

USAID/WASHPaLS

Sanitation Enterprise Recruitment Toolkit

Input Requirements

Objective of this document

This document is meant to provide implementers of market-based sanitation programs with potential approaches and tips to gather inputs for the two activities that are part of the *Sanitation Enterprise Recruitment Toolkit*

- Projected Profit & Loss Statement Preparation
- Returns on Capital Employed Analysis

The two activities will serve as a basis to engage with and attract entrepreneurs to start sanitation enterprises.

Please refer to the PDF documents for each of the activities for details on implementing the modules and rationale for the inputs required.

Approach to gathering inputs

The majority of the inputs required for the Sanitation Enterprise Recruitment Toolkit should be sourced from an MBS program implementer's intervention design and market research. These inputs, i.e., data and assumptions. These inputs should be updated or refined in conversations with entrepreneurs based on their choices, local market data, and experience.

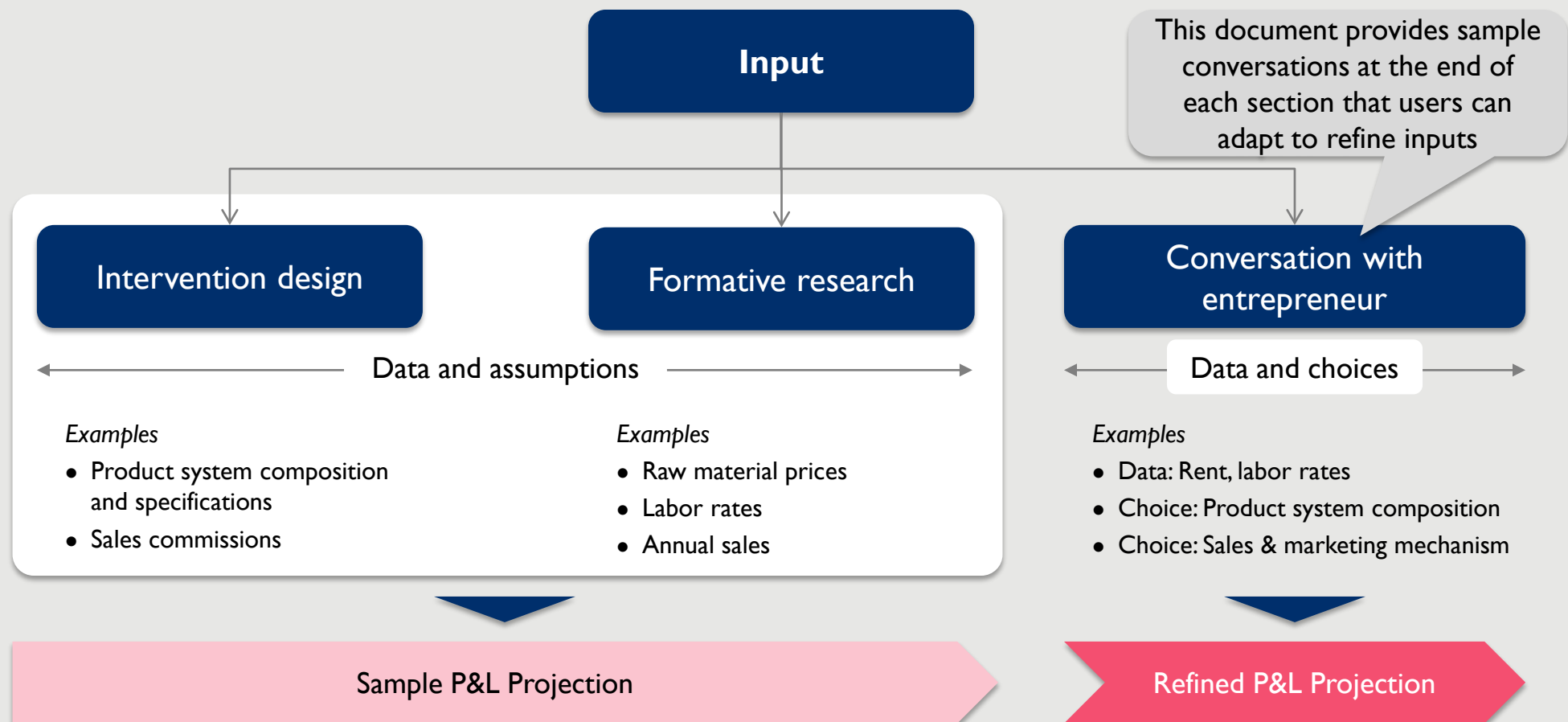


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 - Estimated sales volumes
 - Projected revenue
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Input requirements to estimate sales volumes

Input category	Inputs required	Potential approach
Size of target market	Target market selection	Formative research refined with entrepreneur's assumptions/ estimates
	For each target market	
	Total number of households in target market	Census, health surveys, formative research
	% of these households without improved sanitation	Census, health surveys, formative research
Share of target market likely to buy toilets	For each toilet package/individual component sold	
	Number of households in different target markets	Calculated as above
	Estimated % of different target markets that will purchase toilet package/individual component (annual)	Implementer assumption from formative research, and entrepreneur estimate



Tip

Implementers can estimate the share of different target markets that could purchase toilets by studying historical data on sanitation coverage for different target markets, using data on customer's propensity to purchase in different target markets obtained from formative research, or anticipated sales in response to demand generation interventions in the market (e.g., BCC).

Input requirements to estimate sales volumes

Input category	Inputs required	Potential approach
Marketing strategy	Marketing strategy selection	Implementer recommendation updated with entrepreneur's choice
	Percentage increase in units sold due to marketing strategy	Implementer assumption



Entrepreneurs/implementers can arrive at estimates of the impact of different marketing strategies based on their experience in different contexts.

Sample conversation to estimate sales volumes (1/2)

We have designed two products – the Dual Set at USD 100, and the Offset at USD 20. Which customers will you target for each?

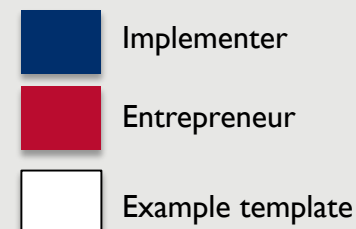
Obviously, the Dual Set should be for very affluent customers. The Offset will be for customers who have lower incomes.

Name of Toilet Package 1	Dual-Set
Price of Toilet Package 1 (per unit)	100.0
Name of Toilet Package 2	Offset
Price of Toilet Package 2 (per unit)	20.0

Our research shows that this town has 10,000 households without improved sanitation in the upper income quartile, and 15,000 households without improved sanitation in the bottom income quartile.

That's a large number of households. How many toilets do you think I can sell if I start a sanitation enterprise?

Target Market 1	
Name of target market	First income quartile
Total no. of households	20,000
% of households without improved sanitation	50%
No. of households in Target Market 1	10,000
Target Market 2	
Name of target market	Second income quartile
Total no. of households	20,000
% of households without improved sanitation	75%
No. of households in Target Market 2	15,000



Sample conversation to estimate sales volumes (2/2)

Going by past trends for this county, around 100 customers in each segment are likely to buy toilets this year. You could perhaps capture half the customers since the only competitor is the mason?

So that would be 100 customers in total. How could I increase this?

Name of Toilet Package 1	Dual-Set
Price of Toilet Package 1 (per unit)	100.0
Estimated % of Target Market 1 that will purchase Toilet Package 1 annually	0.50%
Estimated % of Target Market 2 that will purchase Toilet Package 1 annually	0.00%
Estimated % of Target Market 3 that will purchase Toilet Package 1 annually	0.00%
Estimated % of Target Market 4 that will purchase Toilet Package 1 annually	0.00%
Estimated units of Toilet Package 1 sold (annually)	50.0

Name of Toilet Package 2	Offset
Price of Toilet Package 2 (per unit)	20.0
Estimated % of Target Market 1 that will purchase Toilet Package 2 annually	0.00%
Estimated % of Target Market 2 that will purchase Toilet Package 2 annually	0.33%
Estimated % of Target Market 3 that will purchase Toilet Package 2 annually	0.00%
Estimated % of Target Market 4 that will purchase Toilet Package 2 annually	0.00%
Estimated units of Toilet Package 2 sold (annually)	49.5

In our experience, employing sales agents who you pay commissions for each sale might increase your sales by another 10%.

That would make it 110 customers. That seems reasonable for this area. It could be different but let's use this for now and continue.

Marketing strategy of enterprise	Marketing through sales agents
% increase in units sold due to active self-marketing	
% increase in units sold due to marketing through sales agents	10%

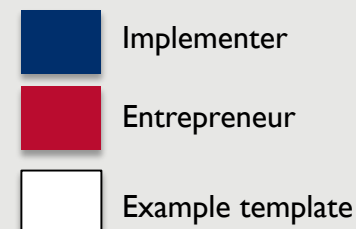


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Input requirements for projected revenue

Input category	Inputs required	Potential approach
Revenue from toilet sales	Method of sale	Entrepreneur choice
	Revenue from toilet packages sold (for each toilet package sold)	
	Estimated units sold	Calculated as per <i>Estimated sales volumes</i> section
	Price per unit	Implementer recommendation; updated with entrepreneur's choice
	Revenue from individual components sold (for each individual component sold)	
	Estimated units sold	Calculated as per <i>Estimated sales volumes</i> section
	Price per unit	Implementer recommendation; updated with entrepreneur's choice



Tip

The price for different products/services can be arrived at based on a number of factors, such as an understanding of consumers through formative research, the entrepreneur's desired margin (absolute) over cost, or the price of competing or substitute products/services.

Input requirements for projected revenue

Input category	Inputs required	Potential approach
Revenue from related services	Method of pricing related services	Entrepreneur choice
	For method 1: Flat rate method <i>(for each toilet package/individual component sold)</i>	
	Expected % of toilet packages/components that will be delivered	Implementer assumption validated by entrepreneur
	Expected % of toilet packages/components delivered that will also be installed	
	Estimated units of toilet packages/components sold	Calculated as per <i>Estimated sales volumes</i> section
	Delivery charge (per unit of toilet package/individual component) Installation charge (per unit of toilet package/individual component)	Implementer assumption validated by entrepreneur



Implementers can assume the expected share of toilet packages/components that will need to be delivered/installed, based on consumer preferences sourced from formative research. Entrepreneurs can refine the assumptions depending on their choice to offer the service and their estimates of customers opting for these services in their area.

Input requirements for projected revenue

Input category	Inputs required	Potential approach
Revenue from related services	Method of pricing related services	Entrepreneur choice
	For method 2: Variable rate method (for each toilet package/individual component sold)	
	Expected % of toilet packages/components that will be delivered	Implementer assumption validated by entrepreneur
	Expected % of toilet packages/components delivered that will also be installed	
	Typical distances to which deliveries will be performed	
	Expected % of deliveries in each range	
	Estimated units of toilet packages/components sold	Calculated as per <i>Estimated sales volumes</i> section
	Delivery charge (per unit of toilet package/individual component)	Implementer assumption validated by entrepreneur
	Installation charge (per unit of toilet package/individual component)	



Tip

Implementers can assume the share of toilet packages/components that will be delivered/installed, and the expected share of deliveries in different distance ranges prior to meeting entrepreneurs. Entrepreneurs can validate these assumption based on local transportation and labor rates, and their understanding of customer preferences in their markets.

Sample conversation to estimate projected revenues from services

Will you charge separately for services such as installation or delivery? Will this charge be a fixed fee per toilet or vary by distance?

Yes, I would like to charge separately for services. I would prefer to charge a fixed rate for every toilet I deliver and install. But I don't know how many people will ask for these services.

Will related services (delivery & installation of toilets) be charged separately from price of toilet?	Yes
Method of charging for related services	Flat rate method

Our research shows that at least 50% of customers without toilets will be willing to pay an additional fee for delivery and installation, because they can't do it themselves and will need to hire people.

If I sell a 100 toilets a year, and charge USD 5 per toilet for delivery and installation of 50% of them, I could generate an additional USD 250 in revenue.

Expected % of all Toilet Packages 1 that will be delivered	50%
Expected % of all Toilet Packages 1 delivered that will also be installed	100%
Delivery charge per Toilet Package 1	5.0
Installation charge per Toilet Package 1	0.0
Estimated units of Toilet Package 1 sold	100.0
Delivery income from sales of Toilet Package 1	250.0

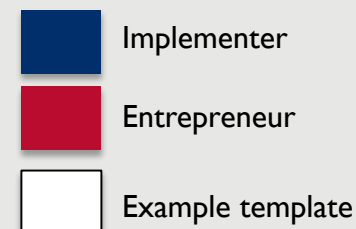


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Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Cost of raw materials	For each toilet package sold	
	Components used within the package	Implementer recommendation updated with entrepreneur’s choice
	Nature of components – traded or manufactured	
	For traded components	
	Cost per unit of component	Formative research, product prototyping; refined with local input suppliers, entrepreneur
	For manufactured components	
	Quantity of raw materials used (per unit of component)	Implementer recommendation
	Cost per unit of raw material	Formative research, product prototyping; refined with local input suppliers, entrepreneur



Tip

- Entrepreneurs may also have some information on costs per unit of components and raw materials, based on their understanding of the local context
- The choice/recommendation for trading or manufacturing a component should be determined by the cost of either option, the difficulty in manufacturing the component, and the availability of local suppliers of a component (or the raw materials required to manufacture it).

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Cost of raw materials	For each component individually	
	Nature of components – traded or manufactured	Implementer recommendation updated with entrepreneur's choice
	For traded components	
	Cost per unit of component	Formative research, product prototyping; refined with local input suppliers, entrepreneur
	For manufactured components	
	Quantity of raw materials used (per unit of component)	Implementer recommendation
	Cost per unit of raw material	Formative research, product prototyping; refined with local input suppliers, entrepreneur



Tip

- Entrepreneurs may also have some information on costs per unit of components and raw materials, based on their understanding of the local context
- The choice/recommendation for trading or manufacturing a component should be determined by the cost of either option, the difficulty in manufacturing the component, and the availability of local suppliers of a component (or the raw materials required to manufacture it).

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Direct labor	Method of payment for labor	Entrepreneur choice
	For method 1: Fixed salary method	
	Number of laborers hired	Implementer assumption of labor requirements and market rates for labor; validated by entrepreneur
	Salary of each laborer (annual)	
	Expected time contribution of each laborer for the sanitation enterprise	
	For method 2: Per toilet package/individual component method (for each toilet package/individual component sold)	
	Estimated units of toilet package/individual component sold	Calculated as per <i>Estimated sales volumes</i> section
	Wages paid to manufacture one unit of toilet package/individual component	Implementer assumption of labor requirements and market rates for labor; validated by entrepreneur



Tip

Implementers can estimate the expected time contribution of each laborer for the sanitation enterprises based on the unit time required to manufacture toilet products and the estimated total sales of toilet products

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Transport of raw materials	Method of delivery	Entrepreneur choice
	For method 1: Owned transport	
	Expected number of trips made to input suppliers (annually)	Implementer assumption based on estimated sales, and raw material requirements; validated by entrepreneur
	Average one-way distance to input suppliers	Implementer assumption from formative value chain research
	Fuel cost (per km)	Local transporters
	For method 2: Hired transport from transporter/supplier	
	If hired transport is paid per trip	
	Expected number of trips made to input suppliers (annually)	Implementer assumption based on estimated sales, and raw material requirements; validated by entrepreneur
	Fee paid for hired transport to supplier/transporter (per trip)	Local transporters



Tip

Implementer's assumptions can be informed through value chain research such as typical shipment capacity per truck and average distance to marketplaces in a county or district. Entrepreneurs can provide estimates on the number of trips based on the raw material quantity required for a given amount of inventory, their location, and experience with procurement.

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Transport of raw materials	For method 2: Hired transport from transporter/supplier	
	If hired transport is paid per toilet package/individual component (for each toilet package/individual component sold)	
	Cost of transporting raw materials per toilet package/individual component	Local input suppliers, local transporters
	Estimated units of toilet packages/individual components sold	Calculated as per <i>Estimated sales volumes</i> section



In some cases, cost of transport from input suppliers or transporters may only be available at a raw material level (e.g., transport cost of procuring a cement bag is USD 0.5). In such a case, users should calculate the quantities of raw materials that will be used in manufacturing a toilet and enter the total transport cost of raw materials per toilet package/component by the necessary calculation.

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Transport for delivery	Method of delivery	Entrepreneur choice
	For method 1: Owned transport	
	Estimated number of trips made to customers (annually)	Implementer assumption based on estimated sales, and raw material requirements; validated by entrepreneur
	Expected average one-way distance to customers	Implementer assumption from formative value chain research
	Fuel cost (per km)	Local transporters
	For method 2: Hired transport from transporter (for each toilet package/individual component sold)	
	Expected % of toilet package/individual component that will be delivered	Implementer assumption validated by entrepreneur
	Estimated units of toilet package/individual component sold	Calculated as per <i>Estimated sales volumes</i> section



Tip

Entrepreneurs/implementers can estimate the average distance to customers, and the expected share of toilet packages/individual components that will be delivered based on their understanding of customer preferences, and the distance of potential customers from the entrepreneur's shop

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Land rent	Rent for land parcel (annual)	Implementer assumption updated by entrepreneur
	Expected utilization (%) of land parcel for the sanitation enterprise	Entrepreneur assumption
Utilities	For each utility	
	Cost of utility (annual)	Entrepreneur information
	Expected utilization (%) of utility for the sanitation enterprise	Entrepreneur assumption



Entrepreneurs are likely to have information on land rent and cost of utilities for their context, based on their experience of running other businesses.

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Marketing (commissions)	Choice of method	Entrepreneur choice
	For method 1: Commission per toilet sold / individual component sold (for each toilet package/individual component sold)	
	Commission paid to sales agent (per unit of toilet package / individual component sold)	Implementer recommendation; finalized by entrepreneur
	Estimated units of toilet package / individual component sold through sales agents	Calculated as per <i>Estimated sales volumes</i> section
	For method 2: Share of price charged to customers (for each toilet package/individual component sold)	
	% price of toilet package / individual component shared with sales agent	Implementer recommendation; finalized by entrepreneur
	Price per unit of toilet package / individual component	Sourced from <i>Projected revenue</i> section
	Estimated units of toilet package / individual component sold through sales agents	Calculated as per <i>Estimated sales volumes</i> section

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Marketing (non-commission)	For marketing collateral	
	Number of advertisements that will be printed	Implementer recommendation; finalized by entrepreneur
	Average cost of printing (per advertisement)	Local printing suppliers
	For organizing village meetings	
	Number of village meetings that will be organized	Implementer recommendation; finalized by entrepreneur
	Average cost of organization (per village meeting)	Local village leaders
	Other marketing	
	Other marketing expenses	Implementer recommendation; finalized by entrepreneur
Repairs	Expected repair cost of each asset	Local equipment/vehicle suppliers
	Expected utilization (%) of each asset for the sanitation enterprise	Entrepreneur assumption

Input requirements for projected cash expenses

Input category	Inputs required	Potential approach
Interest	Principal amount	Entrepreneur choice
	Duration of loan (months)	Entrepreneur choice
	Interest rate on loan (annual)	Local financial institutions



Tip

Implementers can assume a loan is not required to prepare a sample projected P&L statement. The need for a loan and the amount can be discussed with the entrepreneur depending their financial capacity to invest in the equipment and materials required.

Sample conversation to estimate projected expenses from land rent and utilities

Where will you set up the sanitation enterprise? How much do you expect to pay for rent and electricity?

The sanitation enterprise may not require any electricity. However, if you utilize a third of the land for the sanitation enterprise, your effective rent expense for the enterprise will be USD 33.

I would like to set up the sanitation enterprise on the land for my existing business as about a third of the land is not utilized. I pay about USD 100 in rent, and USD 30 in electricity bills per year.

Ok. Use this figure.

Land rent		33.0
Rent for land parcel (annual)		100.0
Expected % utilization of land parcel for the sanitation enterprise		33%
Utilities		0.0
Utility 1		
Cost of Utility 1 (annual)		30.0
Expected % utilization of Utility 1 for the sanitation enterprise		0%




 Implementer
 Entrepreneur
 Example template

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- Input requirements for *Projected Profit & Loss Statement Preparation*
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Input requirements for calculating projected ROCE for sanitation enterprise

Input category	Inputs required	Potential approach
Projected operating profit	Projected P&L statement	Calculated as per <i>Projected Profit & Loss Statement Preparation</i> document
Projected capital employed	New fixed assets	Implementer assumption updated based on entrepreneur's existing assets
	Current value of existing fixed assets	Entrepreneur assumption or calculated as per depreciation methodology described in <i>Returns on Capital Employed Analysis</i> document
	Expected utilization (%) of existing fixed assets for the sanitation enterprise	Implementer assumption updated by entrepreneur's estimates and assumptions
	Expected inventory	

Input requirements for calculating ROCE for existing business

Input category	Inputs required	Potential approach
Operating profit	Current operating profit for existing business	Entrepreneur information
Capital employed	Current value of existing fixed assets	Entrepreneur assumption or calculated as per depreciation methodology described in <i>Returns on Capital Employed Analysis</i> document
	Expected utilization (%) of existing fixed assets for the existing business (if sanitation enterprise is run in parallel)	Entrepreneur or implementer assumption
	Average inventory	Entrepreneur information



The utilization (%) of existing fixed assets for the existing business can be calculated using the following equation: *1 – expected utilization % of existing fixed assets for the sanitation enterprise*

Sample conversation for conducting ROCE analysis (1/3)

What equipment or assets do you use in your existing business? How much do you think they are worth today?

The only asset I use is a small truck. If I were to sell it, I could probably get USD 500 for it.

Existing fixed assets for existing business line	
Name of existing fixed asset 1	Truck
Current value of existing fixed asset 1	500.0

We see that you also keep some materials and products in your shop. On average, what would be the value of these materials and products?

It would be close to USD 500. I need to keep a lot materials since my customers expect immediate delivery.

Typical average inventory for existing business line	500.0
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Implementer



Entrepreneur



Example template

Sample conversation for conducting ROCE analysis (2/3)

If we look at the sanitation enterprise, you could use your truck about 10% of the time to fulfill any deliveries. The only new equipment you will need to purchase are molds. They cost USD 100.

That makes sense. How much materials would I need to keep to start and run a sanitation enterprise?

New fixed assets required for sanitation enterprise	
Name of new fixed asset 1	Molds
Value of new fixed asset 1	100.0
Existing fixed assets for existing business line	
Name of existing fixed asset 1	Truck
Current value of existing fixed asset 1	500.0
Will be used for sanitation enterprise?	Yes
Utilization (%) for sanitation enterprise	10%
Apportioned value for existing business line	450.0
Apportioned value for sanitation enterprise	50.0

In our experience, you could keep materials worth USD 100 in your shop. Customers are typically willing to wait for 2-3 days to get their products delivered.

Okay. So the sanitation enterprise requires me to put in USD 200, plus use my truck occasionally.

Expected average inventory for sanitation enterprise	100.0
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Sample conversation for conducting ROCE analysis (3/3)

That's correct. The current business requires USD 500 plus 90% utilization of your truck. If we compare profits, your profits from the current business are USD 1,000, and you could make an estimated USD 500 in sanitation.

It seems that the current business is much more profitable.

Operating profits

Projected operating profit from sanitation enterprise	500.0
Operating profit from existing business line	1,000.0

You are correct. However, for the current business, you are generating USD 1,000 in profit by putting in USD 950 (adding up the investment and the truck). The sanitation enterprise generates twice the profit for each dollar invested.

That's true. I would generate USD 500 without needing to put in a lot of money for new equipment or inventory.

ROCE Calculations

Projected ROCE of sanitation enterprise	200%
ROCE of existing business line	105%



Implementer



Entrepreneur



Example template