



START YOUR SANITATION BUSINESS!



For
Masons, Manual and Mechanical Emptiers
of Latrines





© WASTE, October 2011, Netherlands
Version 1

The author of this book is:

Natalia Agathou, WASTE, Gouda, the Netherlands

with the technical help of Emeline Bereziat, WASTE, Gouda, the Netherlands

People who helped prepare this guide for you:

Stan Maesen, WASTE, Gouda, the Netherlands

Introduction

This document is a booklet for masons, manual and mechanical emptiers of latrines. If you fall under this profession then we hope that the guide will help you understand your operations, organize them and eventually help you make more money!

The Guide is build up as four main chapters following the “Four Steps to Start our Business”, as presented below. Once you are at a step, you should try to answer some questions that will help you understand what you are supposed to do at every step.



Figure 1: Four Steps to Start your Business!

Step 1: *You will always start with an idea or a thought that will make you think whether you could make money out of it. The first step is exactly about this. You should try to understand and explain your idea, analyze why you want to go for it and if you have the skills to do so. You might think of starting a new business in constructing latrines for households or you might want to expand your business activities, to pit emptying or processing of human excreta.*

Step 2: *Once you have a clear view on what you want to do, then you will need to make sure that apart from you the rest of the world around you thinks that your idea is good. You need to verify in other words that what you aim to provide, is actually wanted by the market. You need to see if you have demand for your products or services. Step 2 helps you to understand and analyze the demand that your products or services will have. It gives you also some ideas of what can affect the demand for your products.*

Step 3: *If you have your idea and you made sure that there is also market demand for it, then you need to start planning. Step 3 will take you through all the questions you need to ask yourself before starting a business. You are going to plan your marketing strategy, your operations as well as your financials. The outcome of step 3 will be a more or less specific plan of how you are going to make your idea reality.*

Step 4: *Then you only need to Go For It! If your planning at step 3 showed that there is a good potential for your idea, then just go for it! Before you do though, Step 4 shows you the last things you need to do, to make sure your business kicks-off as better as possible. Throughout the guide you will get specific information on the three main types of sanitation businesses including construction of latrines, emptying of latrines and small-scale processing of human excreta.*

If you construct or empty latrines:

We hope that this guide will help you understand what you need to do every time a new business idea comes into your mind. We also hope to give you useful information on how to plan and run your business.

The guide gives you the theory, examples and around thirty exercises in order to help you understand and practice. For all exercises there are detailed answers at the Part 2 of the guide, so you can see how did you do! Just take the booklet, read, think and write!

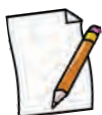
If you are working with latrine constructors or emptiers:

The guide is built in a way that, somebody interested in the business activities of on-site sanitation would be able to read through it and understand the basic idea by himself or herself. However, we realize that because of the high rate of illiteracy in those professions, they would in most cases probably seek assistance. We hope that you will use this guide in a step-by-step way, by answering the questions in each step and by taking the readers through it in a way that they will feel comfortable with the theory, the examples and the exercises provided.

We would like to inform you as well, that we have also developed a supporting training material for the guide. For more information you can contact WASTEatinfo@waste.nl.



Some theoretical information about the presented topic. When you see this sign it means you should pay attention to the information provided.



An exercise. When you see this sign it means you take your pen or pencil and start thinking!



Information of Significant Importance. When you see this sign it means that you are reading a point that is important to know.



Additional information related to the presented topic.

PART A. The Steps	11
Step 1: The Idea	13
Question 1: What is that you want to start doing or start doing differently?	14
Question 2: Why do you want to start your business idea?	17
Question 3: Are you the entrepreneur type?	18
Step 2: The Investigation	21
Question 4 : Will somebody buy your product or service?	22
Question 5 : What can change the demand for your product or service?	26
a. Your Clients	26
b. Your Competitors	42
c. Macro Factors	47
Step 3: The Planning	53
Question 6: What will your Marketing Strategy be?	54
a. Product	55
b. Price	67
c. Place	71
d. Promotion	75
Question 7: What will your Operating Strategy be?	81
a. Latrine Construction	82
b. Manual Emptying	84
c. Mechanical Emptying	85
d. Health & Safety of your Operational Strategy	88
Question 8: What will your Finances look like?	96
a. Start-up Money	98
b. Profits & Losses	102
c. Cash Situation	111
d. Balance Sheet	116
Step 4: The Realization	123
Question 9: How do you get started?	124
a. Make an Action Plan	124
b. Decide on the Type of your Business.	127
c. Try to find start-up money	129
d. Decide on your book keeping forms	133
PART B. Solutions to the Exercises	139
PART C. Further Reading	157

PART A

THE STEPS





Step 1

The Idea





Question 1:

What do you want to start doing or start doing differently?



It all starts from the moment you have an idea about doing something for earning money or doing something for earning more money.

Once you are at that moment it means you should start thinking seriously whether you can put the idea into practice!

First of all, you start by writing down what the idea is all about. Is it that you saw some of your neighbors complaining about their toilets and you want to provide them a better solution or is it that you already empty latrines and you want to serve more customers so you can get more money.



Exercise 1: Write or draw your own idea. What product or service your want to sell? To whom?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



Once you have your idea clear you need to think of the things that will help you succeed in what you are doing and of the things that will threaten your efforts. You need to think first of all at a personal level, what are your strengths and weaknesses and then on a general level, what are the circumstances that will provide opportunities or threaten what you are doing.

Strengths

What are they?

- The things you do correctly
- The things you are really good at
- Your competitive advantage

What to do with them?

You should make sure you keep your strengths.

Weaknesses

What are they?

- The things you do not do correctly
- The things you should improve

What to do with them?

You need to understand why you are weak in some areas and think of ways to change.

So if for example you are not delivering on time your products to your customers, then maybe it is because they are located far away and maybe you should think of changing

Opportunities

What are they?

- The things you should look for and try to use for your own benefit.

What to do with them?

You should use the opportunities that can bring additional value to your operations.

“Have your eyes open”

Threats

What are they?

- The things you should be careful of
- The circumstances that are not controllable and may be unpredictable.

What to do with them?

You should organize yourself in such a way that will allow you to adapt quickly to the new situation.

So, if for example there is an economic crisis that makes you sell less toilets than you expected, then you should have saved some money, so you can cover your costs.



Exercise 2: *Try to match the sentences with the boxes.*

1. You can serve a customer after one hour from his call.
2. A bad reputation for the latrines you build.
3. Another pit emptier has access to more houses than you.
4. The location of your business is close to your suppliers and customers.
5. A community project asks you to build 100 toilets for them.
6. You don't know how to construct a toilet that will meet the needs of your clients.
7. You have to pay taxes for your products or services.
8. A donor funded development program starts in your region and it starts building toilets for free.
9. You are able to find new customers easily.
10. The municipality gives you access rights to empty latrines in three areas in your region.
11. You form an association of sanitation entrepreneurs with other people who do the same as you.
12. The government votes for a law that does not recognize the work of informal latrine builders and emptiers.
13. You don't deliver your products or services at the time promised to the client.
14. You leave a big mess after you empty the latrine.
15. You don't know the prices in your market.
16. The people in your region practice open defecation and are not aware of the negative effects of it.
17. You provide after sales support to your customers.
18. You keep yourself informed about new technologies that could help you do what you do better and faster.

Strengths

Weaknesses

Opportunities

Threats



Question 2:

Why do you want to start your business idea?



Earning money is the main reason why most people start a new business in the first place. But there might be many other reasons why you would like to develop your idea. Telling clearly the reasons why you want to change or start your business is a way to check in the end whether you achieved the things you wanted.

Possible reasons:

*To improve the living standard of your family
For change
For pleasure
For contact with people
To be your own boss
To provide a service to the community
To protect the environment*



Exercise 3: *Write down the reasons why you want to start a business or you want to change what you do now.*

-

-

-

-



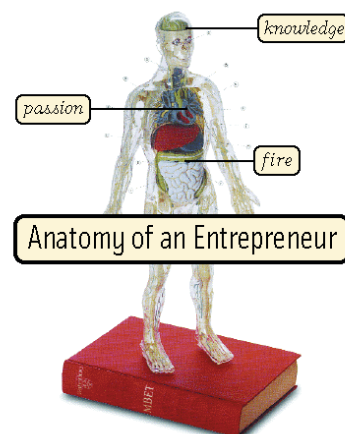
Question 3:

Are you the entrepreneur type?



There are some key competences, personal characteristics that a person should have in order to set up and run a business. Usually you should combine passion for what you will do with the fire needed to trigger the process and the necessary knowledge to realize the venture.

You have to remember that entrepreneurship is having an innovative intuition and identify business opportunities where others can't, but you also need to have the correct tools to equip yourself and organize your thinking.



Exercise 4: Answer the following questions with a “yes” or a “no”.

- Are you hard working?*
- Do you like dealing with people?*
- Are you reliable?*
- Are you good at giving directions?*
- Can you make decisions quickly?*
- Do you know enough about the product you are selling?*
- Do you have the time needed to operate and organize your business?*
- Do you have knowledge of small-scale business operations in the solid waste recovery sector?*



Exercise 5: Write down the personal characteristics that would help you become a good business-man or business-woman (e.g. hard-working, reliable, honest, good planner etc).

1.
2.
3.
4.
5.
6.
- Other.....



You may ask yourself: “Why should I risk my resources in an unpredictable business when I could hold a stable job which offers a regular monthly income without any risk?” In other words, why be an entrepreneur rather than an employee?

Having your own business can have big rewards, but be sure to weigh returns and profits against potential risks and losses!

By now you have:

- Made clear and explained your business idea
- Understood the reasons why you want to realize your idea
- Understood what characteristics you need to have for running a business





Step 2

The Investigation





Question 4:

Will somebody buy your product or service?



From step 1 you might come up with the most brilliant, innovative idea, let's say for example that you can recover urine and make pellets out of it. As an entrepreneur you might have the fire for pursuing the idea but this is not enough. You need to identify whether there is a market that would potentially demand your product so as to be able to make money out of the whole effort.

Demand = Potential Sale = Money!

The price per latrine you construct or per latrine emptying is the interpretation of demand from the market into a number!



Exercise 6: *Read the following true case study and find what was the mistake of the entrepreneur?*

In Bangalore, India a sanitation entrepreneur constructing simple pit latrines for households heard about the benefits of Ecosan toilets from different researchers and NGOs and thus thought he could start constructing them. He ordered the necessary supplies, decided on what type of structure he would provide and even participated in a training, with his employees on how to construct Ecosan structures. He then went to the households and tried to sell his product. However, the households were not interested. They thought that even though the Ecosan it was a clean and non-smelly option, it needed a lot of space they didn't have, since they didn't have a backyard. Thus the entrepreneur was not able to make money out of his own idea.



Analyzing demand is the most important step for you, because you might have in your possession the perfect machinery or the best artisan to design your latrines but if you don't have somebody to pay for it then you will not have a business. Instead, you might find out that there is demand for another type of toilet construction or emptying service from the households and prefer to sell your products there, where there is proven demand.



People (customers) will have demand for your latrines or your emptying services as a result of benefits (quality) these latrines or services will have for them. Demand goes with benefits from a product or service. That means that you should not wait for people to ask for your products if they do not have a certain quality that meets their expectations or needs.



To identify demand is not always simple but is not impossible either. You have just to look around you and identify who is willing to buy your product or who is already paying you for that. If you are not an entrepreneur yet you need to find out if people are willing to buy your product. If you already got money by someone for the products you sell that means that you can talk with them and understand what they expect from your product. Read the following cases:

	There is a Market	There is no Market
You are not selling yet	You analyze the demand for your product and see if there is space for you in the market. If yes you go on with your idea. If no, then you have to rethink	You work to create demand and create a market by selling a product that is innovative or not yet sold.
	Methods to do that: <ul style="list-style-type: none">- Visit households and ask what type of latrines they would be interested in buying.- Talk to your friends and neighbors and see what is their opinion for their latrine, if they have one and what they want if they didn't.- Talk with local NGOs that are active in the field of sanitation and ask them if they have projects which include latrine construction.	Methods to do that: <ul style="list-style-type: none">- You talk with people who might be your future customers, if for example you want to sell urine for agriculture you have to go and ask the farmers in your region if they are willing to buy it.- You discuss it with municipal authorities responsible for the commercial development of your region, usually the chamber of commerce.
You are already selling	You come in contact with your clients and build talk with them in order to have a correct idea of the demand.	There is no possibility of actually selling your products when a market does not exist.
	Method to do that: <ul style="list-style-type: none">- You are part of a Value Chain and that means that you can talk with your existing customers and ask them what they would be willing to pay you, if for example you delivered after-sales support services, or built a new type of latrine.	Method to understand that: <ul style="list-style-type: none">- You cannot find any potential markets- It turns out that many businesses have already failed.- There are empty facilities with rusting equipment from previous entrepreneurs.



Exercise 7: Read the following 4 boxes and try to match them with the correct case.

1. In a town in Vietnam an international NGO has started creating a market for sanitation and the local demand for latrines increased. Realizing that the construction of semi-septic tank requires a large amount of concrete, Mr. Tan thinks of starting his own concrete business. He is doing all the necessary preparations and then will start building “ringed” latrines.

a. Entrepreneur selling but there is no market.

2. In a slum in Kenya, Mr. Josephat is emptying latrines when they overflow and gets paid from the households for his service.

b. Entrepreneur not yet selling and there isn't yet an existing market

3. Carlos in Peru has been hearing from his friends that human faeces can be composted and then turned into pellets, which could then be sold to farmers as an alternative to chemical fertilizers.

c. Entrepreneur not yet selling but there is a market

4. You already empty latrines in one village and you want to expand and sell to the village nearby. However there a government program has offered most of the households with ecosan toilets and trained the people how to use the excreta in their gardens as a soil conditioner.

d. Entrepreneur selling and there is a market

In this step you only need to identify if somebody could be willing to buy your products. In the following step of ‘planning’ you will define who exactly your clients will be and how much you expect them to buy from you. This is a process, which is like a spiral; you have to go around many times to get the level of information you want.



Question 5:

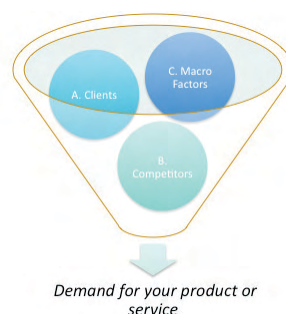
What can change the demand for your product or service?



The demand for your product can be affected and changed because of many different reasons. The most important influence can come from:

- a. Your Clients*
- b. Your Competitors*
- c. Macro Factors*

Below you will find more information on how these three can influence how much you will sell and how much money you will make.



A. Your Clients

When you will have to decide what you are going to sell and calculate how much you are going to sell you will have to think first of all of your clients. You have to understand how they make their buying decisions and what they want or need from you.

Your clients will decide whether to buy your product or not depending if:

- **There is a product or service that complements your product.** So if for example you are promoting shallow pit latrines, no deeper than 2 meters then your clients would want to know if there would be somebody that would empty the latrine for them.*

A very easy example to remember for complementary products is the example of toothbrush and toothpaste. If you have a toothbrush you can use the toothpaste and the opposite. On page 29 you can read more about the complementary products and services in the sanitation chain of which you will be part.



- ***There is a product or service that substitutes your product or service.***

So if for example you are selling septic tanks and at the same time somebody else is selling ecosan toilets then your clients will weight the two options and decide what matches better their expectations. The price and technical characteristics of the substitute products will also affect the demand for what you offer.

This is why it is very important that you analyse what your competitors have to offer and at what conditions. In the following pages you will get more information on the importance of competition.

A common example of substitute products is the example of coffee and tea. If you choose to have coffee then you are not having tea.

- ***They like it***, which depends on complicated psychological social and personal factors affecting their opinion when deciding. If they will like it or not depends also on what you offer, in other words what value can make your product add to them. On page 29 you can read more about how to understand the way your client's are influenced when buying a latrine or a pit emptying service.

- ***They can afford it.***

You should keep in mind that in deciding whether the cost of a service is acceptable or not people will often compare it to the costs of other services, like the school fees they pay for their children or the water and electricity bills, etc.

- ***They predict that in the future the price of the product you offer will increase.***



Exercise 8: For the following cases try to match the following phrases with the influence factor. The first one has been done as an example for you.



Case 1. My name is Timmy and I am hesitating between what type of latrine I should construct for my family. I talked with a local mason and he can construct for me a septic tank or an ecosan toilet. What worries me is that with the septic tank I will need to empty it after 5 years and the construction cost is higher than the ecosan toilet. However with the ecosan toilet I have to make sure I clean the buckets with the faeces more often.

1.
They Like It



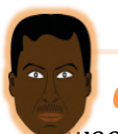
Case 2. My name is Kerali and I have two children. Every month I pay around \$40 for both of them to go to school. Lately I have been thinking of installing a pit latrine in my backyard and so I asked about the price a manual emptier is charging and he said that it will cost me around \$40 for 1 m³ and emptying will be needed every 2 years.

2.
Complementary
Products



Case 3. Catalina was talking at lunch to her husband about a nice pit emptying process she saw on her way back home at the neighbor's house. The emptiers were fast, efficient and they clean the latrine so well.

3.
They Like It



Case 4. Kihoul noticed that the price of cement and wood is constantly increasing in his region. Lately he was seriously thinking of constructing an ecosan toilet with a semi-cemented semi-wooden structure. He is visiting soon a local mason to discuss before the prices increase more.

4.
Current Price



Case 5. A research in a community showed that 86% of the respondents would be interested in using a Urine Diverting Dry Toilet (UDDT) if they are not responsible for the operation and maintenance of it.

5.
Predicted Price

Case 6. Lichun was thinking of paying a mason to build a pit latrine around 2meters deep so he and his family could defecate easily. However, when he thought again about it, he realized that there was no one providing an emptying service for the toilet and like this he would not have been able to empty the pit once it was full. Finally he abandoned the idea of constructing a pit latrine.

6.
Substitute Products

Case 7. A woman in the village mentioned that "Having a full pit, it is like having a corpse in the house: the family does not find peace until it goes out."

7.
They Like It



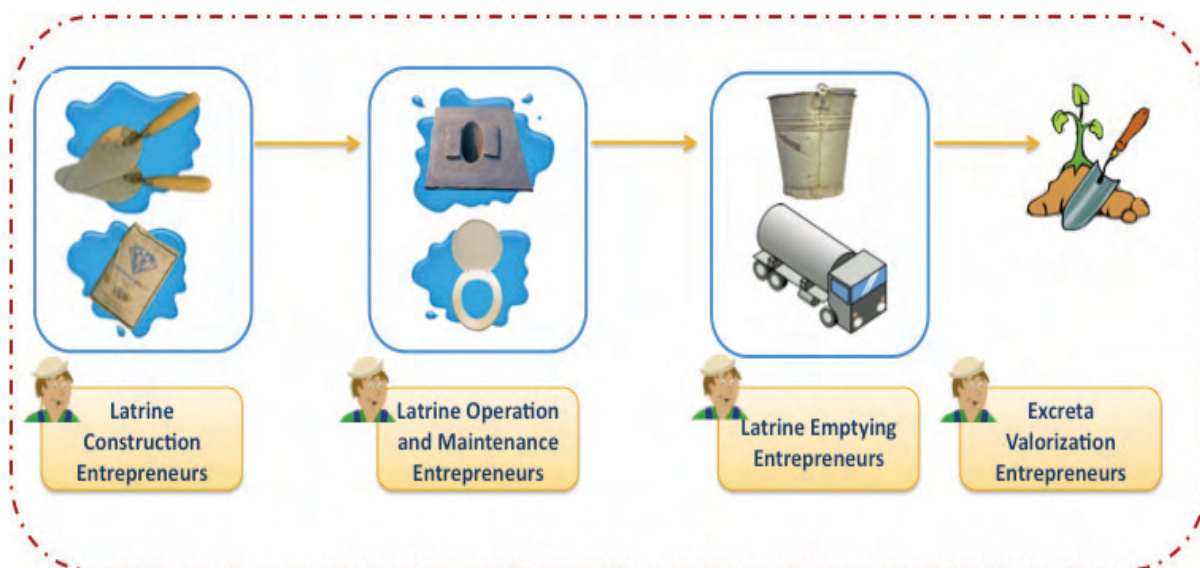
Exercise 9: For the previous cases try to think how you could use the information you got improving your business. What could you do or change in the way you will do business from now on?

	<i>How would you use the information to your business's advantage?</i>
<i>Case 1:</i>	
<i>Case 2:</i>	
<i>Case 3:</i>	
<i>Case 4:</i>	
<i>Case 5:</i>	
<i>Case 6:</i>	
<i>Case 7:</i>	



As an entrepreneur you should always try to remember that it is good for your business to see yourself as part of a chain and try to cooperate with other parts of your chain. In other words, you could try to investigate whether the product or service you offer is complementary to other products and if your product or service could complement other people's business.

The picture below shows the chain of possible entrepreneurs involved in the handling of human excreta. So that means that in whichever part of the chain you are it is for your own good to try to talk with the entrepreneurs that are in the step before or after you.

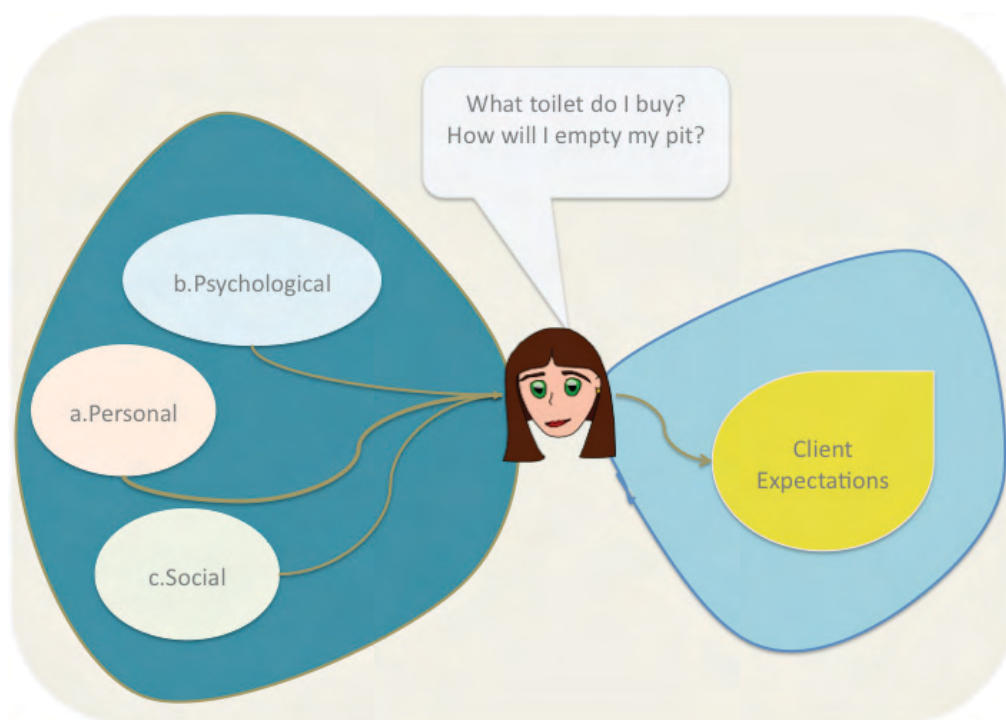


Picture 2: Sanitation Entrepreneurs Chain¹

¹Some pictures copyrighted at shop.wateraid.org



Your clients as most people when they have to decide if they are going to buy a toilet or pay for an emptying service they are going to go through complicated thinking paths. For you to be able to understand these paths and then try to present to them a product or service that will satisfy many of the expectations they have in their mind you need to think like them. You need to put yourself into their position. How would you think if you wanted to build a toilet or empty your latrine or if you paid somebody to clean and maintain your toilet?



Picture 3: How your customer decides to buy or not



a. Personal Factors: Your clients will take different decisions and will have different ways of thinking because of some personal characteristics that depend on their age, sex (male or female), race, nationality etc. For example women are expected to be more motivated and caring about the household hygiene and try to find a solution for their family to defecate.

If you know these characteristics you will be able to understand better their needs and try to adapt your products or services to what they want.



b. Psychological Factors: Another important part of the reasons why your clients might choose to buy or not a product or service from you is influenced by their psychology. Each person has a different psychology when deciding what and when to buy. This psychology is formed by the:

- **Motives** that make the person build a toilet or empty it.

Example: A person might want to have a clean and healthy environment around the house or impress the neighbors or other family members or even for easiness. If you know that the main motive for your client is a clean and healthy environment you then know that he/she will pay attention to whether the toilet you will build for them is smelly or not and if it attracts flies. If you know that their motive is not to lose public face then you know that they will focus more on the looks of the superstructure surrounding the toilet.

- **Perceptions** that people have for the use of a toilet and generally for touching or coming in contact with excreta. You should always keep in mind local customs and beliefs with regards to contact with human faeces.

Example: People in India prefer open defecation because they do not want to pollute the vicinity of the house; they perceive a latrine as a source of pollution, especially, if it is close to the kitchen. It is important to know these perceptions because in this case you will either have to participate in a campaigning for raising awareness on the importance of a toilet or you could also think of not selling. Such perceptions may change, mostly due to social influence.

- **Abilities & Knowledge** of the people. You need to understand that your clients are individuals that can learn and absorb information all the time. That is why if you want to change your clients' behaviour about your product or service then you need to give them new information and make them understand what you offer to them.

Example: You cannot expect your clients to understand what is an ecosan toilet if you don't show them a small "maquette" or a drawing in a brochure of what it looks like. Especially if you want to sell to people who have a certain level of education then it is very important that you are able to present all the necessary information for what you offer.



- *Personality of each of your clients. This means that you should also keep in mind that all people are different and their character will always have a small influence on what they buy. You cannot have a selling technique for every different single character but you can definitely try to sense, when you talk to your clients, what are his most obvious personality characteristics and build on them.*

Example: If somebody comes to your store and after a while you see that he/she is talking to you with arrogance or aggressiveness then you know that when you are talking to them and presenting your products you have to be patient and open to criticism and try to promote your products based on what they think it is right.

- *Lifestyle that your client have. The lifestyle is the way people live. This depends on their income on whether they are married or their social group etc.*

Example: If people lead a healthy lifestyle and they have children and an income that can allow a small investment in improving their defaceting habits then it is quite likely that you are going to be able to sell to them.

c. Social Factors: *The psychology of your clients depends also on what happens around them and who is around them. The family, the opinion leaders and famous people, the religious leaders of a community, the friends and colleagues, all can influence the psychology of your clients when having to decide what to buy.*

Example: If your clients see a famous football player holding a toilet miniature or talking about healthy sanitation then you can be sure that this image will influence the way they see a toilet. It can become a fashionable item or a trend and then you might see people becoming more motivated and active to defecate in a clean and healthy environment.

It is important to know the social factors influencing your clients not only for understanding how they

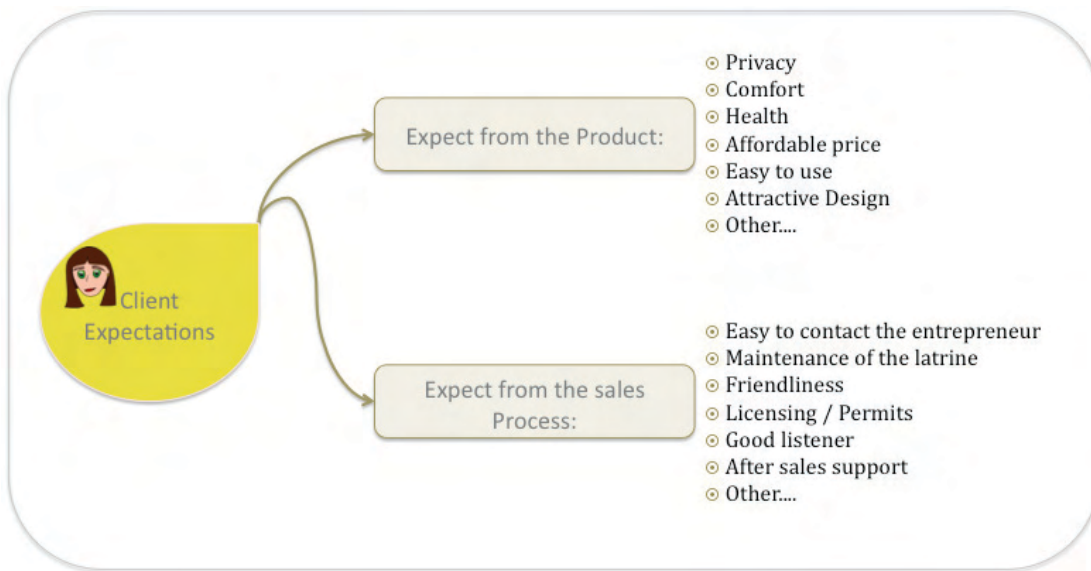




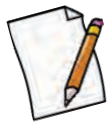
The Clients Expectations

All the factors and examples you read before are the main reasons why a client will ask for specific features from your product or service. Usually your client will expect things from your product or service itself but also from the selling process and the way you are going to treat them.

Some examples of the most common client expectations for sanitation products or services are presented to you in the picture below. Then with the help of the exercise you will be able to analyze each of them in more detail.



Picture 4: What your customer expects from you



Exercise 10: Try to fill in the dots for each of the following phrases, which are based on real situations, with one of the word in the box. The purpose of the exercise is for you to identify the different client expectations.

*privacy, comfort, health, price, permit, easy, contact, friendly,
design, punctual, maintenance, clean*

1. "We started with using a wooden slab as this did not cost much and generally thewas affordable for us".

2. "I was told I need ato build a toilet, but knew nothing about it. That is why I asked from the mason to take care of it".

3. "Bas smells from my latrine gave me colds and my child fell sick. That is why the new latrine I want to build should pay attention to our and reduce the smells and flies around it".

4. "In my family we are all very busy and we don't have much time to spend for cleaning and fixing the latrine all the time. We want a product that isto use and when we need somebody forthat the mason can indicate us a person that could help us.

5. "You should be able to relax when you go to relieve yourself. is really important for me".

6. "I want to be sure that I haveand that there is no risk of my neighbor seeing my manhood when I relive myself."

7. "A home with a latrine is very You can eat anything without fearing that you can get a disease."



8. *"I am really happy since yesterday I called a manual emptier to empty my latrine and he was very with me and flexible with our meeting time. What I appreciated a lot is that it was very easy for me toby phone. He replied immediately".*

9. *"It is very impressive that Mr. Wangombe is so You call him in the morning and agree a meeting time for the afternoon and he will always be on time. He is doing the emptying with his truck in a fast and clean way. I am quite satisfied with his service.*

10. *" My wife is really strict about this, she does not want an ugly and smelly toilet in her backyard and she really wants first to agree with the of the latrine structure.*



So now you know that when you will start analyzing if there is somebody that wants to buy from you and talking to future clients you should try to understand their expectations and their priorities. What do they want and what parts of your product or service are the most important for them. In Annex 1 you will find a small questionnaire with questions you can use when meeting with potential clients.

What people want from their toilets?

Healthy sanitation and hygiene =



A place to relieve oneself (urinate and defecate)

+



A way to clean oneself after

+



Keeping urine and feces away from food and water

+



Making sure that toilets stay clean and safe

+



Turning urine and feces into a healthy resource

©Hesperian, 2005



Exercise 11: Make a list of all the potential clients you are going to have and try to fill in the following table; an example is there to help you.

Your Products:	The Customer (s):	Their Expectations:	How much will they pay you?	Delivery Conditions/ Payment method	Complaints from previous times
Example: Pit Emptying with vacuum truck	Mr. Jose Alvaro, 40 years old, married with 3 kids, teacher	- Fast emptying of the 2meter deep latrine - Leave the place around the latrine clean after emptying	\$60 in total	- Pay at the end of the service. - Pay \$30 on the day and \$30 one week after. - The emptying to take place in the evening.	- The other guy I called was late for 2 hours and when he finally came he emptied half of the latrine and then left.



The next step after you have identified future clients and generally people interested in buying a product or service from you is to decide on which of them you will focus. This is important for your product development as well as for your promotion strategy that you will have to do later on.

You can decide to focus on specific clients based on:

- *The area they live in:* for example you can decide to focus only on the neighborhoods close to yours and that people that come from other villages further away they cannot be served.
- *Their social status (rich, middle class, poor):* for example you can choose to focus only on rich people, which will mean that you will have to sell a product or service of a really high quality or nice design that will attract their attention.
- *Their age:* for example you can decide to try to sell only people who are between 30 to 50 years old because they might be more aware of the in health dangers of defecating in the open.
- *The type and location of their household:* for example if a client calls you from a mountainous area with no good roads and with a pit that is not accessible from the street then if you are a vacuum track emptier you might not be able to serve them.
- *Other characteristics* like education and habits: for example you can decide you focus on people who are educated and could understand better the need to have and use a clean latrine.

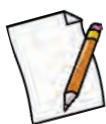
You can also decide not to focus at all and serve whichever client asks for you. This is also possible but then you will have to make sure that your product or service is adaptable to all situations.



Once you decide on who your main clients will be then you also need to make a rough estimation of how many there are going to be. This is of course not a simple calculation and you can never know exactly how many people will come to you. However, you just try to make a good guess.

A piece of advice is: **“Start small and then grow!”**

You can start by asking your neighbors and see how many respond positively. Then based on how many they show interest you can make the hypothesis that if they are happy they will tell to their family and friends and then more people will be interested and so on. Always try to start with a solid base of clients for which you are more or less sure they will buy from you!



Exercise 12: For the first 6 months of your business try to calculate how many customers will ask you for a toilet or an emptying service, based on the discussions you made before with them. The first month is an example to help you.

	Month 1 <i>June</i>	Month 2	Month 3	Month 4	Month 5	Month 6
Number of Clients	5					
Explanations	<p><i>Month 1:</i></p> <ul style="list-style-type: none"> → Mr. Juil has already asked me for a toilet. → Maria asked me for a drawing or picture of my products → Vijul told me he was saving money to offer a latrine as a present to his wife for their wedding anniversary. He also mentioned a friend who was also interested. → An NGO approached me and asked me to construct a toilet as an example of what products I could provide. <p><i>Month 2:</i></p> <p><i>Month 3:</i></p> <p><i>Month 4:</i></p> <p><i>Month 5:</i></p>					



B. Your Competitors

“The people who do the same thing as you”

Who else is offering what you offer?

To define what exactly a competitor is you have to look around you and identify who else is doing what you are doing now, or will be doing in the future. A competitor is not an enemy. He/She is somebody like you with the same needs and same willingness to gain some money from selling or emptying latrines. Most of the time there is room for many people in the business and competitors are not necessarily people you should be afraid of. You need to be aware of their existence and of their work.

If for example you are currently constructing squatting pats and there is another person who is doing the same, then he/she is a competitor. But if for example you are constructing squatting pats and then you sell them to a latrine constructor, this constructor is not a competitor but your client and part of your value chain.



Exercise 13: : Think of two people who do the same work as you and fill in the following table for them.

Factor	Competitor A	Competitor B
Products		
Price		
Quality		
Reliability		
Advertisement Techniques		
Company Reputation		
Sales & Payment Method		
To who do they sell:		



The exercise will help you identify who competes with you in selling latrines or parts of a latrine or in emptying toilets and under which conditions he/she does so. The main reason you need to know about your competitors is for pricing. When you will ask for a price for your products/services you will need to know at what price your competitor sells so you will know how much you can bargain with your client.



An additional reason is differentiation. Knowing what your competitor is offering to the market gives you the opportunity to think of ways of adding a special value to your product, “your competitive advantage” to make it more appealing for the market. For example, if all your competitors just sell the latrines but instead you also offer installation and after-sale support, then you automatically have a competitive advantage.



Types of Competition

Direct Competition: is represented by the people who sell the same or slightly different mix of products/services as you do. These people may already be doing it (existing competition) or might start doing it in the future if they see it is profitable (new entrants in the market). For example if you are emptying manually latrines then you are competing with somebody who is also emptying manually but also with somebody emptying mechanically the latrines.

Indirect Competition: is represented by the people who sell different products or services than you do and are usually competitors of the other entrepreneurs in the sanitation chain. For example if you are a cement ring producer and you sell to a pit latrine constructor then if an NGO starts constructing ecosan toilets for the people then you are indirectly affected by the competition your client is facing.

Future Competition: is represented by the people who are not yet doing what you are but once they see that the business is profitable and can give an extra income then they will start a business as well. This type of competition is hard to predict however it is possible to prepare your business in order not to loose clients.



Exercise 14: Identify in the following cases if an entrepreneur would face competition or not and if yes, of what type?

<i>You are a:</i>	<i>The Situation is that:</i>	<i>Is there Competition?</i>	<i>If yes, of what Type?</i>
<i>1. You empty toilets in your neighbor with a bucket.</i>	<i>You see the son of your neighbor sticking some posters in main streets in your area for emptying pits for the same price as you.</i>		
<i>2. You are constructing ecosan toilets.</i>	<i>In a village 500km away from yours there is a project that gives money to people to build their own toilets.</i>		
<i>3. You sell bags of cement to a septic tank constructor.</i>	<i>The citizens learn how to build their own latrines with wooden materials and branches.</i>		
<i>4. You are constructing septic tanks.</i>	<i>The municipality is installing a sewage system in the region.</i>		
<i>5. You are constructing Ventilated Improved Pit latrines (VIPs).</i>	<i>You hear that in your town there are free trainings for toilet masonry and many people go there.</i>		
<i>6. You are a manual emptier and you want to recover the human faeces from ecosan toilets to sell them to farmers.</i>	<i>The women in your neighbor discovered that they could use the manure from their ecosan toilet as a soil conditioner to their gardens.</i>		



Latrine Constructors

Typical Competition for Latrine Constructors/Masons

- Community Based Organizations that construct latrines.
- A donor financed development program that constructs latrines for free.
- Government subsidized latrines

Mechanical Emptyers

Typical Competition for Mechanical Emptyers:

- A government project for installation of a centralized sewage system.
- Manual Emptyers

Manual Emptyers

Typical Competition for Manual Emptyers:

- A government project for installation of a centralized sewage system.
- Mechanical Emptyers
- Households that empty by themselves



Competition turned to Co-operation

Knowing your competitors is also important for identifying potential alliances. In sanitation business there is usually something to be gained from working together with your competitors. The ways in which you could co-operate are summarized below:

- Random collaboration
- Form an Association /Trade Union
- Form a Partnership/Cooperative/Company

Allying with your competitors can have benefits as well as risks



Exercise 15: Say if the e following sentences are benefits or risks if you try to work together with your competitors.

1. You are less vulnerable to the risks an individual who works alone faces.

2. Sanitation Entrepreneurs can face discipline problems from some members and have to deal with the 'free-riders'.

3. Masons or Emptiers are able to gather resources to buy machinery such as trucks or raw materials that will help them get operate more efficiently.

4. Sanitation Entrepreneurs are able to negotiate better terms and conditions with clients and local authorities.

5. Sanitation Entrepreneurs can have disagreements between them for the strategy they will choose to follow.

6. Sanitation Entrepreneurs can provide for their own social protection through medical coverage, funeral schemes etc.

7. Sanitation Entrepreneurs can fight for changes in legislation affecting them.

8. You have the capacity to take on bigger jobs/orders.

A. RISKS

B. Benefits



C. Macro Factors

“The things you can not easily change”

The demand for your products can be influenced not only by the individual entrepreneurs and the market they address but also by a number of other factors that relate to the wider environment within which you, your customers and competitors do business.

These factors are:

Political/Legal

: Whether a government has a sanitation strategy and has set goals for every household do have access to proper sanitation facilities is a factor that can create or otherwise destroy a business opportunity. Laws or conventions on a national or international level as well as institutional initiatives like the Millennium Goals of the United Nations can have a significant impact on the price of the product or service you sell or even on the existence of a business opportunity itself.

You should make sure you know the laws affecting your operations!

Economic

: If a tax is introduced for every time people are practicing open defecation, that will certainly lead to people looking for constructing a toilet that would permit them to avoid defecating in the open.

Other economic instruments that can have an effect are interest rates, unemployment rate and subsidies. For example subsidizing eco san toilets it means that they are going to be cheaper for the people and thus if you are selling single vault pit latrines then you will face serious competition.



Socio-cultural

: If the citizens are aware of the health and environmental benefits of having a toilet and consider it an important status indicator then they will definitely look for products and services and will be willing to pay for them.

Technological

: If a new type of latrine is designed or a new emptying technology is invented that makes the life of the users easier then it is likely that these new technologies would become a threat for your operations. If however you keep yourself updated with new designs for latrines or new equipment for emptying the pits, then the threat could be turned into an opportunity.

Institutional

: The actions or decisions an institution, for example a municipality or the police or a university, can make and affect your business. If for example a municipality cannot afford to offer an organized sanitation service to her citizens then it is quite possible that people will resort to open defecation or to on-site sanitation solutions.

Environmental

: The outbreak of malaria and diarrhea close to your area of operation might make people think that they should pay more attention to their defecating habits and either come for ordering a latrine or for emptying it more regularly.



These factors can create threats or opportunities for your business, that you should consider when you do your SWOT analysis (see Question 1).



These factors can directly change the price or customer orders you get for your products and services or they might have an indirect effect by changing the environment under which you or your customers or your competitors do business.



Exercise 16: Identify in the following cases what type of factor will affect the demand for an entrepreneur's sanitation products or services, and then decide if the influence is direct or indirect.

	Type of Factor	Direct Influence	Indirect Influence
1. The price of cement and plastic is going up and the latrine constructors have to pay more to build the toilets for their clients.	<input type="checkbox"/>	<input type="checkbox"/>
2. A new public campaign has been launched from the municipality with the title "Show me your toilet and you will have my respect".	<input type="checkbox"/>	<input type="checkbox"/>
3. In South Africa, certain municipalities have recognized the important role of the informal sanitation entrepreneurs and they are making efforts in making them part of their sanitation strategy.	<input type="checkbox"/>	<input type="checkbox"/>
4. A high-tech super structure for surrounding pit latrines has appeared in the market and in a really affordable price for locals.	<input type="checkbox"/>	<input type="checkbox"/>
5. A local bank has introduced new types of loans, addressing sanitation entrepreneurs.	<input type="checkbox"/>	<input type="checkbox"/>
6. In Kibera landfill the city council is threatening the households of demolishing their temporary houses because it doesn't recognize their property rights.	<input type="checkbox"/>	<input type="checkbox"/>



By now you have:

- *Defined your business idea, including your product*
- *Understood the importance of demand*
- *Understood some of the factors that can influence the demand for your product.*







Step 3

The Planning





If after doing your market investigation you see that there are people that they want to pay for your products or services then that means that you have demand. If you have demand that means that you can start planning how you are going to satisfy this demand and provide to your clients what they expect from you.

In this step you will learn how to plan and organize your business so that you can start selling.

You will have to answer three questions:

- *What will be your marketing strategy?*
- *How will your operations look like?*
- *What will your finances be like?*

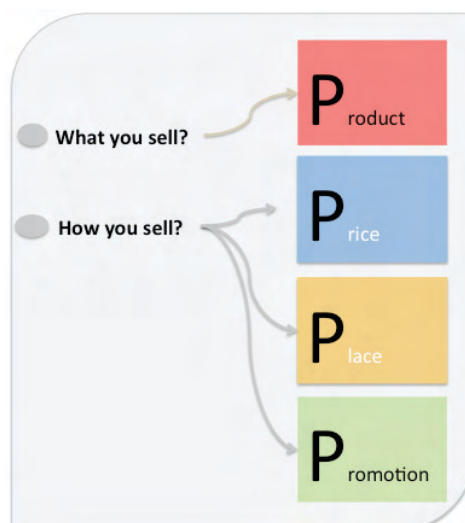


Question 6:

What will be your marketing strategy?



When you read about marketing you should simply think of what and how you are going to sell. In step two you identified to whom you are going to sell. Now also based on that you will decide what product or service you are going to sell and then how you are going to sell it to your clients deciding at what price, at which place and how you are going to make it known. You can simply remember that you have to plan 4 Ps:





Below you will find more information for each of the four marketing Ps, so that you can put all information together and create your marketing strategy.

A. Product



As you saw in step 1, usually when you start thinking of creating your business you already have an idea in your mind of what will be the thing you will sell. However, a product is not only an idea it is either a physical product, a service or a behaviour.

For deciding on your product you need to keep in mind three things:

- 1. The technical possibilities (materials, designs or technologies availability etc)*
- 2. Your skills and abilities*
- 3. Your clients expectations*

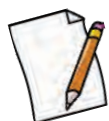
From exercise 11 you collected all the information related to your clients' expectations from your sanitation product or service and from exercise 12 you know what products and services your competitors offer to the market.

Based on this information as well as on your business idea, in this step you have to think of what will be your "product" and even more what is going to be your "competitive advantage". In order to define these you have to make decisions on the following:



Product Checklist

- ☒ **The name of your product/service.**
Will you have a brand name or not? It is good when you are going to promote your products to have a brand name and a logo that your clients would be able to recognize.
- ☒ **The quality of your product/service.**
Will you offer high, medium or low quality to your clients? This decision is important since it is also related with the price you are going to charge. What safety or health standards will it satisfy?
- ☒ **The design of your product (if you are a constructor).**
What types of design will you present? What structure will you build? Will you have some predefined types or you will build the ones your customers want or a mixture?
- ☒ **The after sales support**
*Will you offer to your clients the possibility to ask you for help and maintenance if something goes wrong with the product or service after you sold it to them? Will you give a guarantee for your products? Will this be included in the price they originally pay?
Will they be able to find spare parts from you?*



Exercise 17: *In the following three boxes you will read the product descriptions that were provided by three sanitation entrepreneurs from different parts of the world. Try to tell if their description are complete or not and if not what could they add.*

Case 1. My name is Karina and I am a manual emptier. I have a team of 5 young people and when a client calls me I go with other three people to empty the pit of the client with metal buckets of 100ml. Once we finish we get paid and then we leave.

Case 2. My name is Mr. Tan and I am a small-scale private mason in Vietnam. I have my own concrete business and I now produce concrete rings (of 1 meter diameter) for semi-sceptic tank latrines, which are known in the market as “Healthy Rounds”. I also do the assembly of the semi-sceptic tanks at the client’s house. The product price including the service I provide is reasonable for the people and the quality of the concrete is quite high. During installation I make sure all safety measures so that nobody gets hurt. Also, my customers are my neighbors and village-fellows, so I feel responsible for doing a good job so I offer them an after installation guarantee on my products for 6 months from the time of purchase.

Case 3. My name is Victoria Silva from Bolivia and I own two vacuum trucks for emptying latrines, which are called the “bobos”. I offer a good value for money service and I try to be flexible with time so I can satisfy my clients directly. When I empty the pits me and my employees are all wearing protective equipment and we always make sure that the clients are not exposed to danger caused by the emptying. I am flexible and allow down payment with the rest payable right after harvest

Complete Yes or No?	If not complete what is missing?



Exercise 18: Try to fill in the following checklist for your own business case and decide strategically on the important issues presented before.

Your Product Checklist

☒ The name of your product/service.

.....

.....

.....

.....

.....

☒ The quality of your product/service.

.....

.....

.....

.....

.....

.....

☒ The design of your product (if you are a constructor).

.....

.....

.....

.....

.....

☒ The after sales support

.....

.....

.....

.....

.....



Once you decide on the checklist above that means that you have made your first choice about your marketing strategy, which refers to your product positioning.

The following boxes present you some of the options you can follow as a marketing strategy:

Strategy 1



Standardization

You decide to sell standard products or services which will have the same features for all your clients.

"One for all" principle

Advantages:

- You have smaller operating costs because you follow a routine and save time.
- You can satisfy your clients faster since your product or service design are already decided.

Disadvantages:

- You cannot easily satisfy different client needs.
- You cannot charge different prices for different clients.

Strategy 2



Modularization

You decide to sell standard products but in pieces so households can upgrade their latrines over time as their needs and budget change.

This strategy is applicable more for masons and latrine constructors

Advantages:

- You have a more long-term relationship with your clients.
- You can satisfy your clients faster since your product or service design are already decided.
- You can satisfy different client needs.

Disadvantages:

- You have to do a good technical research on how to break down your product in different parts.
- You have to do a good market research because your clients might prefer to save money and buy a complete toilet.



Strategy 3



Differentiation

You decide to sell different products or services to different clients, based on their needs.

"One for each" principle

This strategy is more applicable to emptiers because it is easier to have different services than different physical products.

Advantages:

- You can satisfy different client with different needs.
- You can charge a different price for different clients.
- You reduce the risk of having only one type of product or service that might not be so wanted.

Disadvantages:

- You have high operational costs
- You will need more time to design and deliver your product.

Strategy 4



Some Differentiation & Some Standardization

You decide to sell few different standard products or services to different clients. This means that you choose three to four different products or services and you offer your clients the chance to choose among those.

Advantages:

- You can offer your client options without having big operational costs because of continuous reinvention of products.
- You can charge a different price for different clients.
- You reduce the risk of having only one type of product or service that might not be so wanted.

Disadvantages:

- You might not be able to satisfy many clients.
- You will need to have good promotion materials to inform people about your different products or services.

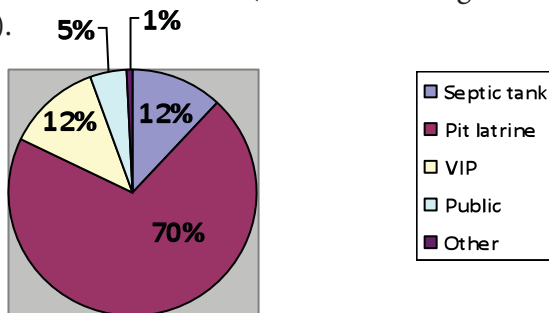
1. Elements to consider for Latrine building

- **Superstructure :**
 - Can be in bricks, wood, cardboard depending on materials availability
 - Note that the superstructure can be the house itself, but some are also portable.
- **Slab/user interface**
 - Can be in bricks, wood, cardboard depending on materials availability
 - Can be on pedestal or a ground level
 - In case of Ecosan, the slab should play a role in urine/feces separation
- **Pit/container**
 - Can be pit/tank under ground level or container above ground level
 - The depth varies depending on many factors (water table, availability of emptying service, easiness to dig pit)
 - Can be sealed or not

3. Reasons for people choosing some specific structures.

- **Superstructure**
 - To give privacy to users
 - Will choose to fit with the other building around
- **Slab/user interface**
 - To keep clean
 - Provide safety and prevent from contact with waste
 - Play a big role in comfort of users
- **Pit/container**
 - Users want it free of odors and flies
 - To keep the waste
 - Protect the environment
 - Most of the time, the design should include emptying possibilities.

2. Statistics on what type of latrine design is more frequently sold per some countries. Example from Dar Es Salam, Tanzania. (Household budget survey, 2007).



4. Source of Information

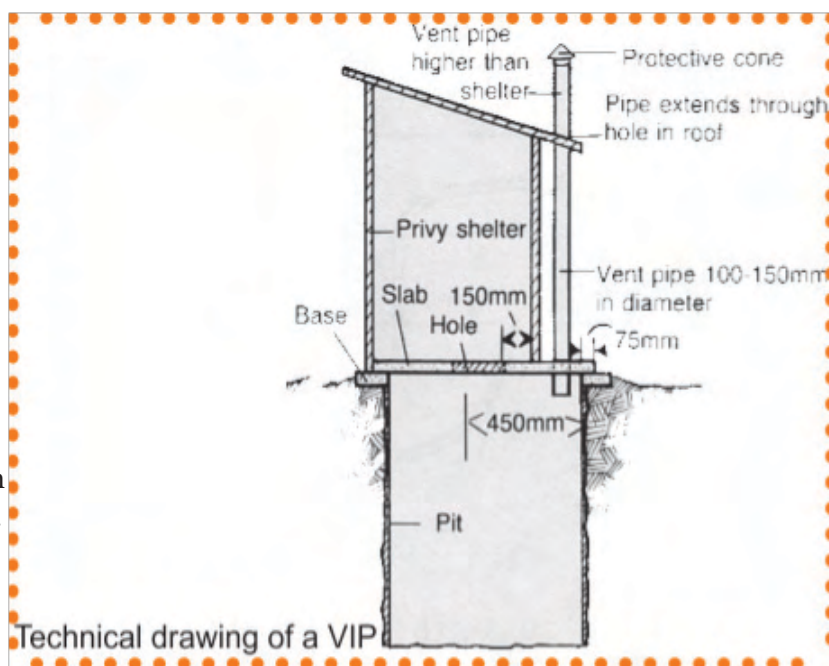
- Akvo give the detail for different model: <http://www.akvo.org> and <http://www.sswm.info> too.
- Decision tool from WASTE: looking at different physical criteria, it helps knowing which technology is adapted.

5. Types of Latrines Available in Market/ Most commonly available

a) Ventilated Improved Pit (VIP)

VIP is an example of a system covering the 3 elements of latrine : super-structure (adapted to local conditions), slab (often a simple hole in a cement slab) and pit. It is a simple improvement over a simple pit because continuous airflow through the ventilation pipe vents odors and acts as a trap for flies.

Despite their simplicity, well-designed VIP can be completely smell free, and be more pleasant to use than some other water-based technologies. A VIP can be upgraded to a double VIP: it has an extra pit so that while one pit is in use, the content of the full pit get treated and can then be emptied manually.



Advantages:

VIP are especially appropriate when water is scarce and where there is a low water table.
Do not require water for operation.

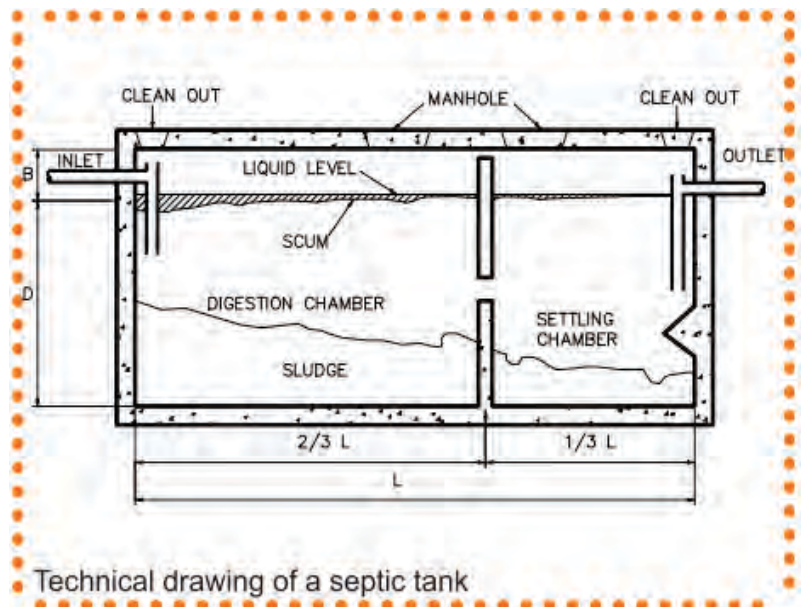
Disadvantages:

VIP are not suited for rocky or compacted soils (difficult to dig) or for areas that flood frequently (pathogen can go out). It may be difficult to empty.

b) Septic Tank Systems

Here is a focus on a pit/container element possibility. A septic tank is an underground watertight chamber and is linked with an user interface in which water is used to flush away the excreta. It should typically have 2 chambers: most of the solids settle out in the first chamber where decomposition take place.

It is difficult to build the good design for a good treatment and it needs regular emptying. The effluent coming out is not pathogen free so it should be directed to areas where human contact is limited.



Advantages:

With septic tank, users don't complain about problems with flies or odours if built/used correctly. It has a long service life (providing that emptying services are available).

Disadvantages:

VIP are not suited for rocky or compacted soils (difficult to dig) or for areas that flood frequently (pathogen can go out). It may be difficult to empty.



c) Urine Diversion Dry Toilet

A UDDT is the user interface allowing for diverting the urine away from the feces. Therefore, 2 containers/pit are needed for this technology, to keep separated urine and feces. When urine is separated from feces, the feces dry quickly. And in absence of moisture organisms cannot grow and as such, smells are minimized and pathogens are destroyed. It is recommended to use ash, sand or lime over the fresh feces, to increase drying time (it limits odours and flies too.)

An alternative is to build 2 vaults for feces to use alternatively. Once one is full, the other vault is used and the content of the first vault can dry completely before emptying. Urine and feces that rested long enough can be use as fertilizer in agriculture.



Advantages:

The main advantage for this technology is the easiness (and safeness) to empty the feces and urine and the potential for re-use. Other positive point is that those latrine can be used even in rocky area (and also in flooded area if container is sealed) and don't need water.

Disadvantages:

UDDT requires education and acceptance to be used correctly (to not mix urine and feces and keep the feces dry).

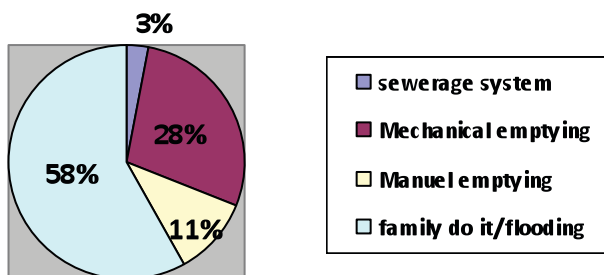
1. Elements to consider for latrine emptying

- Services to provide when there is no sewerage (big majority of the cases in Africa).
- Where the sludge is going to be disposed once emptying is done? For health and environmental reasons, sludge contact with population or ground water table should be avoided. So first is to identify where the sludge can be disposed once emptied. So more than only emptying, often the transport of the sludge should be considered and included in service development (it is often a rather big percentage of service cost).
- What is the aspect of the sludge to empty? Depending on the local conditions and the technology used as a latrine, the aspect of sludge can vary from very liquid to very thick and dried. It will influence which technology can be used : mechanical emptying is often more adapted to liquid sludge. A pump associated with pressured water injection can also help in case the sludge are too thick to be pumped directly. Dried sludge can be removed manually and safety considerations are less than liquid sludge.

3. Reasons for people choosing on type of service

- Manual emptying take it all : people often recognize that with mechanical emptying not all the sludge can be removed. Specifically in some cases, only manual emptying can be done (when there is too much solid waste in the pit, when access is difficult for trucks, etc.)
- The recognition/status of the service of manual emptying, and the working conditions are very bad. People prefer sometimes not to have to deal with manual emptiers and ask service to mechanical emptying.
- People prefer to call mechanical emptiers when they don't want to see the sludge in their surroundings : mechanical emptying bring sludge far.

2. Some statistics on emptying for households in Dar Es Salaam, Tanzania. (based on DAWASA, 2008)



4. Source of Information

- Akvo give the detail for different model: <http://www.akvo.org> and <http://www.sswm.info> too.
- Decision tool from WASTE: looking at different physical criteria, it helps knowing which technology is adapted.

5. Description of advantages and disadvantages per type of emptying:

- **MECHANICAL emptying:**

The most common mechanical emptying type is the vacuum truck, but we refer here at any vehicle equipped with a motorized pump and a storage tank for emptying and transporting faecal sludge. The pump is connected to a hose that is lowered down into a constructed tank (septic tank or aqua privy) or pit and is pumped up into the holding tank on the truck. Generally the storage capacity of a vacuum tanker is between 3,000 and 10,000 L.

Advantages for operators:

- Fast and generally efficient
- Vision/manual handling of the sludge very limited compared to manual emptying. It makes the service more safe and hygienic
- Visibility towards population is good

Disadvantages for operators

- Cannot empty and/or access all the pit
- Very high capital cost (truck and pump) and maintenance difficult (availability of spare part is often a problem)

- **MANUAL emptying:**

Manuel emptying refers to a human-powered emptying and transport and often means one of the following :

- Using buckets and shovels
- Using hand-pump specially designed for sludge removal (Gulper : it is made of a tube and bicycle chain with plaque so that the sludge are lift up when the chain goes up)
- Using a portable, manually operated pump

The method of transport associated with those emptying can be push cart or motorcycle. But in the big majority of the case, the sludge are left next to the pit they have been taken out, leaving the service not completed.

Advantages for operators:

- Advantages for operators
- Very low to moderate capital cost and maintenance cost
- If they are not always recognized by the authorities, they are well known in their communities.

Disadvantages for operators

- In some countries, their service is in competition with something that household do themselves
- Difficult working conditions and often they have bad image with the population
- Transport is sometimes difficult to include in the service



B. Price



One of the most difficult but also most important issues you have to decide as an entrepreneur is the price of your products or services. How will you calculate how much you need to charge your clients? Even though there is no single right way to decide about your prices, likely there is some information you and some tips that can help you with your decision. The information you can use is presented in the following checklist.

Price Checklist

☒ Your product positioning strategy.

Are you going to charge different clients different prices depending on their social status or their needs or for every client you charge the same amount? All that was mentioned before in the product pages.

☒ Your costs of production or operation.

How much money does it cost you to buy the materials for building a latrine or for buying a vacuum track? How much money do you need to cover your business costs? Some pages after you will see how to calculate your costs.

☒ Your clients' willingness to pay

How much do your clients want to pay for what you offer to them? You can use the information from exercise 12 as a basis.

☒ The price of your competitors/ the market price for your product or service

At what price do your competitors sell their products or services? You can use the information from exercise 12 as a basis.

☒ Will you sell on credit or do discounts?

If you do so you need to make sure you calculate your finances in a way that it is possible for you to still cover your costs and satisfy your clients.



The practical tips you can remember:

Tip 1: *You cannot put a price to a product that does not cover your basic business costs.*

Tip 2: *Your price has to be close to what your clients can pay.*

Tip 3: *Your price has to be logic for what you offer.*

Tip 4: *Your price has to be comparable with other goods people pay, for example for water or school fees.*

Tip 5: *Your price has to be close to the price your competitors charge, unless you have a clear strong competitive advantage*



As a starting point you could use the following simple equation for calculating your price. Then you should make sure it is within the limits your customers accept and that it is logical when compared to your competitors.

$$\text{Price} = \text{Cost} + \text{Cost} + \text{Profit}$$

to produce your products or buy your equipment to run your business

Price: *is what you are going to charge to your clients. For example the price a manual emptier in Kibera slum in Nairobi, Kenya is around \$40 per 1m³ of pit emptied.*

Cost to produce your products or buy your equipment: *is how much it will cost you to buy the materials and the equipment you need to use for delivering your product to the client.*

Cost to run your business: *is the cost you have to pay daily like the salaries of your employees, the gas you put in your tank, the rent you pay for your store etc. All these costs are known as operating costs.*

Profit: *is the amount of money that is for your own benefit after you cover all your costs. More information on what you can do with your profit will follow.*



Exercise 19: What price would you charge your client in each of the following cases, making sure that you cover your costs and you make a profit? After you calculate your price explain if there is a big or small chance that your clients would accept it. Remember that the following numbers are not real and are an example.

	Your costs are:	Your clients want to pay:	Your competitor charges:	Your profit will be:	Your price is:
Case 1	\$40 for cement per toilet \$2 for wires per toilet \$50 for rent per month (If you build 10 toilets per month then the cost of rent per toilet would be equal to $\$50 \div 10 = \5 per toilet).	\$60 per toilet	\$65 per toilet	\$5	\$..... per toilet
Case 2	\$500 for gasoline per month \$3 for protective equipment per month \$30,000 for a vacuum truck that lasts for ten years. (You serve 20 clients per month)	\$30 per emptying	\$30	\$100	\$..... per household
Case 3	\$25 for wood per toilet \$1 for nails per toilet \$30 for laminated roof per toilet \$10 for salaries of your workers per toilet \$5 advertising costs per toilet	\$80	\$80	\$10	\$..... per toilet



Latrine Constructors

Some Technical Factors affecting your price:

- *The easiness to find the raw materials (wood, cement, stones etc).*
- *The type of workers you will need (skilled or unskilled).*
- *The design selected by the client.*
- *The type of soil you have to build on.*

Mechanical Emptiers

Some Technical Factors affecting your price:

- *The location of the house in relation to the landfill.*
- *The type of the pit*
- *The ease of the site access*

Manual Emptiers

Some Technical Factors affecting your price:

- *The type of the pit*
- *The state of the pit*
- *The ease of access to the pit*



C. Place



The next “P” you need to think about is the one related to Place. This is about from where you sell or how you deliver your product or service to your client. Place is another issue that also doesn’t have a clear rule to follow. It depends on many things that are different for every entrepreneur. There are however some things you should consider which are presented at the Place Checklist box below.

Place Checklist

☒ **The location of your clients.**

It is important that you are located close to your clients so they can come to you easily but you also minimize your transportation costs. A rule of thumb is that they should not walk more than ten minutes to come and find you.

Related to your customers you should also think where they would look for the product or service you sell.

☒ **The location of your suppliers (if you are a constructor).**

It is important that you can have quick and easy access to raw materials. If your suppliers are far away then you will have again transportation costs that you will have to reflect in the price of your product.

☒ **Your activities in your location.**

What are you planning to do in your office/space etc? Will you put your product together, keep stock, park your vehicles, welcome your clients or show samples of your products? It is important to decide on what you will do in your space so you can adapt it accordingly.

☒ **The zoning and permit regulations**

Do you have the right to have a store or facility in a specific location?



☑ **The visibility of your location.**

Is your business located in a central point from where people pass by daily when they go for shopping or to their works? Is it close by a bus station? If you place your business there you have more chances of getting known to people and future client.

☑ **Your distribution strategy.**

If you are an emptier then yes you will have to go to your clients but if you sell latrines then you have to decide whether you are bringing the product to them or they come and pick it up.

☑ **The location of your competitors.**

You should also take a look at where are your competitors and how they distribute their products.

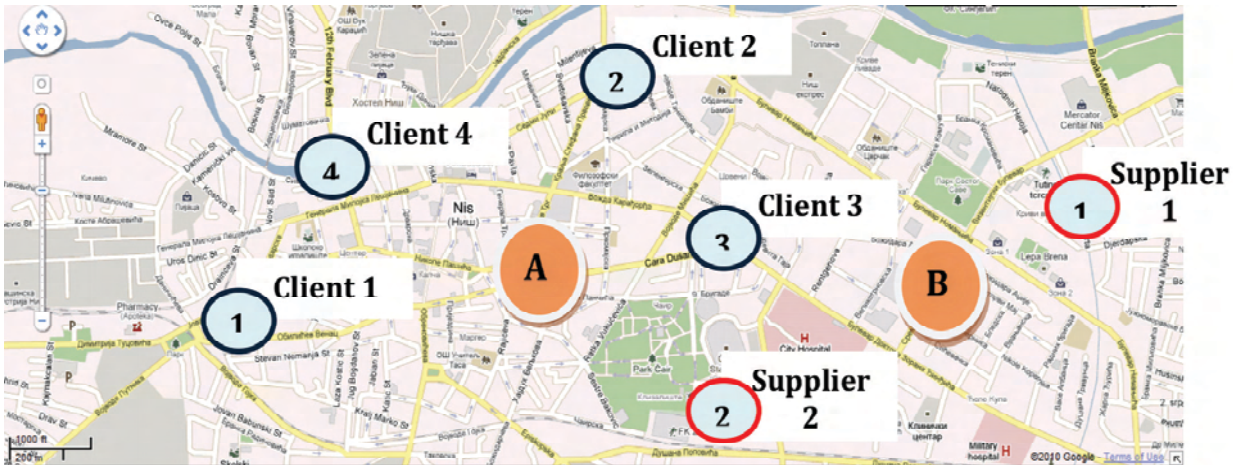
☑ **The availability of necessary utilities**

You have to be sure you choose a location where you can have access to the utilities you need like electricity or water or gas etc.

In order to decide on the location of your business you need to prepare a map of the area where most of your clients and suppliers are and try to identify the best location for it by comparing different locations.



Exercise 20: For the following case calculate which point A or B is better for locating a business. For simplicity reasons your transportation costs are zero and you need to base your decision only on the total distance you have to cover.



Some of the options you have for deciding on the location of your business are the following:

- Have your own store
- Share a location with others
- Have no physical store or place but be contactable only by phone.
- Cooperate with an agency that will come in contact with the client and then she will contact you and let you know where to go.

Each of the above options has advantages and disadvantages. It is up to you to decide on the best for you, without forgetting the checklist above.



Exercise 21: After all the things you read about the Place of a business write down the main decisions you will make for your business.

1. Physical store or not?

.....
.....

2. Alone or with other colleagues?

.....
.....

3. Close to the clients?

.....
.....

4. Close to the suppliers?

.....
.....

5. Close to a crowded public place (square, park, bus stop, market etc)?

.....
.....

6. Do you have a legal permit for the land?

.....
.....

7. Will you rent or hire the place?

.....
.....

8. Will you go to your clients or your clients will come to you?

.....
.....

9. If you go to your clients will you charge them for transportation and if yes how much?

.....
.....



D. Promotion



This is most important of all the “P” you have to deal with when thinking of starting a business as a mason or emptier. The reason is simple and it is because you are selling to households and if you want them to buy from you it means that first of all they know about you! You cannot base your business only on waiting clients to find you, this might come later once you have created a nice reputation in your area. So Promotion is how you tell the people about your product, price or place. Especially at the beginning of your business you have to think well of how to inform future clients.

Based on the clients you identified at step 2 now you need to see how you can let them know that your business exists.

Some basic points that you have on your “Promotion” checklist are presented below:



Promotion Checklist

✓ **The Logo or Brand name of your business**

It is important that you give a brand name or draw a logo that people will see and by it they will immediately recognize your products or services.

✓ **Your approach to different types of clients**

You have to decide whether you are going to have the same advertising strategy for all your clients or use different promotion messages depending on their social status, age, sex etc.

✓ **The most common ways for spreading news in your region.**

From where do people learn the news in your area? Is it from the radio, the T.V., the church, the neighbourhoods, the clubs, the markets, the grocery stores, the school etc. Like this you will know which channels will pass on the information about your business with more certainty and maybe even free of charge.

✓ **The type of promotion materials you want to use.**

Will you use posters, stickers, calendars, brochures, leaflets, radio spots or a combination of them? It is very important that you give a visual to your clients so they can understand your product or service better.

✓ **The seasonality of your promotion.**

You have to decide on how frequently you are going to use promotion materials. You have to make sure that you send the brochures or leaflets for example after the harvest season when people would have more income and could spend some money for their sanitation needs.

✓ **The way competitors promote their products**



Below you can find some ideas of promotion materials from real sanitation entrepreneurs.

Logos

With a logo your client can recognize your products or services and create a kind of trust and style around them. You can print your logo on brochures, on stickers that you can stick on your products etc.



© WSP-EAP, 2009

Leaflets

This is a nice way to briefly present what products you sell and how they look like. Your clients will feel comfortable by seeing a picture of the product they will buy and you are more likely to gain their trust. The same is for emptiers, if you have a leaflet with your truck, some pictures from satisfied clients and your contact details it is quite likely that more people will call you for your service



© WSP-EAP, 2009



If you want an empty pit

- ✧ Fast
- ✧ Cheap
- ✧ Clean

"Bobo" Emptying

at your door in less than 1 hour
just with a phone call!

☎ 000-777-8889





Product Catalogues

Once your clients come to you or call you for more information about your products then you can show them a more detailed product catalogue that will explain the quality, the design, the price and other features of your product. Try to include a picture of what you sell! If these catalogues are hard for you to produce then you can find somebody in your area who could do that for you for a fee.



© WSP-EAP, 2009

	<p>Branded ceramic closet, slab, 1-day labor cost</p>	<p>WC Tumbuh Sehat (Type 1)</p> <p>180 thousand rupiah (USD 18)</p>
	<p>Branded ceramic closet, slab, concrete ring ø1m (1) and cover, 1-day labor cost</p>	<p>WC Tumbuh Sehat (Type 2)</p> <p>260 thousand rupiah (USD\$ 26)</p>
	<p>Branded ceramic closet, slab, concrete ring ø1m (4) and cover, 2-day labor cost</p>	<p>WC Ekonomis (Type 3)</p> <p>600 thousand rupiah (USD 60)</p>
	<p>Branded ceramic closet, slab, concrete ring ø1m (7) and cover, 2-day labor cost</p>	<p>WC Sehat Murah Sumadi (Type 4)</p> <p>850 thousand rupiah (USD 85)</p>

© Almud Weitz, 2009



Other Ways

You can also advertise yourself on vehicles, on your own truck or on other commercial vehicles. Just be inventive!!!



Just remember that whatever you present to your clients in your advertising materials that you are also delivering it. Do not promise something that you cannot give them because then you are creating a bad reputation.



Also do not forget that the more advertising you do the more clients you might attract but also the more money you will have to spend for your marketing! Make sure that you find the right balance between making your business known and keeping the prices competitive!



© Water Aid, 2010



Exercise 22: *Make a list of your clients and decide which type of advertisement you are going to use and where you are going to present it to them. Fill in the following table; an example is there to help you. You can always choose to use the same advertisement for all of them; this depends on your strategy!*

Client Type	What Advertisement	Where Advertisement
Example: Teenagers	Posters	School and Church



Question 7:

What will be your Operating Strategy?



The next question you should ask yourself is “How will I actually do it? From where am I going to find materials, how will I calculate how much materials I need, what type of materials I need, how much time etc.”

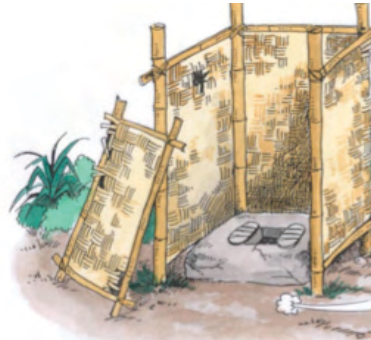
Below you can find information for your operations for the following:

- a. Latrine Construction*
- b. Manual Emptying*
- c. Mechanical Emptying*
- d. Health and Safety*

There are many different types of latrines that you can construct for your client. Each type of latrine has different design and structure. However most of the latrines have three parts:

1. Upper Part

This part is the roof, the frame and the walls.



© WSP-EAP, 2009

2. Middle Part

This part is the slab or the sit.



© Susana, flickr 2010



© Susana, flickr 2010

3. Lower Part

This part is the pit or the hole where excreta end.



1. Upper Part

Roof gives privacy and protection to the user from the sun, wind, and rain. It can be made of leafs, rooftiles, zinc, plastic etc.

Frame is used to support the roof and walls. It can be made of bamboo, wood, etc.

Walls are part of the superstructure. They give privacy and protection to the users. They can be made of wood, bamboo, bricks, cement etc.

2. Middle Part

Slabs can be made of any material which is strong enough to support the users. Materials used should last long and be easy to clean such as wood, concrete, bamboo with clay, etc.

3. Lower Part

How to calculate the pit volume for a VIP.

Volume = Time for the pit to be full * Number of Users * Amount of excreta per person per year

Human-powered Emptying and Transport of pits and tanks refers to several things:
using buckets and shovels;

- using a hand-pump specially designed for sludge (e.g. the Pooh Pump or the Gulper); and
- using a portable, manually operated pump (e.g. MAPET: Manual Pit Emptying Technology).
- using a pushcart or tricycle to transport containers and oil drums containing urine and excreta.



© WASTE, 2007

1. Before the Emptying

1. The client passes by the office of the company or calls for requesting the service. During this conversation the client explains the location of his/her house.

2. The emptier asks specific questions to the clients in order to assess whether the emptying is technically feasible. The criteria used are:

- The accessibility by road
- The distance between the pit and the road
- The liquidity of the sludge (if it is solid then the mechanical emptying is not possible)

3. Once the feasibility of the emptying is clarified then the emptier and the client agree on a price and set up a meeting. The parameters affecting the price are:

- The distance of the truck and the pit
- The type of pit (diameter etc)
- The urgency of the service



© WASTE, 2012

2. The Emptying (appr. 5minutes/ 8m³)

4. The emptier with his team (usually up to 3 people in total) goes to the client's house.

5. The emptying team does a quick diagnostic to see the composition of the sludge and the depth of the pit, by using a wooden stick (approximately 2-3 meters long).

6. Once the diagnostic is positive, the pipes are being selected according to the diameter of the pit. Then the pipes are installed between the pit and the truck.

7. The valve is securely opened.

8. One member of the team stays next to the pit and the other one is with the truck. The one in the truck launches the compressor.

9. The two emptiers are in constant communication during the process, in case there is a bulky obstacle within the sludge.

10. Once the pit is empty, the valve is shut and the pipes are washed with water. The truck vacuums clean water from 2-3 buckets of water. Then the pipes are place again up on the truck.

11. The emptiers clean their hands with Detol.

12. The truck leaves for disposing the sludge.



© WASTE, 2012

3. After the Emptying

(5-10 minutes/8m3)

13. The truck covers usually a distance of up to 20klm in order to dispose of the sludge.

14. Once in the area of disposal the emptier opens the valve at the back of the truck and disposes the sludge. There are two ways of disposing it, either with the compressor on or without the compressor. The advantage of using the compressor is that it goes faster.

15. Once the sludge is disposed the valve closes.

16. The emptiers wash their hands with Detol.

17. The truck is ready for next emptying.





D. Health and Safety of your Operations



1. Your Protection

If you want to make sure that you are alive and kicking for running your business you need to pay a lot of attention to your protection. This part is especially important if your business is emptying pits and coming in contact with human faeces and urine. The risks you are facing in this case are:

- *The land not being stable*
- *The latrine falling down*
- *You getting infected*
 - *Death*

Why is it important for you?

You run less risks of falling sick or getting infected by malaria, tuberculosis, HIV etc.

You save costs (direct and indirect) caused by accidents.

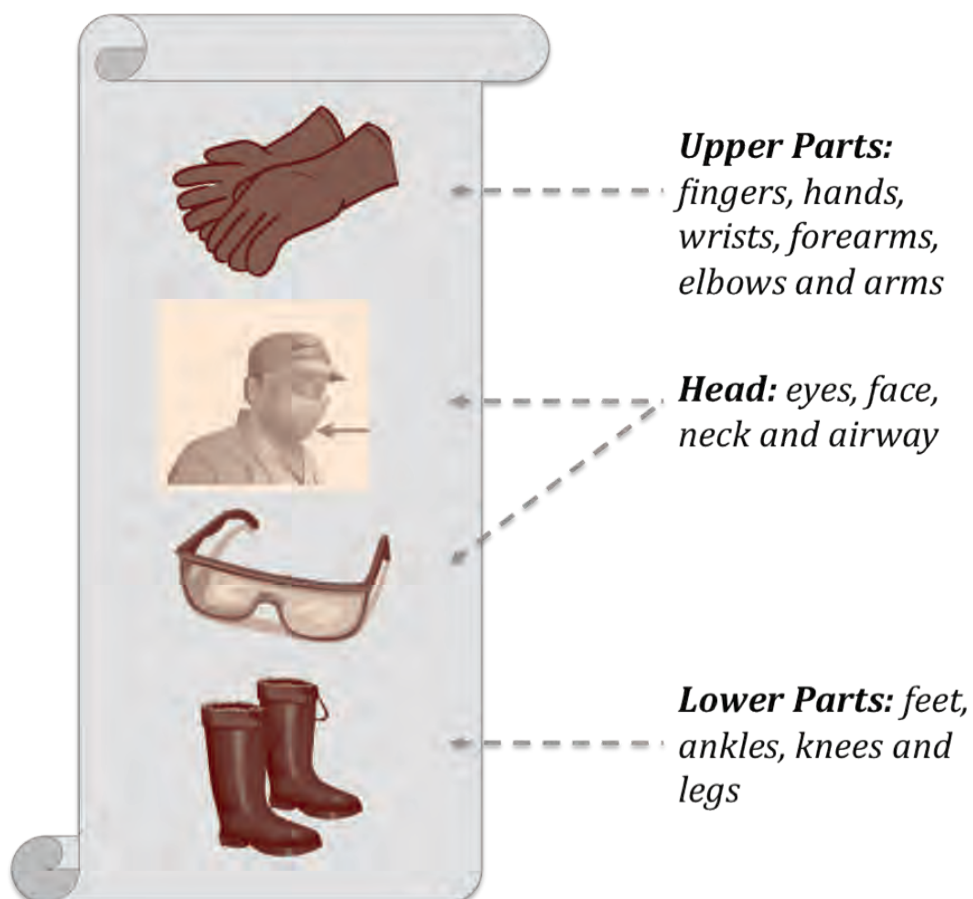
You increase your productivity because you don't reduce the amount of time you work.

You present a better picture of yourself and of your company to the outside world.



What Equipement?

The equipment you need to use to be safe while working with faeces is shown in the following picture:



If you live in a country where the weather is really sunny and warm, it is not very easy to keep on the mask on your face.

For this reason there are different types of masks that exist in shops with holes (open backed masks) that permit you to transpire less when wearing the mask. You can read more on the different types of masks you can use in Annex 2. You can read some instructions on how to create your own mask in Annex 3.



Gloves

The gloves will help you protect from:

- *Coming into contact with the faeces and the urine*
- *Cuts getting infected*
- *Contact with aggressive contaminants or pathogens, dry sex litter and other materials that people throw into their pits etc*



Mask

The mask will protect you from:

- *Breathing in the methane from the faeces*
- *The stinky smells of the sludge*

Eyewear

The eyewear will protect you from:

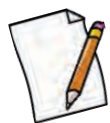
- *Splashes of faeces in your eyes*
- *Pieces of stone or other materials*



Boots

The boots will protect you from:

- *Injuries caused by broken glass or other sharp items*
- *Infections caused by syringes*
- *Contact with other dangerous materials*



Exercise 23: For each picture say what is good practice and bad practice when doing sanitation business. Put a circle around the correct sign.

1.



© SuSanA on Flickr (2010)

2.



© WASTE, 2010



3.



© WaterAid, 2005

4.





2. Your Medical-Working Track Record



One more thing that you can do when going back home after work, is to write on a paper the things you did that day. In the same page you could also note down any health problems you faced during a certain period. In this way you keep track of the excreta you interact with and that could potentially be causing you a health problem and you yourself become an expert on how to protect your own health.

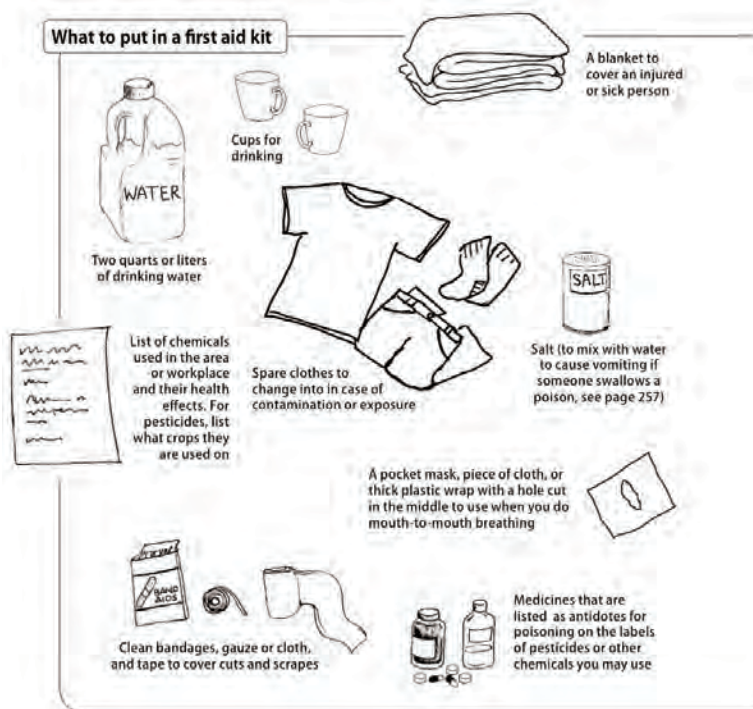
3. Your Working Space

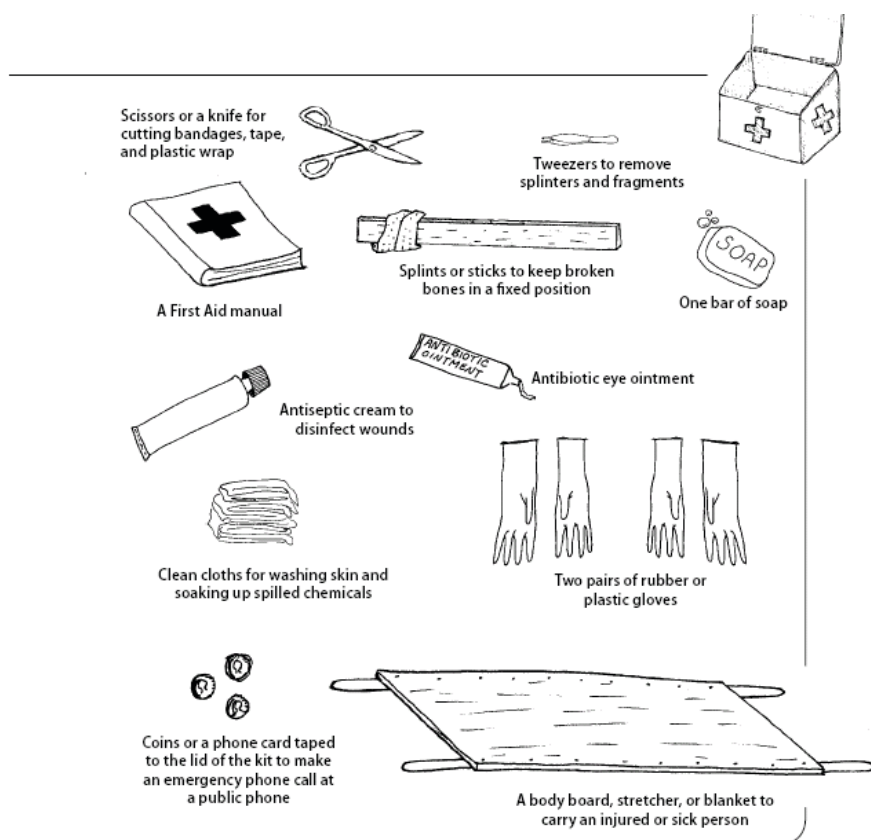


Apart from your personal equipment while working you should also have your working space equipped with a first aid kit for emergency cases.

Make a first aid kit in a container with a tightly fitting cover so water, dust, or chemicals cannot leak into the kit. Make sure everyone in the community or workplace, including new workers, knows where the kit is kept and how to use it.

The following picture presents some key things your survival kit should contain.





Adapted from: Hesperian, A Community Guide to Environmental Health, 2008



4. The Environment



One important thing you should remember both if you are constructing toilets and emptying them is that the way you do your operations can have negative effects on the environment around you (for example the rivers, the water sources, the sea, the agricultural fields etc.).

Any toilet or emptying method you propose to your clients has to:

- *Prevent diseases: it should keep disease-carrying waste and insects away from people, both at the site of the toilet and in nearby homes.*
- *Protect water supplies: it should not pollute the water you drink, the water in seas or rivers or the water under the ground.*
- *Protect the environment: propose solutions to your clients that reuse the human excreta in the soil and that they are used for the benefit of the environment.*

What you can do:

- 1. When digging pits try to see if there is water passing underneath by looking if there are water pumps or dwells next to the pit location.*
- 2. Propose latrines that recover the faeces separately from the urine and explain to your clients how they can reuse them to their soil.*
- 3. Do not empty your vacuum truck in rivers, seas, forests and generally in places where you have no permission to. Try to contact your municipality and explain to them why it is important that they find a place for you to throw away the sludge.*

In Annex 4 you can find some more information about the options you have for dealing with the sludge.



Question 8:

What will be your Finances be like?



The last part of the things you need to plan before starting your business is the money! All the previous decisions and plans you made may seem perfect in theory but if you put numbers on them then they might not be such a good idea.

As an entrepreneur and successful business man you need to have an idea of your costs, your expected sales, the amount of money you are going to earn etc. The reasons why you need to know these things are:

- To know if it is worth continuing doing this job*
- To be able to get some money from bank or other institutions*
- To know if you can grow as a business*

As you did a small research for your clients, competitors, the technologies you are going to use like this you need to do some research before starting for some basic costs for materials, rents, trucks, equipment etc. Once you have done this research you are ready to plan your finances.

For planning correctly your finances you need to put in paper four main things:

- A. Your Start-up Money*
- B. Your Profits and Losses for the 1st year.*
- C. Your Cash Situation*
- D. Your Balance Sheet*

The following pages will help you understand what information you need to know and how to organise it so it can tell you if you will be doing ok as a business or not!

Before you start reading the following pages you should try to do the following exercise.



Exercise 24: Match the following terms with their meaning.

a. Profits

1. The costs you to pay for different things like electricity, rent, insurance etc.

b. Assets

2. The things you own, your business property like stock of materials, equipment, a truck etc.

c. Expenses

3. The positive gain you have from running your business, after you have deducted your expenses.

d. Revenues

4. The money equivalent of all your, cash, property, and other valuables, which represent the wealth of your business.

e. Capital

5. The condition in which what you spend is more than what you earn.

f. Loss

6. The amount of money you receive from selling your products or services.



A. Start-up Money



What is it?

Your start-up capital is the amount of money you need to start your business. This money will help you cover starting expenses before you actually have revenues. You will need start-up capital for:

a. Capital Investments	b. Working Money	c. Other Start-up Costs
<p><i>When you buy an asset that has a high value and lasts for a long time. The capital investments you can make are primarily for:</i></p> <ul style="list-style-type: none">→ A plot of land, a place to store materials etc• Equipment like : a vacuum truck, a moulder, a pump, hand tools, uniforms, a vehicle for transportation etc.	<p><i>The money you will need to pay on a regular basis before you actually start to make money. Your working money can cover the:</i></p> <ul style="list-style-type: none">→ Stock of materials→ Rent→ Promotion of products (i.e. publicity)→ Labour (payment of yourself and your employees).→ Utilities (fuel, electricity, water, gas)→ Maintenance of machines and facility→ Insurance→ Interest on Loan	<p><i>They include the things you will pay only once at the beginning of your venture like:</i></p> <ul style="list-style-type: none">→ Business License→ Permits or Zoning Approval→ Legal fees for Contracts→ Registration fees→ Money for unexpected costs



Why is it important?

First of all, for you to have a clear idea that at the beginning of your operation you will not directly make profits and above that you will have to pay some money from your own savings until you start selling.

Second, people who will lend you money would like to see what would your start up capital expenditures be and know where their money will be spent.



How to calculate it?

$$\text{Start-up Capital} = \text{a. Capital Investments} + \text{b. Working Capital} + \text{c. Other Start-Up Expenses}$$



Example

Remember that the numbers are imaginary and do not show real life situation.

Start-up Cost Type	Cost in \$
a. Capital Investments	
Truck	20,000
Pump	200
Tank System	100
Hand tools	50
Total Capital Investments:	20,350
b. Working Money	
Promotion (assuming "word of mouth")	0
Rent for Parking Facility (1 month x \$50)	50
Labour (1month x \$25)	25
Maintenance (1 month x \$10)	10
Interest on Loan (assuming grace period of 3months)	0
Total Working Capital:	85
c. Other Start-up costs	
Business Licence	10
Legal fees for contracts	5
Registration Fees	20
Money for unpredicted costs	10
Total other start-up costs:	45
Total Start-up Money (a+b+c):	20,480



Stock of Materials: *If your business sells the products or services on credit it will generally take even longer before cash comes in from sales. In this case you may need to buy stock a second time from your start-up money. So in the above table, the Stock of Materials would be $= 2 \times (200\text{kg of Cardboard} * \$0.5/\text{kg})$.*

Rent: *You calculate the rent for your business premises that will be paid from your start-up money. This means that you will have to estimate for how many months you will pay the rent from your own pocket. In the case where you will have to pay from your start-up capital more than one month rent, in the above table, the Rent = Number of Months x Rent.*

Labour: *The same applies to the calculation of labour expenses. You need to estimate for how many months you will pay your employees before the sales cover your costs. In the case where you will have to pay from your start-up capital more than one month's wages, in the above table the Labour = Number of Months x \$25.*



Exercise 25: Calculate the start-up capital you need by filling in the following form.

Start-up Cost Type	Cost in \$
a. Capital Investments	
.....
.....
.....
.....
.....
.....
Total Capital Investments:
b. Working Money
.....
.....
.....
.....
Total Working Money:
c. Other Start-up Costs
.....
.....
.....
.....
Total Other Start-Up Costs:
Total Start-up Capital (a+b+c)



B. Profits and Losses (P&L)



What is it?

The profits and losses statement is simply a calculation of your sales and costs for each month of your operation. If the sales are more than the costs then you make a profit. Otherwise you lose money. Usually when you set up a business you do a P&L for the 1st year.

For your Profit and Loss statement you need to present the following:

- | | | |
|-----------|-----------------------------|--|
| A. | Costs | <i>How much money you pay for constructing your latrines or using your vacuum truck and for other operating costs?</i> |
| B. | Sales | <i>How much money you earn from selling your products or services?</i> |
| C. | Net Profit/
Loss | <i>How much to you gain or lose?</i> |



Why is it important?

Your profit and loss statement tells you whether or not your business is making money. It tells you whether you are profitable or not.

That is why it is really important when you make your estimations you write down the assumptions you made. If for example you are going to hire another employee to help you in the construction of the latrines, you are making the assumption that you will have more clients asking you for latrines. An assumption is something you take as a fact and is based either on your intuition or on some personal estimation or your experience.



A.

Costs

= Costs for producing your products + Operating Costs

A.1. Costs for producing your products:

These costs are related to how much it costs you to produce your latrines. If you are an emptier then these costs would probably be zero since you only have operating costs. If for example you are constructing simple pit latrines the cost of your latrine should include all the materials you need to buy for constructing it.

A general rule for calculating the cost for producing your product is adding the costs of each material you use in the product. To calculate this individual costs you can use the following:

*Cost of material = Quantity of material used * Price of material*

A.2. Operating Costs:

Operating costs include all of the following costs:

Labour Costs: *How much it costs you to employ people?*

How to calculate Labour Costs:

To calculate your labour costs you need to know the following:

- *Number of days your employees are going to work*
- *Number of people you are going to hire: This depends on how many latrines you need to construct or empty and how much work each person you hire can do per day.*
- *The average salary you should pay your employees and every when you are going to pay them (monthly, daily, every 15days etc)*

(See exercise 20 for an example on how to calculate labour cost)



Rent: How much money you pay to use the space/area/room etc where you process and store your products?

Utility Costs: How much money you pay for electricity, water, gas, telephone etc per month/day/usage etc?

Maintenance Costs: How much money you pay for keeping the machines or trucks you use in a good state, or repairing them when necessary.

Transportation Costs: How much money you spend to transport your products to the client's house, if you have decided that (see marketing strategy, place)? Transportation costs can include fuel for a vehicle, food and medical care for your donkey/horse etc.

If you have a fuel-operated vehicle (a car, motorbike etc) then you need to know what the "consumption" of fuel is for every route you make. Usually the fuel consumption is measured by liters/km. So if your car consumes 10 litres per km and you are doing 20 km per day, supposing that the price of fuel is \$1.2 per litre then you pay per day $20 \text{ km} \times 10 \text{ litres/km} \times \$1.2 = \$240$ per day.

Office Supplies: How much money do you spend for office supplies such as paper and ink for the printer, pencils, notebooks, stickers for the bales, forms for your book keeping etc.

Insurance Costs: How much money you pay to keep yourself "covered" if something goes wrong?

Bank Interest: How much money you pay per month in order to repay your loan to the bank? (see step 4, exercise 30).

Advertising: How much money you pay for making your products known to the outside world (customers, other regions, municipality etc).



Since your business will be facing many risks, especially at the beginning, it is advisable to be rather pessimistic with your estimations of potential sales and costs. It is better that you get positively surprised in the end and get better results rather than the opposite.



Try to have accurate estimation of costs as possible. For example if you want to rent land do not guess what the price of the rent will be but rather go to its owner and ask him or her.

B.	Sales	$= \text{Amount of Materials you sell} * \text{Price}$
-----------	--------------	--

Your sales are what you sell to your clients multiplied by the price at which you sell.

For example, you sell 5 latrines for \$60 for the 2 and for \$45 for the rest in January. Then your total sales for January would equal to

$$(2 * \$60) + (3 * \$45) = \$255.$$

Another example could be that if you empty 4 latrines per week for \$50 each then for the month of June your sales would be

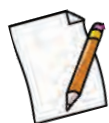
$$4 \text{ latrines} * 4 \text{ weeks} * \$50 = \$800$$



For the first months, since you don't have already made any sales you will have to write down what you predict to sell. In exercise xxx you have calculated how many clients you expect to serve, so now you can use this information to calculate your sales.

C.	Net Profit or Loss	$= \text{Sales} - \text{Costs}$
-----------	---------------------------	---------------------------------

To calculate if you are making a profit or if you are losing money then you simply subtract your costs from your sales.



Exercise 26: Try to calculate the labour costs for Carolina.

Carolina is an entrepreneur in the construction of cement rings for latrines. Today, Carolina does this by herself, but she has received two big orders for the next two months and instead of producing 10 rings per day now she has to process 24 rings per day. She is wondering how many people she needs and how much it will cost her if she hires people to help her.

She knows that:

- *Her business operated 25 days per month.*
- *The amount per day that should be processed the next two months is 20 rings.*
- *In average an experienced worker in making cement with some technical equipment can make 3 rings per day.*
- *One day's salary for the experienced worker is \$2 per day.*

So how many people does Carolina have to hire and how much will she have to put as labour cost in her profit and loss statement?



Example

The following table is an example of how you can present your Profits and Losses. The numbers used are not realistic and are used just as an example.



Entry Type (\$)	Jan	Feb	Mar	Apr	Ma y	Jun	July	Aug	Sep	Oct	Nov	Dec
A. Sales												
Product 1	50	60	100	100	110	150	150	200	200	250	400	400
Product 2	50	40	50	50	90	100	100	100	100	150	200	400
Total Sales (Product 1+ Product 2):	100	100	150	150	200	250	250	300	300	400	600	800
B. Costs												
B.1 Costs for Processing Materials	1	1	2	2	3	3	3	4	4	5	5	6
B.2 Operating Costs												
- Labour	20	20	30	30	30	30	30	30	30	50	50	70
- Rent	50	50	50	50	50	50	50	50	50	50	50	50
-Utilities	15	15	20	20	20	20	20	25	25	25	30	30
- Maintenance	0	5	5	5	5	5	5	5	5	5	10	10
- Transportation	10	10	10	10	10	15	15	15	15	20	20	30
- Office Supplies	5	5	5	5	5	5	5	5	5	5	5	5
- Insurance	3	3	3	3	3	3	3	3	3	4	4	4
- Interest on Loan	15	15	15	15	15	15	15	15	15	15	15	15
- Advertising	0	0	0	0	0	0	0	0	0	0	0	0
Total Costs : (B.1.+B.2)	119	119	140	140	141	141	141	152	152	179	189	220
NET PROFIT /LOSS (before tax): (Sales-Costs)	-19	-19	10	10	59	109	109	148	148	221	411	580



Please note that the following P&L is an example and some operating costs might appear in some business cases and not in others. The costs you are going to estimate depend clearly on your operations.



A really important issue is tax. If you are a registered company then you will have to pay taxes to the municipality or to another institution. The taxes will be mostly on your income and that is why you will pay an income tax. This means that your Net Profit or Loss is before tax and in order to see what really stays with you, you need to subtract the tax charges. This means that you add at your P&L statement two more lines like below:

NET PROFIT/LOSS: (before tax)	-19	-19	10	10	59	109	109	148	148	221	411	580
Income Tax: (if 9%)	2	2	1	1	5	10	10	13	13	20	37	52
NET PROFIT /LOSS: (after tax)	- 21	- 21	9	9	54	99	99	135	135	201	374	528

Note: numbers around round up at the first decimal point

The amount of tax you pay depends on the country you are. To find out how much tax you will pay you can ask your local municipality to help you or the chamber of commerce and trade.

So now you know that at the end of January and February you are making a loss of \$21 and at the end of March you are starting to make a profit of \$9, which is money that is for you!.



How to use it?

Based on the result of your Profit and Loss Statement, you will either have a profit or a loss! It is so simple!

That means that in any case, you need to do something about it. The following table presents you ideas on what to do in each case.

With your Profit you can:

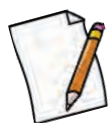


- *Pay back your loan*
- *Replace a machine or buy equipment. Grow your business.*
- *Save money for future "difficult" times.*
- *Enjoy*

With your Loss you can:



- *Not worry if it is in the first 3 months you start your business*
- *Use the saved money to cover your expenses*
- *Try to sell more*
- *Try to reduce expenses*
- *Try to borrow some money*



Exercise 27: Try to decide for each of the sentences 1 to 5 what type of cost it is based on the theory above.

STATEMENT	COST TYPE
1. You use burnt bricks for constructing product 1. The cost per kilo for both is \$5.	
2. You use small blocks of paper as a receipt when delivering a latrine to your client or when receiving an order. This blocks of paper cost \$0.5 each.	
3. You use a 20sq. meter area to store your bricks before they become a latrine. The rent for this space is \$50/month, which you pay in cash.	
4. You printed out 100 leaflets with your contact details and a photo of your truck, to distribute it to your region. The cost per 100 leaflets is \$10.	
5. You use a horse carrier for transporting your products. The cost per bag of horse food is \$4.5.	



C. Cash Situation



What is it?

The cash situation tells you how much cash you have. It shows how much money is coming into the business and how much money is going out. This statement should show that your company has the cash to pay its debts on time.

In other words, the cash situation analysis shows the liquidity of your company at any given month. The differences between the cash flow statement and the P&L statement are summarized in the following table.

	Cash Flow	Profit & Loss
Sales	<p><i>The amount of money you get from your sales is written in your cash situation books only when you actually received it and not before.</i></p> <p><i>If you are selling on credit, meaning that you give your customers the chance to pay you later, then the money from these sales is written in the cash flow only when paid by your customer.</i></p>	<p><i>The sales you do for one month are, even if you have not be paid yet for them, written in the P&L statement on that specific month.</i></p>
Costs	<p><i>You mention the costs you paid only when you actually paid them, not in advance.</i></p>	<p><i>The costs you expect to pay are mentioned in the P&L statement even if you haven't paid them yet.</i></p>
Money coming in	<p><i>If you manage to find money from other sources than your sales, for example by taking a loan, then this is mentioned in the cash situation analysis.</i></p>	<p><i>In your P&L you will not be able to see additional money coming in if it is not related to your sales.</i></p>



Why is it important?

Because profits do not guarantee that you have cash in your hands. You must be sure you have cash available to pay for bills and day-to-day activities. It shows also an important figure, the breakeven point.

*BREAKEVEN is when
THE MONEY YOU RECEIVE = THE MONEY YOU PAY*

What you should aim for is that you reach this breakeven point as soon as possible, when operating. That means you should make sure that relatively soon, in less than three to five months, you can see that the money you receive is more than the money you pay.

If you see that this is not happening then you might want to find some additional money to cover your temporary liquidity difficulties!



How to calculate it?

A.	Cash In	$= \text{Cash in Hand} + \text{Sales} + \text{Cash from Credited Sales} + \text{Loan}$
-----------	----------------	--

Cash In includes:

- **Cash in Hand:** *this is the amount of cash you have available, wherever you might keep it, when you start operating your business and at the beginning of each month. For the pre start-up phase it is assumed that you have no cash in hand and that a loan will help you cover your expenses the first month. The following months however, the cash in hand is what remains from the use of the previous one month. From the example that follows, for March the Cash in Hand is -48 which is what remained from February in the line of Cash Generated.*
- **Sales:** *this is the amount of cash you receive from your sales.*



- **Cash from Credited Sales:** *this is the amount of cash you receive from the sales you make on credit. This is the money you get after one month for example from your customer, because at the moment of sale he didn't have money to pay you and he asked you for a one month credit. If you look at the example that follows, in June for example you have \$100 at your cash from credit, which represents the \$100 from the sales of May that the customer didn't pay you.*

If you decide to sell with credit, meaning not being paid directly when you deliver your product but some time later, depending on your agreement with the customer, you have to be really careful and trust that you will get your money back. It is hard to say no to customers but banks will not hesitate to take all your premises if you cannot pay back your loan!


- **Loan:** *this is the amount of money you receive from a bank or other financial institution in the form of a loan.*

B. Cash Out = *Costs of Producing your products + Other Operating Costs*

Cash Out Includes the cost categories as presented already in the Profit & Loss statement.

C. Cash Generated = *Cash In – Cash Out*

Cash Out Includes the cost categories as presented already in the Profit & Loss statement.

 *The best way of running your business is to maintain a positive cash flow. However, if your business faces cash problems there are a number of ways your can deal with the situation:*

- 1. Get the money people owe you*
- 2. Increase your profits by increasing sales and/or reducing costs*
- 3. Find additional sources of supplies*
- 4. Borrow money*
- 5. Put more money of your own into the business or find a partner etc*



Example

Based on the example presented in the Profit and Loss section, below you can find an example of how you can present your cash-flow projections for the first year.

Entry Type (\$)	Pre Start-up	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
A. CASH IN													
- Cash in Hand	0	-10	-29	-48	-88	-28	-69	140	199	297	395	766	977
- Cash from Sales	0	100	100	100	150	100	250	200	200	150	400	400	800
- Cash from Credited Sales	0	0	0	0	50	0	100	0	50	100	150	0	200
- Loans	80	0	0	0	0	0	0	0	0	0	0	0	0
Total CASH IN:	80	90	71	52	112	72	281	340	449	547	945	1,166	1,977
B. CASH OUT													
- Cost for Processing Materials	1	1	1	2	2	3	3	3	4	4	5	5	6
- Labour	10	20	20	30	30	30	30	30	30	30	50	50	70
- Rent	50	50	50	50	50	50	50	50	50	50	50	50	50
- Utilities	10	15	15	20	20	20	20	20	25	25	25	30	30
- Maintenance	0	0	5	5	5	5	5	5	5	5	5	10	10
- Transportation	10	10	10	10	10	10	15	15	15	15	20	20	30
- Office Supplies	5	5	5	5	5	5	5	5	5	5	5	5	5
- Insurance	3	3	3	3	3	3	3	3	3	3	4	4	4
- Interest on Loan	0	15	15	15	15	15	15	15	15	15	15	15	15
Total CASH OUT:	90	119	119	140	140	141	141	141	152	152	179	189	220
CASH Generated: (A-B)	-10	-29	-48	-88	-28	-69	140	199	297	395	766	977	1,757



Exercise 28: Try to answer the following questions based on the Cash Situation table presented above.

1. Which month is the month, where the entrepreneur receives, as much money as he pays, in other words where is the breakeven point?

.....

2. In August, the entrepreneur has \$50 cash coming from credited sales. Can you explain what that means? From which month is the money coming from?

.....

.....

.....

3. In February, the total Cash In is equal to \$71. Can you explain how is this money calculated?

.....

.....

.....

4. In April, the entrepreneur has total cash generated \$-28. What does this mean? What do you suggest him to do?

.....

.....

.....

5. If you were a banker would you invest in this company by looking at the above cash flow statement? Yes or no and why?

.....

.....

.....



D. Balance Sheet



What is it?

It is a “photo” of your company at a given point in time. It shows what your business has (its assets), what your business owes (obligations/liabilities) and how much money you (the owner) have put in the business (equity).

Your Balance Sheet should have the following information:

- *Current Assets: these are the things that your business owns that can be converted to cash within a year, for example cash, people that owe you money, raw materials etc.*
- *Fixed Assets: these are things owned by your business that have a long-term use such as property, land and equipment. For example vehicles, buildings, special equipment, air-conditioners etc.*
- *Current Obligations: are the debts your business will pay within a year, for example general operating expenses, items that you bought on credit etc.*
- *Long-term Obligations: are debts that you don't have to pay within a year, usually a long-term bank loan is a typical example.*
- *Owner's Money: is what capital have the owners put in the company plus any earnings that have been retained in the business. It is what the owners would get if all the assets were sold and all the obligations were paid.*



Why is it important?

It is important to know that if you apply for a loan, a banker will check first your Net Working Capital Ratio. This is what you get when you subtract your current obligations (bills due within 30 days) from your current assets (what you could turn into cash within 30 days). This ratio shows how possible it is that you manage to pay all your short-term obligations.

$$\text{Net Working Money/Owner's Money} = \text{Current Assets} - \text{Current Obligations}$$

To see whether you have a positive or a negative net working capital, divide your current assets by your current obligations to get your current ratio:

$$\text{Current Net Working Money Ratio} = \text{Current Assets} \div \text{Current Obligations}$$

For Example: Current Net Working Capital Ratio (1.3) = Current Assets (\$200) \div Current Liabilities (\$150)



The goal is that the ratio is anything more than 1, and that means that you have a positive net working capital so you can meet your short-term obligations.



Example

The Balance Sheet for the company used in the previous examples, will look like this for the first day the entrepreneur starts to sell:

BALANCE SHEET (\$)		
November 20, 2010		
A. Current Assets		
Cash	100	
Credit Sales (Accounts Receivable)	0	
Stock/Inventory	10	
Total Current Assets		110
B. Fixed Assets		
Equipment & Fixtures	28	
Building	0	
Total Fixed Assets	28	
(-)Depreciation	2.8	
Total Fixed Assets (net)		25.2
Total Assets (A+B)		135.2
C. Current Obligations		
Trade Creditors	0	
Tax related	13	
Total Current Liabilities		13
D. Long-term Obligations		
Bank Loan	150	
Total long-term obligations		150
Total Obligations (C+D)		163
Capital		
Owner's Investment	135.2	
Retained Earnings	0	
Total Capital		135.2
OWNER'S MONEY		-27.8



The Current for the example is

Net Working Capital Ratio = Total Assets ÷ Total Obligations= 135.2 ÷ 163 = 0.8.

Obviously there is a problem in the balance between how many assets the entrepreneur of the example has and how much money he or she needs to pay to other people. That means that he or she needs to rethink and see again his or hers other financial statements (profit and loss or cash situation) and see where they can improve their performance.



Exercise 29: *Try to answer the following questions based on the Balance Sheet presented as an example.*

1. How much money does the entrepreneur has to pay for his total obligations and how did he/she calculate this number?

.....

2. How much money does the entrepreneur has on the first day of his/her operation? How did he/she calculate this number?

.....

3. If the entrepreneur bought a new plot of land with his own money at a price of \$500, where in the Balance Sheet would he/she have to add this money?

.....

4. If the entrepreneur bought this plot of land not from his own money but took a loan of \$500, how the Balance sheet would be different?

.....

.....

5. The entrepreneur has to subtract from his/her fixed assets some money for depreciation. Can you explain what is this? If you know that the original value of the equipment he bought is \$28 can you estimate how many years he or she expects the equipment to last?





.....

.....

.....



The following table is summarizing the four financial statements you will have to create when writing a business plan. Usually banks or other investors are interested in your Profit & Loss statement and your Balance Sheet.

Type of Statement	Shows	Calculated as	
A. Start-Up Money	The money you need to begin “The key that open the first door of your operations”	Capital Investment + Working Money + Other Start-up Costs	
B. Profit & Loss (P&L)	Making money or not	Sales - Costs	
C. Cash Situation	What money is coming in and what out	Cash In - Cash Out	
D. Balance Sheet	The situation of your business at any moment.	Assets - Obligations	



By now you have:

- *Planned how you will get your products or services to your market (Marketing Plan)*
- *Planned how you will organize your operations (Operations' Plan)*
- *Planned how much money you will need to start, how much you will earn and how much you might lose (Financial Plan)*



Step 4

The Realization





Reaching step 4 means that you have find a business idea, you searched if there was actual demand for it and then you planned how to make it happen. Now the only remaining thing to do is actually GO FOR IT!

Ancient Greeks said that “Well begun is half done”. You should make sure you kick-off your business in the most organized way possible.

Question 9:

How to you start your business?



When you will kick start your venture you should do the following:

- a. Make an Action Plan*
- b. Decide on the Form of your business*
- c. Try to find start-up money*
- d. Decide on your book keeping forms*

A. Make an Action Plan



After the planning step you probably understood that there are quite a lot of issues that you need to figure out before starting. In order not to lose valuable time and not complicate your tasks more than necessary you should make in advance your own action plan. This should include the preliminary activities you need to do as well as by when you expect to accomplish them.

The following table is an example of how an action plan looks like. It can be adapted to your needs and thoughts! You may add or remove activities depending on your case. By putting a ✓ means that you will commit yourself and try to achieve the deadlines you set for yourself. Be aware and set up a realistic start-up plan.

Example of Action Plan Form									
Activity	Weeks								
	1	2	3	4	1	2	3	4	5
1. Find the location of your business			✓						
2. Try to find additional money	✓	✓	✓	✓	✓	✓			
3. Order Equipment		✓				✓			
4. Order Office and other supplies						✓			
5. Make sure you have places from where you can find or buy materials.	✓	✓	✓	✓	✓	✓			
6. Install Equipment & Organize your facility								✓	
7. Make your business known			✓		✓				✓
8. Register at the Municipality							✓		
9. Start Business									
	November					December			



Usually the activities 2 and 5 are not only happening during one week, but all the time. You always need to make sure you have enough money to start and if you apply for a loan then this will take more than one week. You always need to make sure you have sources of supply that you trust and count on them to have the materials you need to sell.



Exercise 30: Think of all the things you need to do to start your business, and then put them down in paper by filling the following Action Plan. You can change the time scale even the activities to make it more useful for you.

Example of Action Plan Form										
Activity	Weeks									
	1	2	3	4	1	2	3	4	5	
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
Month					

B. Decide on the Type of Business



The legal form your company will depend completely to you and the vision you have for it.

The first question you have to ask yourself is whether you want to continue being informal and not having an official legal status of operation or formalize your operations by registering your business.

The choice is not easy. To answer that question you need to see what are the advantages and disadvantages of becoming formal or remaining informal.

Baasim is a latrine constructor in the city of Nakuru in Kenya and he has chosen to work informally. Vladimir is a latrine emptier in the city of Lima in Peru. He has decided to work together with the municipality and register his operations.

I am **happy** because like this I:

- Don't pay taxes
- I keep all the money I make for me
- I don't need to change and start keeping books and stuff, which I can't.
- I make a living and feed my family.



"Informal" Baasim

Sometimes though I feel **stressed** because:

- I get harassed by the police and they don't allow me to collect materials.
- I need to take a loan but the bank does not give me one.
- If my customers do not pay me I cannot take them to court because my business does not have a legal standing.
- The municipality does not want to work with me, if I am unregistered.

I am **happy** because like this I:

- I have a more secure income
- I am insured
- I can have access to more areas because the municipality has given us permission to collect from households.
- I can take a loan and expand my business
- I don't feel afraid that the police will harass me.



"Formal" Vladimir

Sometimes though I feel **stressed** because:

- I have to keep track of all my activities.
- I have to follow the decisions of my association.
- I need to make enough money so I can pay my taxes and still have a profit.
- I need to comply with some national laws regarding safe handling of waste materials.

Either case is "paradise". Both of them face difficulties but also enjoy some benefits from their choice.

In case you would like to have some more information on the different legal forms of business that exist, if you feel that the formal model is what you choose, then you can read some more information in Annex 5. You will find information for:

- a. Sole proprietorship
- b. Partnership
- c. Corporation
- d. Community Based Organization
- e. Cooperative

C. Try to find start-up money



If when you calculate your start-up capital in Step 3, you realize that you will not manage to cover all the costs you have out of your own money, it is normal to try to find other sources to help you with your financials.

There are different informal and formal types of lenders:

a. Informal Lending Sources

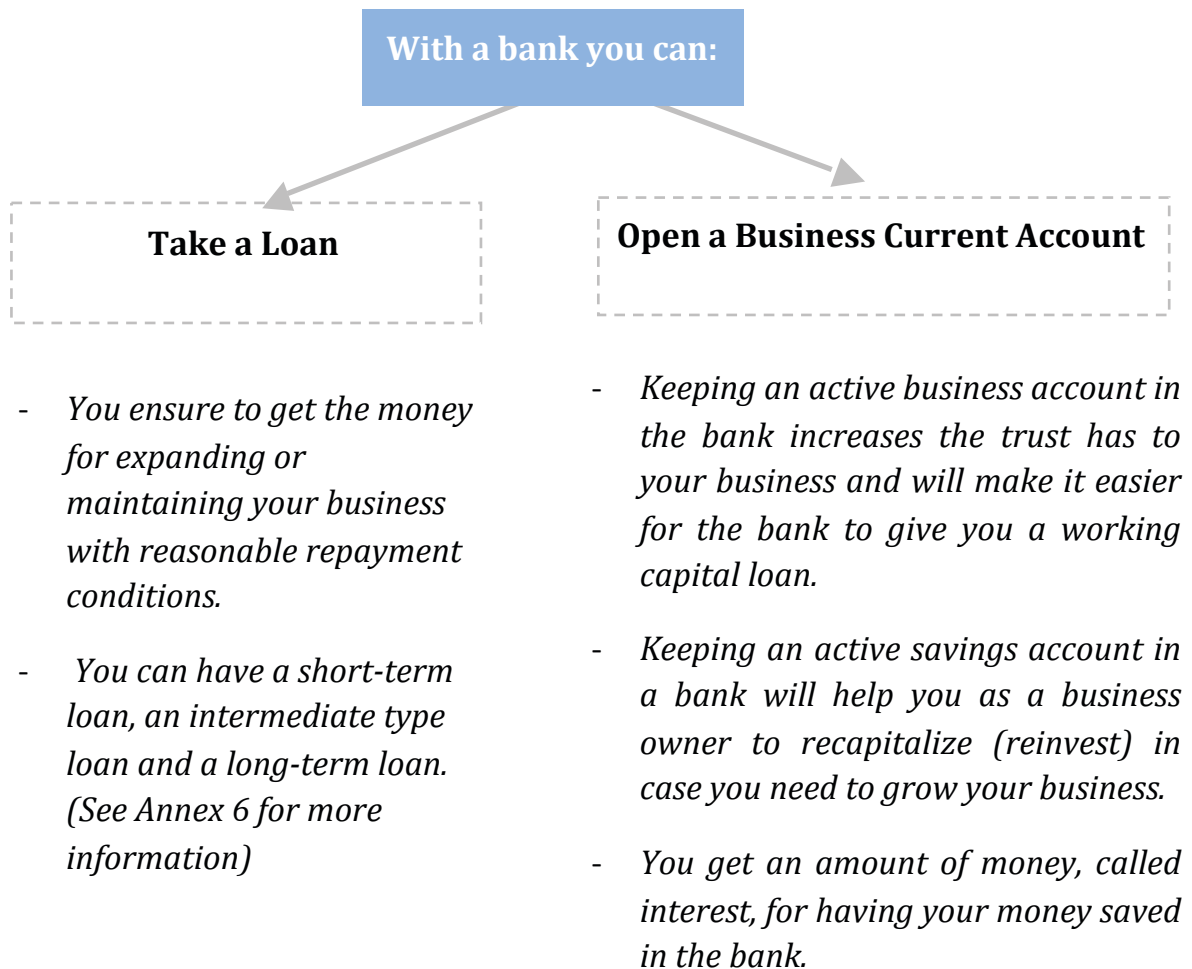
- Family or friends
- Pawnshops, where you can get quick cash by pawning jewelry and other valuables
- Money Lenders, these are people who lend quick money without collateral but charge huge interest rates. It is really not advisable to use this source of money.
- Credit cooperatives, these are a popular and easy source of credit especially in the rural areas. It may therefore be very useful for you, as entrepreneur, to join one. Usually a credit coop will lend an amount up to five times bigger than the money a member has deposited in it. Interest charges are often minimal.

b. Formal Lending Sources

- Banks
- Financial Institutions
- Government Development Agencies

From all the different sources it is important that you have a clear idea of the different types of interactions you can have with a bank. It is important to know also what types of banking “products” could be useful in your case.





A bank will ask from you:

Collaterals: *These are anything that you can show to the bank as a guarantee in case you cannot pay back your loan. It can be anything from a house to a car or some money the guarantee of another person.*

Cash Situation (cash flow): *You will need to show to the bank that you have enough cash remaining in your hands after you cover your costs that would permit you to repay the loan on a regular basis, for example monthly.*

Registration: *The bank will ask you if you are registered. If you want to get a loan then you will need to do so. The main reason for this is that registration symbolizes that the municipality recognizes your activities and this gives confidence to the bankers that your business is stable.*

Balance Sheet: *You will need to show how many things you own, the value of your business as well as the other obligations you might have, like other loans etc.*

In any case you should remember that a banker would need to see if you are “liquid”. In other words you will need to prove that you are an active entrepreneur with constant sales and increasing clients. That is why you should always be prepared to answer the following question when going to a bank.

1. How many clients do you serve per day?
2. How much do you charge for your service or product?
3. How much money do you have on average in you pocket at the end of a day?
4. Have you taken a loan from another bank?
5. How many people work for you?



Exercise 31: Think of all the things you need to do to start your business, and then put them down in paper by filling the following Action Plan. You can change the time scale even the activities to make it more useful for you.

Loan Summary

Loan Amount: **Ksh.**
 Loan Length:
 Annual Interest: **3%**
 Every when you pay:
 Monthly Payment: **Ksh.**
 Total Paid: **Ksh.**
 Total Interest: **Ksh.**
 Total Periods:

List of Payments

Period	Interest Paid (Ksh.)	Principal Paid (Ksh.)	Remaining Balance (Ksh.)
1	0.50	16.44	183.56
2	0.46	16.48	167.08
3	0.42	16.52	150.56
4	0.38	16.56	134.00
5	0.33	16.60	117.39
6	0.29	16.65	100.75
7	0.25	16.69	84.06
8	0.21	16.73	67.33
9	0.17	16.77	50.56
10	0.13	16.81	33.75
11	0.08	16.85	16.90
12	0.04	16.90	-0.00
Totals:	3.26	200,000	

Question: With every payment you give to the bank, for the previous loan, are you paying back?

- Only Interest?
- Only the Loan Amount (principal)?
- Both Interest and Loan Amount



You should know that the loans a bank can offer can be any of the three above cases, either you will repay only interest with every payment and in the end you pay the principal, either you will pay only the principal and no interest and either you will pay both principal and interest at the same payment.

D. Decide on your book keeping forms



The small final thing you need to figure out is what kind of templates/forms you are going to use in order to track all your transactions, assets and activities of your business. Below you will find some templates for the basic business activities of an entrepreneur in waste material trading.

a. Order Book

Every time a client is ordering products for purchasing them, the details of his/her order need to be recorded officially. For this reason, the order book is used for purposes of recording the quantity of the product ordered for, the product specification and delivery terms.

The order book is important because:

- *The records show what is actually required, when it was ordered and with what requirements.*
- *Helps to check whether what is finally delivered is the same as what was ordered.*

b. Delivery Note Book

After making an order for the supply of goods, the requested products will eventually be supplied and are brought in with a delivery note. That is why the delivery book is used for recording the details related to the quantity of products delivered and their specifications.

The delivery book is important because you need:

- *To know whether what was ordered is what is delivered.*
- *To show to the sender that the item(s) was/were delivered.*

Below you can find examples of an order book and a delivery note book template.



ORDER NOTE

Date..... 20.....

FROM.....

.....

TO.....

.....

PLEASE SUPPLY THE FOLLOWING GOODS

UNDER THE CONDITIONS:

Signature of Client:

DELIVERY NOTE

Date..... 20.....

M.....

.....

PLEASE RECEIVE THE UNDERMENTIONED IN GOOD
CONDITION.

FROM.....

.....

Comments to the company:

Signature of Client:

c. Receipts Book

Every time you receive cash from outside sources e.g. sales of goods and/or services rendered, you have cash coming in that needs to be recorded in the receipt book. The receipt book therefore contains document record, which is used to acknowledge receipt of money.

Receipt book keeping is vital in that:

- It is done in order to officially confirm that money has been received.
- It makes it easy for the the accountant/treasurer to enter cashbook records.

Name of Client:		CASH SALE	
M.....		No. 040	
Date..... 20.....			
QTY	Price to be paid		
		Advance	Remaining
Signature of seller/provider:			
E&OE	Goods once sold are not returnable. Thank you.		

d. Voucher Records File

This is a file for filling documents used to show amounts of money payments to other people. The cash outflow/payment could be for purposes of purchase of assets, purchase of stationery, payment of salaries/wages/allowances to officials, electricity, rent, water etc.

It is important to keep a voucher records file because:

- *You will find it necessary and important to obtain information related to all money paid out.*
- *You can control your cash payments and ask yourself why such money was paid out when and to whom.*
- *Voucher records are so important since they are used to enter your cash in, in the cashbook.*

Name of the Co.		PETTY CASH VOUCHER	
		No.	
		Date..... 20.....	
A/C		Advance	Remaining
Shs..... TOTAL			
Checked by	A/C Code	Signature of recipient	
Authorized by			

So now you know how to start your own business in waste material recovery or improve the level of organization at your existing company!

If you feel like you want to ask something do not hesitate to contact us at office@waste.nl or nagathos@waste.nl.

And do not forget that for making money out of waste you should follow:



PART B

SOLUTIONS to EXERCISES

Exercise 1:

The answer depends on your case. You write or draw your idea, on what you want to do. For example, "I want to start selling compost from human excreta to the farmers of my village".

Exercise 2:

Strengths: 1,4,6,9,18

Weaknesses: 2,6,13,14,15

Opportunities: 5,10,11,17

Threats: 3,7,8,12,16

Exercise 3:

The answer depends on your case. There is no correct or wrong answer in this case.

Exercise 4:

If you answered 'no' to more than two of the previous questions you might have to change your outlook if you want your company to succeed. You will need at least 6 of those characteristics to make your business idea a reality.

Exercise 5:

The answers in this exercise depend also on your personality. You need to think of which personal characteristic of yours will help you build and operate successfully your enterprise.

Exercise 6:

Exercise 6: The most important mistake the entrepreneur in India made was that he didn't research, before he started his production of ecosan toilets, if there was an actual need for them. He didn't verify if there were actually people willing to buy them, in other words he didn't verify there was a market for his product. The clients on the other hand had clear reasons why ecosan was not an option for them.

Exercise 7:

1-c, 2-d 3-b, 4-a

Exercise 8:

Case 1: 6. Substitute Products

Case 2: 4. Current Price

Case 3: 1. Client Preferences

Case 4: 4. Predicted Price

Case 5: 3. Client Preferences

Case 6: 2. Complementary Products

Case 7: 7. Client Preferences

Exercise 9:

Here are the tips on how you should use the information from the previous exercise.

	<i>Situation</i>	<i>Example</i>
<i>Complementary Products</i>	<i>If you know that someone is selling something that could make you improve the level of satisfaction your clients have then you could think of allying with them.</i>	<i>If you are constructing toilets and you know somebody who is providing emptying services then you can make an agreement with him to recommend him to your clients provided he gives them a discount for the emptying service.</i>
<i>Substitute Products</i>	<i>If you know that someone is selling a product that competes with your product you could investigate what is the competitive advantage of your product and what are the disadvantages of the other product so you can add a value to the client.</i>	<i>Imagine you are emptying latrines with a bucket and after the emptying you leave a big mess around the latrine. If there is another emptier that has a pipe and a truck and before he leaves he makes sure the place around the latrine is empty then you are facing of going out of business. In this case you will need to think how you can improve your operations and satisfy your client as much and even more than your competitor.</i>
<i>Client Preference</i>	<i>If you know the basic factors that influence the decisions of the people in your region then you can try to give them what they want and adapt your products and services to their needs.</i>	<i>For example if in your area having a nice looking, clean and non smelly toilet is a indication of social status then you know that your clients will need to see in your products also a nice appearance and not only good technical performance.</i>
<i>Predicted Price</i>	<i>If you know that your clients are anticipating a price rise in the future then simply be honest and do not charge them more so you can build trust with them. If they feel you don't try to deceive them then they will not only come back to you but also recommend you to their friends and family.</i>	
<i>Current Price</i>	<i>If you know what your clients are paying for other important things like school fees, electricity or water then you can charge them a price that will be comparable and normal in comparison to these.</i>	<i>If for example your client is paying \$0.5 per day for drinkable water then you cannot charge your emptying service \$100 per month. It would be simply too expensive for him or her.</i>

Exercise 10:

- 1= price
- 2= permit
- 3= health
- 4= easy, maintenance
- 5= Comfort
- 6= privacy
- 7= clean
- 8= friendly, contact
- 9= punctual
- 10= design

Exercise 11:

This depends on your case. You can use the example to get a feeling. It is important that you base your answers on real discussions with potential clients. Take a sample of your product with you so they can have a better idea of what you are offering and thus be more pragmatic to their willingness to pay.

Exercise 12:

This depends on your case. Try to think of people who will buy your products, how much they will pay you and how often you will have to sell to them. Do not forget to ask their expectations for quality and design.

Exercise 13:

This depends on your case. Try to think of people who by doing what they do they reduce your market share.

Exercise 14:

1.	<i>Yes, there is competition</i>	<i>Direct</i>
2.	<i>No there is no competition</i>	<i>You are very far away for feeling the effect coming to your area.</i>
3.	<i>Yes, there is competition</i>	<i>Indirect. If the constructor to who you sell has decreased sales then you will also see your sales going down.</i>
4.	<i>Yes , there is competition</i>	<i>Direct</i>
5.	<i>Yes, there is competition</i>	<i>Future Competition</i>
6.	<i>Yes, there is competition</i>	<i>Direct, the women will reduce the amount of human excreta they throw away, thus your supply will be reduced.</i>

Exercise 15:

A. Risks: 2, 5

B. Benefits: 1, 3, 4,6,7,8

Exercise 16:

	Type of Factor	Direct Influence	Indirect Influence
<i>1. The price of cement and plastic is rising increasingly and the latrines constructors are facing growing production costs.</i>	Economic	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>2. A new public campaign has been launched from the municipality with the title "Show me your toilet and you will have my respect".</i>	Institutional	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>3. In South Africa, certain municipalities have recognized the important role of the informal sanitation entrepreneurs and they are making efforts in integrating them in their sanitation strategy.</i>	Legal/Political/ Institutional	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>4. A high-tech super structure for surrounding pit latrines has appeared in the market and in a really affordable price for locals.</i>	Technological	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>5. A local bank has introduced new types of loans, addressing sanitation entrepreneurs.</i>	Economic	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Exercise 17:

Case 1: No /The product description in the first case is not complete. The entrepreneur is not saying anything about the quality of the service she provides, if she has a brand name for her business and if she is providing some type of support/help to the clients after she finishes with the emptying.

Case 2: Yes

Case 3: No /The product description is quite good but not complete. The entrepreneur does not mention anything about after sales support.

Exercise 18:

This depends on your case.

Exercise 19:

Case 1

- Your price is: \$52 per toilet.

This is calculated as following:

Your costs per toilet + Your profit = (\$40+\$2+\$5) + \$5= \$52

- There is a high chance that the client will choose you since his/her willingness to pay is even higher than what you charge and the competitor is selling at a higher price.

Case 2

- Your price is: \$137.65 per household.

This is calculated as following:

Now all you costs per month are: \$753

The total number of households you serve per month is: 20

Your costs per household+ Your profit. Here because you don't charge per toilet and your costs are per month or even per 10 years for the truck then you have to translate all the costs in the same unit, which in this case will be per client/household.

That means that first all you have to make all your costs per month. The vacuum truck is 30,000 and will last for 10 years that means that if every month you had to pay a small amount for it that would be $\$30,000 \div 10 \text{ years} = \$3,000$ per year, which is then $\$3,000 \div 12 \text{ months (in a year)} = \250 per month.

Now all your costs per month are: \$753

The total number of households you serve per month is: 20

Your costs per household are: $\$753 \div 20 = \37.65

Now if you go back to the original equation where

Price= Your costs per household+ Your profit = $\$37.65 + \$100 = \$137.65$

•There is small chance that your clients will accept to call you to empty their pit. You are charging almost 4 times more than your competitors and 4 times more than your clients can pay. Apart if you offer a service of an extreme good quality.

Case 3

•Your price is: \$

This is calculated as following:

Your costs per toilet + Your profit = $(\$25 + \$1 + \$30 + \$10 + \$5) + \$10 = \$81$

•There is a chance of your clients choosing your product if you manage to convince him/her why what you offer is better than that of your competitor. Since the prices are almost the same you need to make clearer your competitive advantage.

Exercise 20:

You have 2 points of suppliers, 4 selling points –where your clients are- and 1 point where your facilities should be. In this exercise you are asked to estimate the best location for your facility by calculating the time and cost of your transportation.

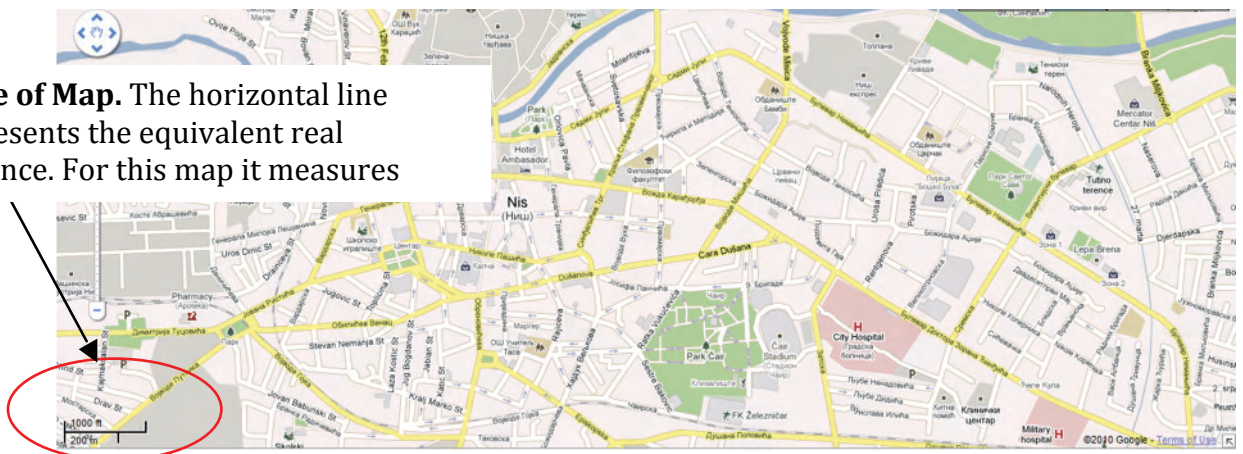
For answering this exercise you need to follow the checklist:

1. Find a map of your area
2. Find your points of supply and the selling points.
3. Walk/Drive/Pass by all the points that you have identified
4. Choose a point A and a point B as potential locations for your facilities.
5. Calculate the distance, time and transportation cost from one of the points to your facility.
6. Do the same for all your points on your map.
7. You compare the cost and time calculations
8. You choose either point A or point B for your location.

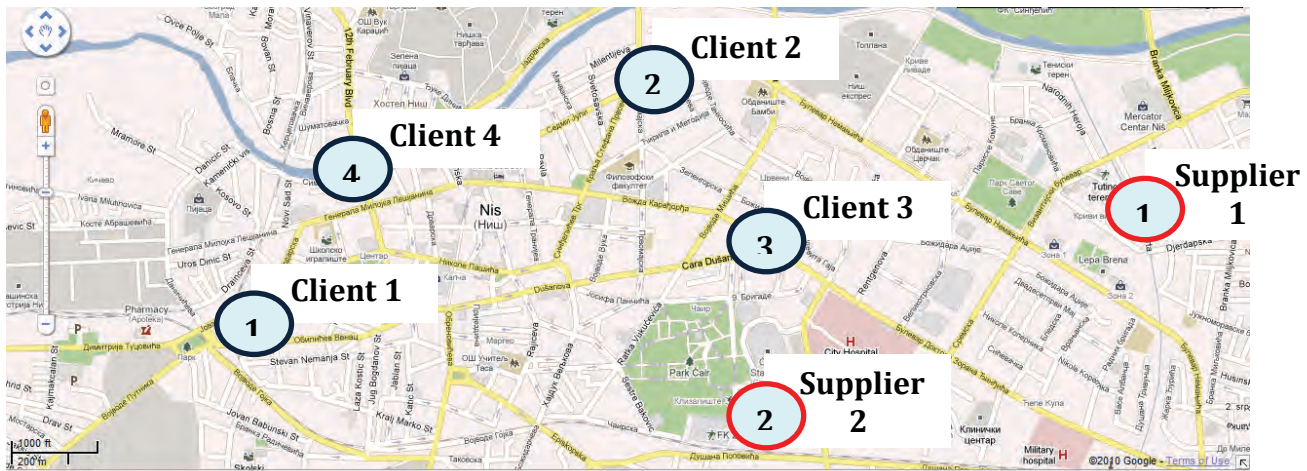
In the hypothetical situation of a latrine constructor in Nis in Serbia, the identification of the best location for his sorting and processing facility would be done as following:

1. Find a map of your area.

Scale of Map. The horizontal line represents the equivalent real distance. For this map it measures



2. Find your 2 points of suppliers and the 4 selling points.



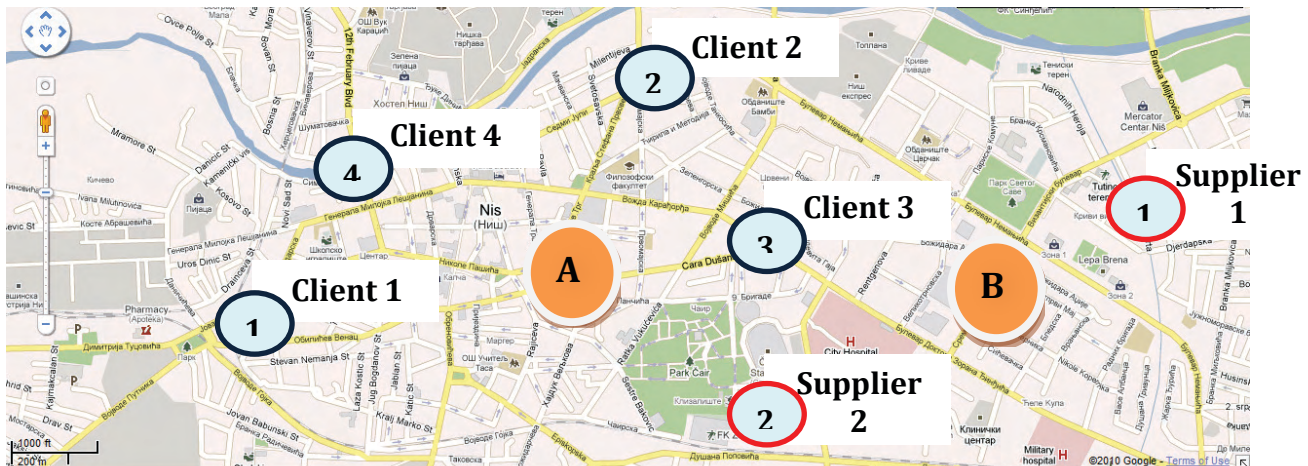
3. Walk or drive or pass by all the points you have chosen in step 2.

The reason for that is that you can sense the actual distances you will be required to make from one place to the other.

4. Choose a point A and a point B as potential locations for your facilities.

The choice of these points A and B should not be done by chance. You should take into account the practicality and time parameters into account, as mentioned in the note on page 57. You will have to choose two locations so you can compare them. In reality you might have more you might have more than two options for your location. The rent you might need to pay per location can influence your decision as well.

For the example we will pick point A and B as shown on the following map:



Point A was chosen because of its proximity to all 4 clients but it is kind of far away from the suppliers. Point B was chosen because of its proximity to the suppliers and some of the clients.

Point A was chosen because of its proximity to all 4 clients but it is kind of far away from the recovery points. Point B was chosen because of its proximity to the suppliers and some of the clients.

5. Calculate the distance, time and transportation cost from one of the points to your facility. // 6. Do the same for all your points on your map.

a. Distance

To calculate the distance between your locations you need to know the scale of the map and have a ruler to measure the distance between the points on the map. For this example the scale is 200m, meaning that for every 200 real meters you match the length of the line shown on the scale, which for this case is 1,5cm. So looking at the map you need to calculate the real distances

From Point A to Client 1:

From Point A to Client 2:

From Point A to Client 3:

From Point A to Client 4:

From Point A to Supplier 1:

From Point A to Supplier 2:

From Point B to Client 1:

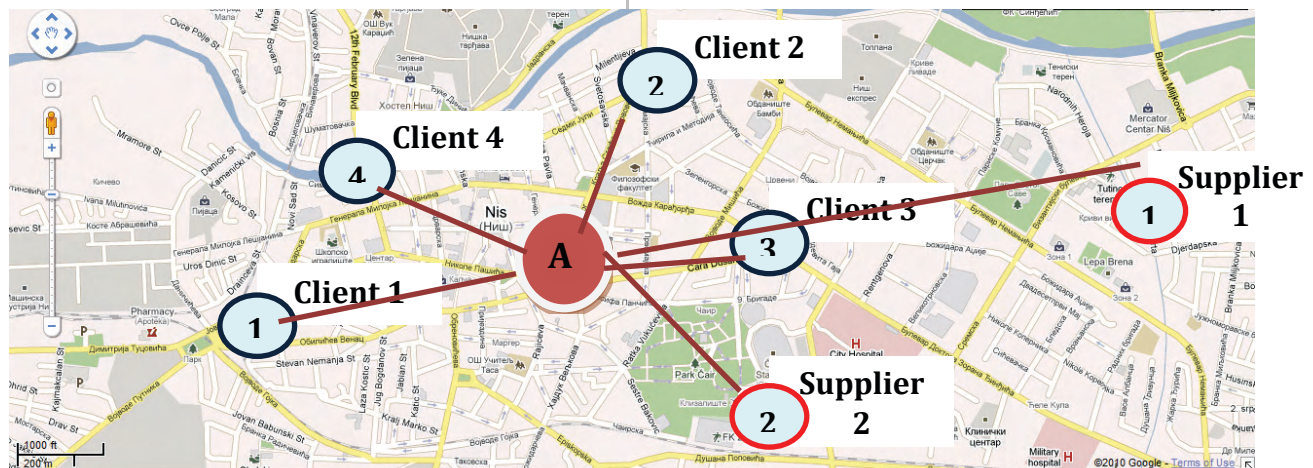
From Point B to Client 2:

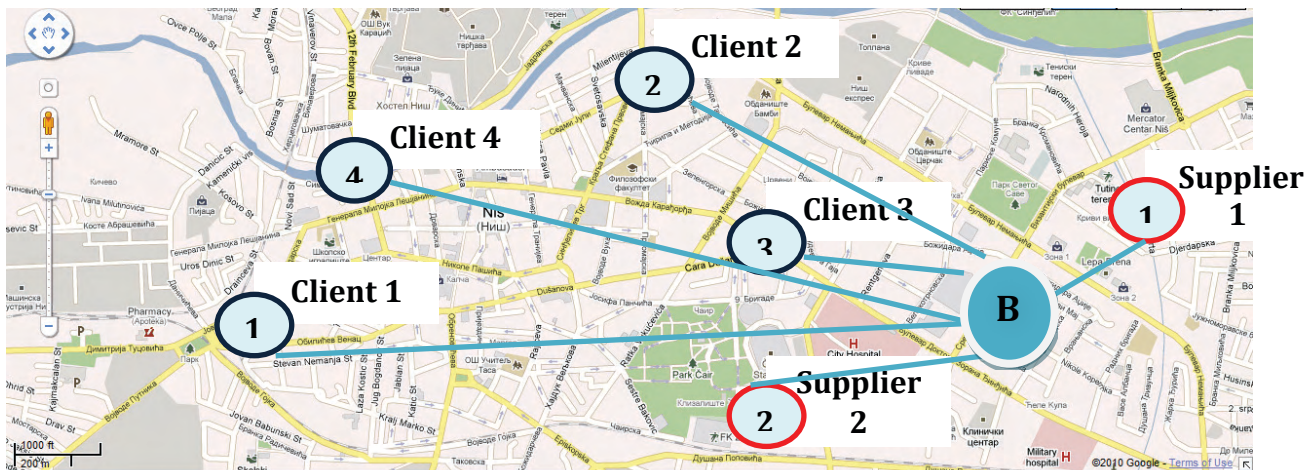
From Point B to Client 3:

From Point B to Client 4:

From Point B to Supplier 1:

From Point B to Supplier 2:





From Point A to Client 1:

$$(2.5\text{cm} * 200\text{m})/1.5\text{cm} = 333 \text{ m}$$

From Point A to Client 2:

$$(1.5\text{cm} * 200\text{m})/1.5\text{cm} = 200 \text{ m}$$

From Point A to Client 3:

$$(1.5\text{cm} * 200\text{m})/1.5\text{cm} = 200 \text{ m}$$

From Point A to Client 4:

$$(2\text{cm} * 200\text{m})/1.5\text{cm} = 267\text{m}$$

From Point A to Supplier 1:

$$(6\text{cm} * 200\text{m})/1.5\text{cm} = 800\text{m}$$

From Point A to Supplier 2:

$$(2\text{cm} * 200\text{m})/1.5\text{cm} = 267\text{m}$$

From Point B to Client 1:

$$(8\text{cm} * 200\text{m})/1.5\text{cm} = 1,066\text{m}$$

From Point B to Client 2:

$$(4\text{cm} * 200\text{m})/1.5\text{cm} = 533\text{m}$$

From Point B to Client 3:

$$(2\text{cm} * 200\text{m})/1.5\text{cm} = 267\text{m}$$

From Point B to Client 4:

$$(7\text{cm} * 200\text{m})/1.5\text{cm} = 933\text{m}$$

From Point B to Supplier 1:

$$(1\text{cm} * 200\text{m})/1.5\text{cm} = 133\text{m}$$

From Point B to Supplier 2:

$$(2\text{cm} * 200\text{m})/1.5\text{cm} = 267\text{m}$$

For this exercise let's assume that the mason transports by rickshaw his materials and products, thus the transportation costs would be zero.

7. You compare the cost and time calculations

So assuming that in one day your program starts by going to supplier 1 and then to supplier 2, then you come back to your facility. Then you visit in one go your clients. This is a simple example of your routing plan. It can of course be more complicated.

So your total distance covered if:

*You have your facility in point A would be equal to the sum of all the distances from that point multiplied by two, because you have to count the return also. This means that from point A you will have to cover the following distance: $(333+200+200+267+800+267)*2 = 2,067 \sim 2\text{km}$.*

*You have your facility in point B would be equal to the sum of all the distances from that point multiplied by two, because you have to count the return also. This means that from point B you will have to cover the following distance: $(1,066+533+267+933+133+267)*2 = 3,199 \sim 3.2\text{km}$*

8. You choose either point A or point B for your location.

The calculations show that in terms of distance point B would require you cover more distance. This will mean that you will also have to spend more time on transportation.

b. Time

For calculating the time it will take you to move from one point to the other, depends on the transportation means you use. If you go on foot then it will take you more time than if by car. However, then you will have higher transportation costs, because of the fuel.

Exercise 21:

Depends on your decisions. Try using the things you learned from the theory.

Exercise 22:

Depends on your research and decisions. Try using the things you learned from the theory.

Exercise 23:

The answers to the pictures are shown in the following table. The ✕ indicates that it is a wrong practice and the ✓ indicates that it is a correct practice with regards to health and safety guidelines.

1. ✕	2. ✕
3. ✓	4. ✕

Exercise 24:

$a \rightarrow 3$
 $b \rightarrow 2$
 $c \rightarrow 1$
 $d \rightarrow 6$
 $e \rightarrow 4$
 $f \rightarrow 5$

Exercise 25:

This exercise depends on your case. You can use the theory presented before the exercise to estimate your own Start-up money needed.

Exercise 26:

Question 1: How many people Carolina has to hire?

She needs to process 20 rings per day and she knows that each experienced worker processes 3 rings per day.

That means that she needs $24 \text{ rings} \div 3 \text{ rings per worker per day} = 6 \text{ workers per day}$

Question 2: How much it will cost her to hire 6 workers?

Each worker will work 25 days/month.

This will be for 2 months. So that means that in total each worker will work for 50 days.

Each worker costs \$2 per day.

Carolina will have labour costs for the next two months equal to:

*$50 \text{ days per worker} * \$2 \text{ per day} * 6 \text{ workers} = \600*

Her labour costs per month will be \$300 and \$300.

Exercise 27:

1: Costs for Processing Materials

2: Office Supplies

3: Rent

4: Advertising

5: Transportation

Exercise 28:

Question 1. In June. The entrepreneur surpasses the breakeven point after June and he has enough liquidity to cover all his costs.

Question 2. It means that in May his customer didn't pay the entrepreneur \$250 as he should for the materials he bought, but \$200. The customer paid the remaining \$50 in June and that is why this amount appears in the cash from credited sales.

Question 3. Cash In = Cash in Hand + Cash from Sales + Cash from Credited Sales + Loans.

Question 4. The negative cash generated amount means that the entrepreneur does not have enough money to pay his running costs. He is suggested to do one of the following:

- 1. Get the money people owe you*
- 2. Increase your profits by increasing sales, and/or reducing costs*
- 3. Find additional sources of supplies.*

It is relatively soon to suggest him/her to borrow more money, since he just started with a loan. The same for finding external partners. It is relatively soon for that.

Question 5. A banker will definitely need to see the cash flow statement of the company. However, he will not base his investment decision only on that. He will also like to see the P&L as well as the start-up estimations, as well as a more complete plan for the company including its marketing and operational strategy.

Exercise 29:

Question 1. The entrepreneur has to pay \$163 for his total obligations and in the case of the example these obligations concern \$13 for paying taxes and \$150 for paying back the bank loan. These number was calculated by adding up the current and longterm obligations of the entrepreneur.

Question 2. On the first day of his/her operation (20th November 2010) the entrepreneur had \$110 which included the \$100 cash he/she had and \$10 value of inventory (materials' stored). These were his/her current assets, which were calculated by adding up the different types of current assets.

Question 3. He would add it under the fixed assets category, under building.

Question 4. If the entrepreneur took a loan then in his long-term obligations, under bank loan he would have not \$150 but \$700. That means that the owner's money in the end would be -\$577.8.

Question 5. Depreciation is the number that represents the value loss of a machine or equipment and generally of assets while time passes by. This means that if you buy your baler today at \$8 and you try to sell it after three years, you will not be able to sell it for \$8 but for less. There are different ways of calculating depreciation and the simplest is to divide the original price of the asset by the number of years the asset is expected to last.

In the example we know that the baler cost \$28 (from equipment and fixtures) and that the depreciation is \$2.8 (from depreciation). That means that if we want to calculate how many years the entrepreneur thought his machine will last we divide the value of the baler with the depreciation. That means that $\text{Years} = 28 \div 2.8 = 10$ years.

Exercise 30:

This exercise depends on your case. Just note down all the activities you have to do before starting and fill in the action plan table.

Exercise 31:

The missing information from the loan data box is:

The correct answer to the question is "c".

Loan Amount: **Ksh. 200.00**
Loan Length: **1 year**
Annual Interest: **3%**
Every when you pay: **Every Month**
Monthly Payment: **Ksh. 16.94**
Total Paid: **Ksh. 203.26**
Total Interest: **Ksh. 3.26**
Total Periods: **12**

PART C

MORE READING

Annex 1

Questions to ask your future clients

(Based on the Sanitation Marketing for Managers, USAID, 2010)

For the clients who have a latrine and need to improve it:

a. Knowledge of the different technologies and choosing

- *Of the types of latrines you know, which is your favourite? What makes you like this latrine?*
- *Which latrine type you don't like at all? What you don't like about it?*
- *What type of latrine do you have?*
- *Why did you choose this particular type? //Why did you make it this way?*
- *What are the things you like about your latrine and what are the things you don't like about your latrine?*
- *What improvement you want to make in your latrine?*
- *How do you empty the pit of your latrine (if you have one)?*
- *How often do you empty the pit of your latrine (if you have one)?*
- *How did you decide where to place the latrine and dig the pit?*
- *How deep is the pit and why?*
- *How long did it take you to build it?*

b. Motivations

- *Why did you decide to build a latrine and why is it important for you?*
- *What are the advantages and disadvantages of having a latrine in your house?*
- *If you didn't have a latrine, where would the members of your household defecate?*

c. Finances

- *How much money did it cost you to build the latrine (with the materials included)?*
- *How much money are you willing to pay to improve your current latrine?*
- *How much money do you pay to empty the pit of your latrine (if you have one)?*
- *How much are you willing to pay to empty the pit of your latrine?*

For the clients who don't have a latrine:

- *Why do you want to build a latrine?*
- *What type of latrines do you know and what type of latrine would you like to build?*
- *What special parts should it have?*
- *Why are these parts important to you?*

If you think at the other types of latrines you know, are there any problems with them that make you not to want to build them?

Annex 2

Different Types of Protective Masks

(Based on the Community Guide to Environmental Health, Hesperian.org, 2008)

Protective masks

The best ways to prevent harm from breathing in toxic chemicals and dust are to have good ventilation when working with them, and to wear a protective mask made to protect against the chemicals you are working with. If you feel ill from a chemical while wearing a mask, it is a sign the mask is not working properly, or that you are being exposed to that or some other toxic chemical in some other way.

Loose cloth or paper mask

This mask will help keep out some dust. It will not stop you from breathing in chemical fumes. Fumes pass through paper and cloth and leak in around the edges of a loose-fitting mask.



Tight-fitting paper mask

This mask will protect from dust. The mask should touch your face all the way around. It will not stop you from breathing in chemical fumes. These masks clog up or wear out quickly and must be replaced when they no longer touch the face all around.

Plastic dust mask

This mask will protect from dust better than a loose cloth or tight paper mask. The mask should touch your face all the way around. It will not stop you from breathing in chemical fumes.



Rubber respirator

This rubber mask with filters MAY keep you from breathing in chemical fumes. It must fit your face tightly so no air leaks in between your skin and the mask. You will probably need a different filter for each chemical and must change the filter often. You will need special training to fit, use, and clean this mask. This mask is hot and uncomfortable to wear. When working with chemicals, take breaks often in an open, well-ventilated area where you can safely remove the mask.

Annex 3

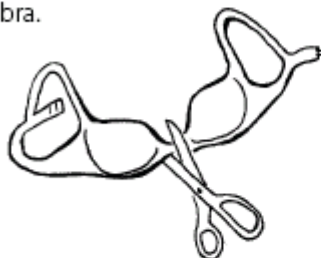
How to make your own protective mask

(Based on the Community Guide to Environmental Health, Hesperian.org, 2008)

How to make a cloth and activated charcoal mask

This homemade mask was designed by Dr. Maramba of the Philippines. It will give some protection from chemicals and dust.

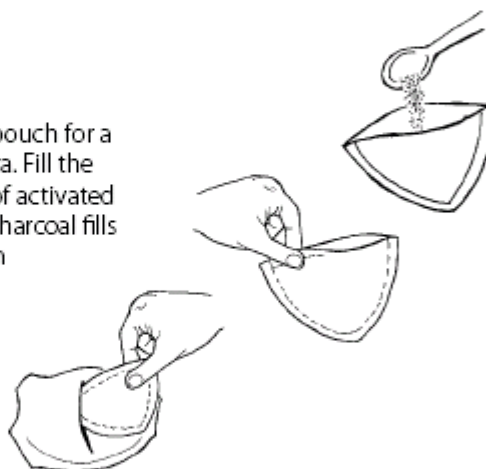
- 1** Cut one cup from a padded cloth bra.



- 2** Remove padding from the bra cup.



- 3** Cut some filter paper to make a pouch for a new pad that will fit inside the bra. Fill the filter paper pad with 100 grams of activated charcoal, making sure a layer of charcoal fills the entire filter evenly rather than settling to the bottom. Seal the paper so it will not spill, and place it inside the bra where the bra pad was.



- 4** Fit the bra cup with elastic straps to hold it tightly to your face.



The filter should be aired out between uses. If used while spraying the most toxic chemicals, this mask is good only for 2 uses of 4 hours each. The charcoal must be replaced within 1 week, depending on the type of chemical exposure and how long it is worn.


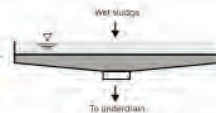
Annex 4

What to do with the sludge from latrine pits and septic tanks

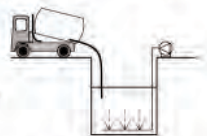
(Based on John Pickford and Rod Shaw, WEDC Loughborough University Leicestershire)

Faecal sludge from unsewered public toilets or from bucket latrines commonly has a COD (Chemical Oxygen Demand) exceeding 20 000 mg/l, total solids greater than 3.5mg/l, up to 60 000 helminth eggs per litre, and NH₄-N ammonia concentration exceeding 2000mg/l. The ammonia concentration is particularly significant because liquid with a high ammonia content is likely to be toxic to the algae which are necessary for the operation of waste-stabilization ponds.

Common methods of dealing with sludge include:

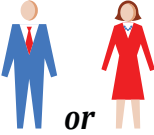
Disposal into water	Sludge is regularly and indiscriminately dumped into rivers, ponds, lakes and the sea. This is bad for the environment and a real health risk.
Disposal onto land	Indiscriminate dumping onto land is as common and as undesirable as disposal into water. Untreated sludge can be used as a fertilizer provided great care is taken to avoid contamination of crops.
Composting	Mix sludge with two or three times its volume of vegetable waste. To keep it aerobic, turn it several times in the first few weeks. Then pile it into windrows (long heaps, often about 2m wide at the top, 2m high, with sides sloping at about 45°) for several weeks. You can then use it as a land-conditioner and fertilizer. 
Household biogas units	Add latrine or septic-tank sludge to biogas units, whose main input is animal waste (e.g. cows in India or pigs in China).
Drying beds	Sludge flows onto a shallow tank to a depth of about 300mm. The base of the tank slopes to allow drainage and is covered with a layer of sand which forms a 'bed'. The time it takes for the solids content to increase until the sludge can be lifted by hand or mechanical shovel depends on temperature, humidity, and rainfall. In favourable conditions, this should be about a week. 

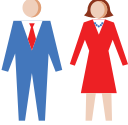
If you have a wastewater treatment system you can also use:

Solids-liquid separation	A preliminary treatment. Dewater, dry or treat the separated solids by anaerobic digestion (as described below). Treat the liquid in waste-stabilization ponds, or mix it with municipal wastewater for conventional treatment.
Anaerobic digestion	Add sludge from pit latrines, aqua-prives and septic tanks to wastewater sludge separated by sedimentation at wastewater-treatment plants.
Extended aeration of septic-tank sludge (septage)	This method is good as less land is required for separation and dewatering. The capital and operating costs of aeration are high, but the smaller area involved should enable you to use local treatment units, and save money on haulage. 
To sewerage systems	Sludge is often illegally dropped down manholes, increasing the likelihood of downstream blockage. Discharge stations can be specially constructed to receive and retain sludge from tankers, then discharge it to the sewer when the flow is appropriate.
Waste-stabilization pond systems	Faecal sludge may be treated in facultative waste-stabilization ponds together with municipal wastewater, or separately. The facultative ponds may be preceded by settling, thickening, and anaerobic ponds, and may be followed by maturation ponds.

Annex 4

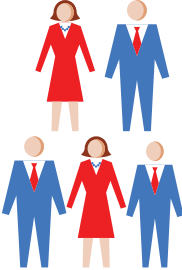
Common legal forms of businesses

Type	Advantages	Disadvantages
Single Proprietorship 	<ul style="list-style-type: none"> - You can easily set it up; it is simple and low cost. - You make your own decisions 	<ul style="list-style-type: none"> - Requires a lot of your time - The growth of your business is limited to your own financial means. - You as the owner are the only responsible if things go wrong.
Description: An individual owns the business. The owner needs a license to operate and if he/she has employees, then registration for sales tax or value added tax might be needed.		

Type	Advantages	Disadvantages
Partnership 	<ul style="list-style-type: none"> - You can easily set it up - The balance and check of your operations is shared between the two owners. - Money and expertise can be more easily found. 	<ul style="list-style-type: none"> - If you disagree strongly with your partner then the partnership might be in danger. - If one of your partners makes a decision then it is binding for you as well. - If one of the partners has no more money, you might have to pay all the business debts by yourself.

Description:

Two or more people form a partnership. Current regulation says that maximum twenty people can form a partnership. The partners are the owners of the business and they make all decisions about the business together, unless they have agreed otherwise in the partnership agreement. The business profits are divided between the partners according to the partnership agreement and each partner is individually taxed on his or her share of the profits.

Type	Advantages	Disadvantages
Corporation 	<ul style="list-style-type: none"> - You share the risks and losses with other partners. - You have maximum flexibility for growth. - You are not held responsible if something goes wrong. - The management is more professionalized. 	<ul style="list-style-type: none"> - The process of setting it up is complicated - You as an individual you might have little influence on the management of the company. - You might have to face an increased bureaucracy.

Description:

It is owned by one or more owners, called the shareholders. There can be one or more owners who are all working in the business. There can also be the case where two are working in the business and the rest even though they are investors and owners of the company; they are not active in the business. For setting up this form of business you need to get help from a lawyer.

To start a limited liability company, you draft a Memorandum and Articles of Association of your planned enterprise and file the document together with the proposed name of your business with the Registrar of Companies or a similar authority. The Registrar of Companies issues a certificate of incorporation, which means that your limited company is now formed.

type	Description
community based organisation	<p><i>It is a business set-up by residents in a particular community to encourage self-help activities. Its purpose is to mobilize local resources to improve the quality of life through collective self-help. A CBE is a profit-oriented business and offers a service for a profit.</i></p> <p><i>A CBE is allowed to make a profit and to redistribute it to its members as an addition to their salaries. The members are the owners of the business and they make all decisions about the business together, unless they have agreed otherwise in the agreement.</i></p>

Type	Advantages	Disadvantages
Cooperative <i>(Association of People)</i>	<ul style="list-style-type: none"> - It is not very likely that it would be dissolved. - As a member you cannot be held personally responsible if something goes wrong. - More than one people benefit from the business. - The members can hire professional managers. 	<ul style="list-style-type: none"> - The fact that you share control of the company. - The fact that for every decision you make you need to have all or at least the majority of members to agree.
<p>Description:</p> <p>A cooperative is formed by a number of people who decide to work together for a common purpose. The common purpose can be economic gain or providing certain services for the members of the cooperative. All the members of the cooperative have one vote each when making decisions, but often they appoint a management committee to handle the day-to-day operations of the cooperative.</p> <p>A cooperative must be registered with the authorities. It is complicated and takes long time but is normally not very expensive. The financial risks are normally not very high for the members of the cooperative. Their personal responsibility for the cooperative's debts is limited to what they have paid into the cooperative as capital. The cooperative itself is taxed for the profits. The profit is then divided among the members, for which they pay tax according to the tax laws in the country.</p>		

This section was adapted from the following two sources:

- Start your Waste Recycling Business; A technical step-by-step guide of how to start a community based waste recycling business, Business Manual, International Labour Organization, October 2007
- Do you want to go into business, The Philippines Department of Industry and Trade, Bureau of Micro, Medium and Small Enterprise Development, 2010.

Annex 6

Types of Loans

Short-Term Loans

- *These are the loans that you need to pay back in one year or less.*
- *They are normally “self-liquidating”, meaning that you will use them to buy raw materials and supplies, labor and other requirements that will make you generate money for the business and in turn you will use them for paying back the loan.*
- *Collateral is usually required. However, a bank may extend a collateral-free loan, otherwise known as a clean loan, if you are a client with an excellent credit track record.*
- *Short-term loans may come in the form of a “revolving credit line”, an agreement by the bank to extend a loan, not to exceed a specific amount, whenever you as a borrower need it. A credit line is automatically renewable, every time you go and repay back part of the loan.*

Intermediate Loans

- *Otherwise known as term loans*
- *These are loans that you can pay back in one to three years.*
- *For a start-up entrepreneur, term loans may be very useful. They are backed up by collateral securities and paid back in installments, meaning frequent payments (for example every month).*
- *You can find these in banks and other financing institutions.*

Long-term Loans

- *You would be able to get a long-term loan extension only if you can ensure the lending institution that you would still be in business – and making a profit – over the long-term period of the loan, which is up to ten years.*
- *Thus, to qualify, your business must be seen to be stable and sustainable.*

COMMENTS FORM

We would really appreciate if you would give us your comments for what you liked or didn't like in this guide. If you have any ideas of how we can improve this guide please let us know by either:

1. E-mailing this form to office@waste.nl or nagathos@waste.nl

Name:

Company:

Title:

Contact details:

.....

.....

Your Suggestions:

.....

.....

.....

.....

.....

.....

.....

.....

.....







WASTE advisers on urban
environment and development

Nieuwehaven 201
2801 CW Gouda
the Netherlands
tel: +31 (0) 182 522 625

office@waste.nl
www.waste.nl