WeTrade connects market demand and supply of semi-manufactured materials. Goods are transported by TNT and money is transferred by Vodafone M-PAiSA.
Part 1. What is a global market
  - Domain
  - Introduction to the global market
  - Access for all?

Part 2: Why is this global market hard to access?
  - economical gap,
  - infrastructural gap,
  - a gap caused by rules and regulation on international trade
  - Results research Dharavi
  - Concluding

Part 3 (NOT finished)
  - connect - mobile phones, internet,
  - e-commerce
  - m-commerce
  - understand - cultural differences
  - trust - trust in transactions made via technology, not face to face
  - motivation -

Part 4 Context to concept
  - factors (incomplete)
  - context and statement
  - interaction vision and interaction qualities
  - product qualities
  - concept

Part 5 Final service design
  - WeTrade (Finished by friday)
  - Validatie (Next week)
  - Evaluation
Today 2 billion people live in informal settlements at the Base of the Pyramid, BoP, having incomes far below the western poverty line. There is little access to goods and informal businesses cannot benefit from the regional and global market economy since they are not integrated in it and have little or no growth potential (Hammod, Kramer, Katz, Tran & Walker, 2007).

TNT, a Global express company, together with Vodafone, a mobile phone provider that connects people, initiated the project WeAre. This project aims to provide the unaddressed with mobile addresses in order to become adapted to the global logistics network.

When having an address informal businesses can send and receive goods at the global and local market. However these addresses will not yet ensure a connection with these markets. Research on how to connect local businesses to the market is dan and based on foundings from this research a service is designed. This service will enables and stimulates the businesses to interact at a global market. Both, access to this market and the ability to benefit from this market will be provided.

The domain for this report is ‘The design of a service that enables and stimulates informal businesses to interact with the global market’

To understand this domain and in order create starting points to formulate the context to which the service will be designed, it is important to deepen the meaning of three specific elements within this domain.

The global market place globalisation of the world and market businesses Base of the pyramid, Dharavi slum, the informal business owner Enables Communication technology & stimulates trust to interact cross-cultural business
Illustration of the WeAre.Project: a platform build by TNT and Vodafone: A new address service, including transportation and money transfer, that connects informal businesses to formal businesses.

Project domain: yellow frame. A user-interface that enables informal businesses to send and receive goods at the global marketplace.

Assignment

Formal market

New/Existing platform

Service

Transportation

Handover

TNT logistics

I can receive & send goods all over the world

Confirm address

Make payment

TNT & Vodafone

address database

Vodafone

MPesa money transfer
Global market
Markets and economies of the world have become more and more interdependent, the international market reflects this in the movement of capital and the exchange of goods and services.

The international market is the market that due to globalisation has grown from a domestic to an international level. On an international market domestic economic developments are not only determined by domestic policies and market conditions, they are as well influenced by international policies and economic conditions.

International trade exists which is the action of buying and selling capital, goods and services across international borders. International trade does not differ in motivation and behaviour from domestic trade: both involved parties aim to exchange goods, services or capital.

The differences are in the effect of the trade. Domestic trade exist to exchange goods between borders, and improve a broad scale of domestic production. International trade crosses borders and makes countries become more specialised and more depended on each other.

International trade is mostly restricted to goods and services since capital and labour are more mobile within a country than across countries. Instead of building an own production plant, companies import products that are produced using cross-domestic production plants. It is therefore that mostly products, services and raw materials are exchanged.

Take for example a product like the Iphone. Designed in the United States, assembled and produced in large manufactory outlet’s in China, transported to wholesalers all over the world to finally get sold to a large number of consumers to enable them to communicate all over the world.

Internationalisation and globalisation aim to lower the inequalities within countries, however whether this really is the effect or not is arguable.

In this chapter both negative and positive effects of globalisation is elaborated on to be able to conclude whether globalisation can be contributing to the elimination of poverty in developing or underdeveloped countries.
Negative effects of a global market

Both protectionism and anti-globalisation movements argue the effect of globalisation. Wealthy markets to protect their domestic production and economy mostly carry out protectionism. Anti-globalists fight against multinationals that, in the name of globalisation, open production plants in poor countries and harm the environmental and socio economical situation in these countries. Exploit employees, pollute ground water and ground and kill local businesses.

International trade implies that borders have to be crossed; this is costly and takes time, due to differences of language, legal system and culture between countries.

Due to international trade, the broad scale of domestic production will decrease. An increasing specialisation will lead to a growth for businesses within this specialisation, however the broader scale of domestic production will not survive due to the strong international competition. Domestic production and service supply becoming poorer is protected by protectionism.

Protectionism
Some countries protect their domestic production and services. Protectionism knows two options. The first is to set restrictions, like tariffs on goods and services that are to be imported from other countries, making the imported goods and services more expensive in relation to domestic goods and services. Second is to subsidise a domestic business, to ensure domestic products and services are cheaper than the imported ones.

Europe, USA and Japan make use of the protectionism and support their own domestic economies, but in the same time make it impossible for smaller companies or companies from less developed countries to profit from the global marketplace.

Moreover, double standards are created. Countries, i.e. developing countries, are forced to open up their markets for import from rich countries and have face tariff barriers for export from rich countries. These tariff barriers can be as high as US$100, four times higher than tariffs for rich countries. Sometimes making the costs become twice as high as the aid they receive.

This protectionism inevitably increases the gap between the rich and poor countries. When protectionism occurs international trade is not equal and the global market is not ‘free’.

Unsuccessful and inefficient domestic businesses prosper and the supply from these businesses overmasters the supply from poor countries. The small businesses in poor countries, those who need to sell their products the most, in order to keep ones head above water on the international market, are being destroyed. As a result, small companies stay small and poor countries stay poor.

Poverty due to globalisation
Due to these barriers of trade a great number of developing countries could not benefit from the process of globalization. Anti globalisation movements say that instead of contributing to the elimination of poverty, capitalism and globalization has made inequalities across and within nations grow. Financial markets have become instable and environmental deterioration exists. Inequalities within countries rise and exploitation of employees in poor countries by rich multinationals is, according to the anti-
globalisation movements, to blame to globalisation

Anti- globalisation – movements
The WTO, world trade organisation, has allowed Multi National Companies (MNC) to trade internationally, this resulted to a high number of MNC that run a production platform in the rural areas of different emerging countries. These MNC are said to raise the number of jobs in poor countries on the one hand and to create a more fair supply of consumer goods on the other hand. Doing so MNC will contribute to the elimination of poverty.

Anti-globalisation movements strongly disagree with the mission of the WTO and argue their strategy. According to these anti-globalisation movements in reality, workers of these factories are being exploited and working circumstances are low. The factories do harm to local society both on environment and socioeconomic level. (SEE FIGURE COCACOLA)

Multinationals often exceed government and market rules to obtain as much profit as possible for their shareholders. Economically it is right to follow the market, however rules should be fair. It is due to the anti-movement that MNC are monitored to not bribe country leaders or exploit employees.

Jeffrey Sachs (2005) argues that, however anti-movements are right in fighting the effects of MNC in poor countries, the grounds of these fights, globalisation and capitalism, are not right. Capitalist, like Adam Smith agree on the fact that multinationals should be punished whenever they trade unfair and agree to governmental actions in favour of the poor and environmental issues. However globalisation itself and the development of international trade has led to positive effects on the elimination of poverty.

Benefits of a global market
Without international trading, nations would only have access to goods, services and capital produced within their own countries. International trade makes countries and markets able to specialise. Followers of the free trade principal state that, the more open the market is and the higher the freer trade, the more poor countries can benefit from the global economy.

Specialisation due to globalisation
Theodore Levitt (1983) formulated globalisation for the first time for a Harvard Business Review. According to him, globalisation can be explained as the change in social patterns and technology that allows companies to sell the same product over the entire world.

Globalisation increases the demand for the market system. When there is no need for supply and demand every single household cultivates its own food, builds its own house and takes care of its own development. People in this world have multiple specialities, self-sufficient but inefficient.

A market system will stimulate people to specialise. If all people specialise in different specialisations both, a demand for a certain service or product and a supply for another service or product, will exist. A higher extend of specialisation will lead to a bigger market and a more divided division of labour and a greater number of exchange within economies.

The ability to exchange goods and services and the size of the market is determined by the amount of specialization and productivity, however, only when one can exchange, a market system can exist and specialising is profitable.
Freer trade

Free trade is the trade between open markets and trade barriers do not exists. Free trade makes it possible to have a larger number of inputs at lower costs. Open markets allow countries to specialize in the production of certain products of which they happen to have the right resources, capital or knowledge.

According to Danny Quah and James Rauch (1990) freer trade results in acceleration in the equilibrium of growth. A closed economy has to produce a large array of intermediate goods and is likely to run into bottlenecks, freer trade, opposed to autarky, allows countries to relax these bottlenecks and grow faster. In other words more open economies will grow faster than restricted ones in the long run. However economies should be of comparable size to reach a state of equilibrium.

A research of by Gene Grossman and Elhannan Helpman (1991) and Edwards (1992) show that a higher openness of a country will allow smaller countries to absorb technology developed in advanced countries an thus grow, in equilibrium, more rapidly than when the degree of openness is lower.

Benefits for developing countries

Balakrishnan (2004) states that developing countries could benefit from a globalised world. Globalisation of the world would mean greater access to markets, knowledge and technologies. “A countries’ productivity can rise and this will contribute to a higher living standard”

According to Jeffrey Sachs (2005), it is due to globalisation that the number of the extreme poor in India decreased with a number of 200 million, for China this number even counted 300 million. These countries experience an incredible economic growth thanks to the growing number of export due to direct investments of foreign countries. (figure XXX(Kopie blz 354 sachs) )

A wider range of consumer goods

When a market is excluded from the international market, prices will be higher and a lack of choice and quality in consumer goods exist. Markets that benefit from the global market will experience a raise in purchasing power, without the actual incomes of the poor having to change. (Sachs, 2005)

Larger number of export

For a sustainable economic growth of poorer countries, export to rich countries is necessary. In this way countries can get access to foreign currency, which on his turn enables them to import capital goods from rich countries.

Concluding

The global market and international trade on this market have both had, positive and negative effects on the gap that exist between poor and rich countries. However international trade has let to a decrease in poverty in upcoming economies. To obtain the most economical growth and to benefit from rich economies, poor countries indeed need to become part of the international market. By the export of goods and services, foreign currency can be gathered, necessary to import capital goods from rich countries. The import of products, technology and knowledge by rich countries will lead to an increased and enforced market. However before countries are able to export goods they have to actually get access to the international market.
In the last chapter: ‘What is the global market. Beneficial or not?’ an introduction on the terms ‘Global market’ and ‘international trade’ are given and both positive and negative effects of a globalising world are explained.

To fully benefit from international trade, access to the global market it is necessary. Having access to the market means two things, being able to get access to supply, products and services imported from other countries, and being able to answer to markets demand by producing products and services that can be exported.

This chapter will answer the question: ‘We can all benefit, can we?’ and will elaborate on the gap between the ones that can and the ones that cannot benefit, the rich and the poor. To access the global market, a country has to meet certain standards. A description of markets that do access the global market is given and the standards to meet are summed up. Next to this a description is given on those who do not access nor profit form the global market.

Globalisation is a process that developed over the years, since the discovery of the sea routes between Europe and Asia and Europe and Africa the world started to globalise. Markets arose and international trade made countries depend on each other. See figure xxx for the development of globalization over the years.

As to be seen in this figure, there is not such a thing as a fully globalised world yet. Some countries fully profit from international trade while others are not even able to join. As long as countries cannot join, gaps between rich and poor countries will not be closed.

Access to international trade can be a big challenge for the ones who are excluded from the global market. In the next chapter findings from a literature study, done on economies that do not have characteristics like capital, network, possibility to invest, size, governmental organisation, trustworthiness and infrastructure, are presented. A link to the WeAre concept (van Ginhoven, 2011) is made.
Access to the global market
Mostly large economies and multinational companies trade international and gain profit from this. For small entrepreneurial businesses if not protected within domestic governments, so especially the ones in emerging or upcoming economies, it is difficult to access this market.

Who has access to this international market?
Rich countries
Countries that benefit from globalisation are countries like the US, Europe, Japan. These countries, once formally represented the first world, still profit the most of globalisation although differences between the first, second and the third world fade.

Multinational companies in rich economies try to access poor economies. They try to gain profit at ‘the fortune at the bottom of the pyramid’ Prahalad and Stuart (2002) and believe that doing so they will contribute to the elimination of poverty.

Upcoming economies
Upcoming countries like China and India slowly start to become part of the international market. Economies grow, however very unbalanced. Although countries are growing economically, governmental political powers have not been reformed and corruption and exploitation within domestic economies exist.

Dress code
For a domestic economy to benefit from trade on international level, they have to draw up on characteristics like, capital, goods and services, wealth, a network of partners and customers, infrastructure and transportation facilities. Having these characteristics does not necessarily make a domestic economy profit from the global market. Free trade areas within countries, where in a certain country is not included, can limit import from and export to countries within this area.

Moreover, protectionism can stimulate domestic economies by the protection of local services and goods but this protectionism can restrain the export and the equilibrium of the international market. Foreign economies are not able to profit from protected economies since high tariff barriers have to be bridged and if even if these barriers are taken, foreign exported products cannot compete with highly subsidised domestic products and services.

Countries and companies that have a good international reputation are valued trustworthy and are therefore more likely to have a higher number of international trade.

Figure xxx gives an overview of characteristics domestic economies need, and visualises rules and restrictions set to regulate international trade.

Who cannot access?
For (international) companies, in well-known countries having a big
capital and an international reputation, it is easy to get access to the global market. However for small start-up companies, especially ones in unprotected emerging countries, getting access to and benefit from this market, is not easy.

Emerging markets
Emerging markets, also referred to as ‘the base of the economic pyramid’, are third world markets that have a bad economic situation.

The base of the pyramid can be subdivided into three layers, extreme poverty, moderate poverty and relative poverty. A day people have between $1-3 a day to spent and markets do not function well. (FIGUUR XX.)

The base represents 4-billion plus poor people, two third of the world population, mostly living in non-western countries such as Asia, Africa and Latin America. Countries are economically isolated and find difficulties to profit from globalisation. And however some parts of these regions, such as China, India, Brazil and Russia have markets experiencing great economical growth, still al large number of people cannot benefit from the global market.

Does globalisation led urbanisation lead to a decrease in size of the base of the pyramid or to an increase of informality?

An increasing number of urbanisation, especially in developing countries, is caused by a continuation of the world population and the trend of growth of the urban economy due to globalisation. This led to the decrease of rural poverty however urban poverty rose accompanied with an increase in number of people living in slums. Due to the growth of the economy and the participation of countries to the international market, a gap between rich and poor within a country rises. People living in the city can benefit from the economic growth and become wealthier. Rural areas are isolated from the city and it’s success. Trying to close this gap, people from rural areas or smaller villages move to the city for work. As a result cities grow and slums arise. The size of these cities, so called mega cities, increases rapidly.

Today, of the 4 billion people living on the base of the pyramid world wide, 2 billion people live in slums. According the UN Habitat (2010/2011) this number will rise from 2.0 to 3.5 billion, fifty nine percent of the expected population growth between 2000 and 2030. Slums are mostly located in overcrowded cities where Insufficient affordable or accessible facility to house the number of people migrating to the city leads to the growth of ‘informal settlements’. FIGURE An Informal settlement is a type of slum that is, as its name indicates, informal and is located along railroads, on pavements and at the borders of the cities. Transportation to and from these areas is, most of the time, not arranged well and people live in economic and social isolation.

These informal settlements are mostly not recognized by the local government. Due to informality, settlers cannot get a bank account, access to social services and goods (UN HABITAT, 2010/2011). Different governments, of developing countries, start to acknowledge the negative effects of an informal status. In example, India’s ‘Unique Identity project’ aims to give an identity to all 1.2
billion people living in India. (Wired, September 2011)

Markets of informal settlements, in some cases, can benefit from a country or cities’ economic growth and have become part of the global market. Examples to this are slums of Mumbai, Rio, Sao Paulo and Mexico City that have developed distinct ecosystems.

On 435 acres of land Dharavi generates an estimated $450 million in manufacturing revenues, or about $1 million per acre of land. Established shantytowns in Sao Paulo, Rio and Mexico City are equally productive. (Prahalad, Hammond. 2002)

Although a percentage of these upcoming economies has access to the market and seem to benefit from it, a much higher percentage does not benefit from this globalisation at all. Most settlers live in socioeconomic isolation due to several reasons.

Concluding:
Domestic economies, to profit from the global market, have to be developed to a certain level. This development means that countries need to possess capital, goods and services, wealth, a network of partners and customers, infrastructure and transportation facilities. Countries that do not possess these prescribed qualities find difficulties in accessing the global market and will not experience the total benefits from globalisation. Moreover rules and restrictions set on global trade to regulate the global market can limit access to it.

Developing countries have rising economies and can slightly profit from globalisation. However it is due to globalisation that cities urbanise into an extreme level. Since cities cannot cope with the enormous urbanisation rate, high percentages of inhabitants settle in informal settlements. Settlers of these settlements live in socioeconomic isolation and are often unable to profit from both domestic and global wealth.

The following chapters will elaborate on the several reasons that cause a continuous socioeconomic isolation and will explain into what extent Dharavi its revenue contributes to an increase in socioeconomic isolation.

Finally an answer to the question: how we can ensure that this 3.5 billion people that live and in the future will live at the bottom of the pyramid, get access to and can benefit form the global market, will be sketched.
Local businesses
In the previous chapter, it is described that access to the global market is required for economies and countries to be able to benefit from it. Standards a country needs to access the global market are summed up, and a description of markets that do access the global market is given. Next to this, a description is given on those who do not access nor profit from the global market.

The question ‘We can all benefit, can we?’ is answered and an elaboration is made on the gap between the ones that can and the ones that cannot benefit. Introducing the gap between the rich and the poor. This gap knows several elements, the economic gap, the gap in infrastructural organisation and a gap that is created between markets by international rules and regulations.

This chapter will elaborate on how to bridge the economical gap and evaluates different theories about economical solutions to create equilibrium between the rich and the poor.

Prahalad and Hammond (2002) sketch two situations. In the first situation, the gap between the poor and the rich becomes larger. Globalisation stagnates, and multinationals start to exclude emerging markets since these markets are risky and difficult to access. “incidents of economic chaos, governmental collapse and civil war, plague developing regions. Terrorism remains a constant threat, diverting significant public and private resources to security concern” (Prahalad & Hammond, 2002)

Different people argue this theory. According to Warnholz, MNC can hinder local business to grow and will, instead of contributing to eradicate poverty, threaten jobs and incomes. Better is to support local businesses and thereby try to limit Multinationals in creating monopolistic markets.

According to Mohammed Yunus (1998) the solution can be found in micro credit, small loans to stimulate local businesses or businesses initiatives. Yunus states that all people have an entrepreneurial spirit. This entrepreneurial spirit stimulates the poor to make their living through all sorts of small-scale businesses.

In BoP markets entrepreneurial businesses, whether or not to be formal, serve in goods and services. Stimulation of these businesses could lead to rising economies and can finally lead to economic equilibrium between former poor and rich countries.
Multinational companies to expand capacity to consume?

Prahalad (2005), states that emerging markets are to be seen as an opportunity. By creating ‘the capacity to consume’ (Prahalad 2006) new profitable markets can be generated on the Base of the pyramid. Multinationals can then give the poor access to higher quality goods at lower price, and dramatically raise their sales in the same time. Government and donors will be catalysts to this process. Arguing this theory

This theory is, however often copied by governments, aid organisations and multinationals, doubtable. According to Warnholz the argument of Prahalad, that the BoP is an underserved market that ‘remained invisible for too long’, has not taken into account that domestic economies have to be on a certain level to benefit from international trade. First purchasing power has to be raised in order to create customer demand.

Creating domestic demand first
Murphy et all (1989) state that generating domestic demand is crucial for economic growth to take of. If domestic markets are to be sized on the level on which they can compete on the global market, this means that employment and incomes have to be generated. The theory of Mayatsuyma (2002:1035) about mass consumption societies, states that creating demand and productivity is intertwined. Productivity is gained by the reduction in price of consumer goods. Reducing price makes the goods affordable to a larger number of households and as a result bigger markets for these goods will rise, demanding a higher production and thus raises productivity.

Disparity within economies
Long-term projects of the World Bank (2007) showed a market expansion of the middle class in developing countries. These middle-income groups, rather than the true BoP, are likely to attract business attention causing a regional disparity to emerge.

In conclusion BoP strategies can have positive impact on poverty levels but if the downsides are not sufficiently addressed a good state will not necessarily rise and only multinational companies and the middle class will benefit.

Stimulate local entrepreneurs
According to Warnholz, MNC can hinder local business to grow and will, instead of contributing to eradicate poverty, threaten jobs and incomes.

When big businesses successfully capture these markets, they will compete with these small scale suppliers and make production intensive manufactories redundant. Businesses will be killed, resulting in a decrease in local jobs and incomes and the threatening of livelihood basis of poor people. (Jenkins 2005). “for example the move of British American tobacco into India’s incense sticks market displaced many women home workers, who had previously made these by hand.”

Better is to support local businesses and thereby try to limit Multinationals in creating monopolistic markets.
Microcredit
Instead of ‘creating capacity to consume’, local businesses and initiatives can be stimulated. Loans and investments can help local businesses grow to a level on which they can compete on international markets.

Muhammed Yunus, the founder of the micro credit, has made loans accessible for poor people. He stated that all human beings are entrepreneurs and so everyone person has an entrepreneurial side. This entrepreneurial side should be stimulated to help people to climb out of poverty.

The Grameen Bank, founded by Yunus, makes loans accessible to poor people. Local businesses can get a loan to start or to empower their business, if loans stay it is easy to pay back depths and business will flourish.

Different businesses succeeded due to microcredit and a Nobel price rewarded Muhammed Yunus’s initiative. However the last few years the success of microcredit has become doubtable. Arguers, claim that microcredit, next to successes, also knows examples of businesses that fall deeper into depth. According to them microcredit will only be beneficial for the first small percentage of success.

When a business is to grow to a next stage and more resources, both human and material resources, are needed. To do so big investments are required. Since the microcredit will only allow people to get small loans, businesses will not be able to make this next step and stay relatively poor, limited to grow to a level on which they can be self sufficient. (Tegenlicht, february 6th 2012)

Whether micro credit is a success or not is doubted however theoretically, it can lead to an increase in socio economic status for some people at the base of the pyramid. If done successfully: microcredit leads to money, money leads to investments, investments can lead to an increase in sales or the resell of goods and sales will lead to an increased revenue. This increased revenue can be saved up to pay back the loan and the lasted revenue can be used to buy food, rent housing of pay for kids to go to school. Initiatives like websites as M4CU and Kiva are based on the same principle.

Concluding
Creating capacity to consume is not the answer for emerging markets to gain profit from the global market when Multi National Companies will hinder local businesses to grow. Instead local businesses should be stimulated to grow to a level on which they can compete on the global market and trade internationally.

Microcredit can be an injection for this growth, however for continuous growth local businesses are depending on bigger investments.

The next chapters will elaborate on supporting markets, businesses and entrepreneurial initiatives on non-economic levels, domestic infra structural organisation and worldwide regulation of global markets.
In the previous chapter is described that access to the global market is required to benefit from it.

The question ‘We can all benefit, can we?’ is answered and an elaboration is made on the gap between the ones that can and the ones that cannot benefit, the rich and the poor. Standards a country needs to access the global market are summed up and a description of markets that do access the global market is given. Next to this a description is given on those who do not access nor profit form the global market.

In general it is hard for an underdeveloped country to access the global market. Due to economic isolation of an underdeveloped domestic economy, caused by the absence of sufficient investments, capital and wealth, countries cannot participate in international trade. If the domestic production of goods and services is underdeveloped an economy cannot export and to gain foreign value.

Domestic economies cannot develop due to domestic politics and infrastructural organisations that form bottlenecks. Examples of this are corruption, bureaucratic red tape, inadequate infrastructure and insufficient channels of transportation.

Of course isolation works on two sides, accept from the difficulties emerging countries experience to access the global market to export their goods and services, emerging markets are hardly accessible for foreign companies to supply their products to. Under developed or developing markets often have closed economies. Separation of the global market hinders international companies and foreign economies to access these markets and supply goods and services. However opening their economies to free trade will not necessarily lead to success.

The next chapter will elaborate on the effects of international trade rules and restrictions domestic countries have to keep to in becoming player in international trade.

This chapter elaborates on limited access on personal level. “Today’s mega cities are breading ground for opportunities, but are as well strongly associated with poverty and slum growth. (Van Ginhoven, 2011) Businesses located in informal settlements, ‘have not businesses’ cannot access global markets since due to ‘informality’ and the lack in addresses.
Address systems and Identity

Two third of the world population cannot access international markets and cannot experience economic growth. On personal level two things highly contribute to national development: An adequate address system and a citizen’s formal identity. Having both can lower difficulties in accessing national and international markets.

Different initiatives and programmes carried out by both, national and international governments or organisations. These initiatives aim to give formal identity to all citizens and/or try to develop adequate address systems.

A few examples are summed up, in table 41. Two initiatives are elaborated more to finally introduce the WeAre concept that addresses the unaddressed and combines both, giving a location based address and a personal identity.

Identity
Without registered prove of who you are, you cannot get access to things you are entitled to. Governmental programs or bank accounts, loans and insurances become inaccessible. “You’re pretty much locked out of the economy” (Beiser, September 2011).

Aadhaar
As mentioned in the previous chapter, India’s government tapped Nandan Nilekali, “The Billgates of Banglore” to carry out one of the biggest identity projects in the world. The ‘Unique Identity project’ aims to give an identity to all 1.2 billion people living in India. This project, also known as Aadhaar, will provide people with identification numbers, or Aadhaar numbers. This number is linked to fingerprints and Iris scans and aims to formally register all Indians and is said to be solely beneficial.

“In India, hundreds of millions of impoverished people have no ID—which means no bank account, credit, insurance, or government aid. A nationwide biometric project aims to get them—and everyone else—into the system.” (Wired, September 2011)

The Aadhaar number will give 400 million plus people access to bank accounts, housing and social services and will thereby improve their living conditions.

The number will function as a platform can be used in multiple ways. Registering is voluntary but in the future this Aadhaar number will be necessary to function within the society.

The project has, as well, downsides but, according to Vince Beiser, for supporters the upsides beat the downsides.

A profile is sketched of Kiran, no last name by Vince Beiser (wired September 2011). Kiran is one of India’s, estimated, 400 million inhabitants without anything that documents her existence, ID, drivers license or voting card. Using the Aadhaar number Kiran can obtain a government card, this card will register her as an inhabitant of Dehli, and it will protect her from orders to leave the city and entitle her to subsidized groceries.

Addresses
Without an address a person, although having an identity, cannot be reached by or benefit from public services and goods and businesses cannot be located or identified.

“Addresses are one of the bases for national and international communication (messages) and trade (goods). Physical addresses...
are essential if individuals are to be connected to the rest of society and, in turn, if society is to be connected to individuals.” (UPU, 2010)

An address can be formulated as the indication of a specific geographical location where goods and messages can be delivered and where a person or family can be found. Due to a rapidly increasing urbanisation informal settlements housing a huge number of inhabitants arise. Keeping track on who is located where is a difficult task and therefore developing countries, for a great percentage, lack in formal address systems.

Addresses are key to social and economic development of a country. According to the Universal Postal Unit (2010) “One might even argue that having an address could be considered a basic right.”

Having an address is beneficial and needed for various reasons. A society’s success is partly based on addressing systems. Addresses give individuals an identity within a community. Addresses can register citizens to “real” citizens having a social role and rights and obligations attached to it. Being registered kids can attend school and people can profit from health services.

Addresses help governments to role out public or emergency services, to reach the whole population and give the power to tax. Addresses make customers identifiable so they can access products on national and international markets. And addresses can locate and indentify local businesses that export globally, giving face and ground to be trusted in trading over distance.

Addresses can help businesses in providing water and electricity supply and to locate clients to deliver goods and addressees are key to NGO and development organizations to locate people and successfully implement actions.

Furthermore addresses are essential to better plan services according to needs, to facilitate the opening of bank accounts, to make sure bills for services, like electricity and water, can be send, to offer a variety of services other than prepaid services, to create accurate mapping systems and associated tools, to offer postal or express services in a modern and efficient way and to deliver physical goods order goods via e-commerce and e-government services.

Addressing the World
The Universal Postal Union, UPU, initiated the Addressing the world initiative. Within it’s mission “To develop social, cultural and commercial communication between peoples of the world”, the Its ultimate goal is to provide everyone with an address. “An address for everyone”

UPU makes a distinction between four different elements of an addressing system that have to be developed in order to contribute to socio and economic growth within a nation.

Addressing standards, Standardising and improving existing address systems worldwide; addressing database, having an updated database of addresses, important for governments and companies since addresses form the face of people; electronic address, giving a digital identity that can be used as an trusted digital address in for example e-commerce; and physical addresses, identification of a location, by street name and number, where goods and messages can be delivered.

Address the Unaddressed: WeAre
The WeAre initiative combines both initiatives. This concept is built on three elements “1) Local Mpesa stores that serve as PUDO lo-
cations, 2) Registration of members by linking their mobile phone number to a specific store, and 3) Mobile payments that ensure a reliable service.” (van Ginhoven, 2011)

The project shares the idea that under served economies in, developing, countries can benefit from access to national and international market. The concept to “Address the unaddressed” founded by Sacha van Ginhoven (2011) is based on the idea that the socio economic situation of ‘not haves’ can be improved by issuing geo-code based addresses. Storing a specific geo-code location via a user’s mobile phone creates the geo-code address.

This geo-code address fulfils all the elements of an addressing system, as formulated by the UPU, however, differs in the fact that these addresses are linked to a personal mobile phone number and therefore provides people with a unique identity, alike the Aadhaar project.

The project does not aim to give all members a unique location based addresses. Instead by storing a geo-codes via a mobile phone a member is linked to the closest Mpesa store location. These Mpesa stores are located in informal settlements and serve as a pick up and drop of point for messages and goods. And in the same function as a reliable method for money transfer.

Concluding
Countries that have upcoming economies often count a large number of inhabitants of which high percentages are not formally registered as citizens. However, formally identifying all citizens is necessary for a country to get and keep track of a its citizens. Initiatives like India’s Aadhaar are initiated by governmenst to do so. Identity is needed to get access to governmental services and to register in a city. Opening a bank account, getting loans or insurance is only possible when being formally registered. However, an identity alone is not enough. People have to be locatable to. Addresses locate people and enable companies and public organisations to communicate and trace people.

Due to the urbanisation of countries, cities cope with a huge migration number. Since housing this people is practically impossible informal settlements rise. People will settle in unstructured and unorganised areas, lacking in infrastructural services and city governments will lose track on who lives where.
Addresses enable governmental organisation to communication with people and to delivery goods and, sometimes emerging, services.

Address services like address systems, address databases, physical addresses, and electronic addresses, form the base of improving access to citizens and enable citizens to access the national and international market.

The WeAre project makes a useful combination between addresses and identity and integrates address systems, databases, physical addresses and electronic addresses into one, obtainable by mobile phone, geo-code address. The WeAre address concept is starting point for the design of a service to connect local businesses to the global market.
Last chapter introduced economies that do not have characteristics like capital, network, possibility to invest, size, governmental organisation, trustworthiness and infrastructure. For them access to international trade can be a big challenge. Both identity and address systems are needed to improve on both sides, to give citizens and local businesses access to the market and to make local businesses and citizens accessible for the market. This chapter takes a deeper sight in rules and restrictions that mean to regulate the global market. Rules and restrictions of international trade often only contribute to the success of rich countries and exclude poor countries. In example: free trade agreements between rich and poor countries will make ‘equal trade’ imbalanced. An elaboration, of rules and restrictions that limits market access, is made.

The deep sea
the infrastructural and the regulation gap
Export of domestic production on global scale can be beneficial for domestic markets. The area of distribution is very big meaning that large numbers of sale can be reached. According to a quote on the Oxfam Novib trade campaign, poor countries could impressively improve their domestic economy by simply increasing their export to one per cent of the world exports.

“If Africa, East Asia, South Asia, and Latin America each increased their share of world exports by just one per cent, the resulting gains could lift 128 million people out of poverty.” (Oxfam, 2011)

However, due to different rules and restrictions put on poor countries by rich countries and due to the regulation of international trade, poor countries are disabled to increase their share of world exports. Instead of being beneficial, the global market becomes a ‘deep sea ‘ and is more likely to harm domestic economies than to strengthen them.
Subsidising goods

Rich countries spent a lot of money subsidising their domestic production. In example: $1 Billion a year is spent on farming enterprises (Oxfam, 2011). In the same time poor countries are forced to stop subsidising products.

When rich countries export their surplus goods on poor countries markets local economies will suffer. As a result farmers businesses will drown. “Unbalanced playing field made many poor farmers even poorer and forced them of their land.” (Oxfam, 2011).

Trade agreements
Trade agreements between poor countries could empower them in form of ‘strength in numbers’ as Oxfam (2011) states. The US and EU are pushing countries to make free trade agreements. If a free trade agreement is made, countries are not allowed to make barriers to trade or receive foreign investment. Poor economies cannot protect their industries. Import will flood domestic production and stop the growth of upcoming domestic businesses. Trade agreements, between rich and poor countries, will therefore only be beneficial to rich countries.

Agreements aim to make markets trade on equal level and between equal partners trade can than be beneficial for both. However since poor countries have a poor economy and rich country have a rich economy, trade between both will be unequal and in the game the strongest and smartest will win.

Concluding:
Poor countries will not profit from export or import and will not benefit economically from globalisation if they are forced to make free trade agreements.
Free trade agreements will disable poor countries to protect domestic production and make agreements between poor countries, to strengthen by number. As a result rich countries flood poor country markets, with the surplus of their, often subsidised, goods and upcoming local businesses will drown.

Free trade agreements will make the global market a deep sea as long as domestic economies do not get a change to grow to a stronger level and equal trade is not possible.

Hieruit concludeer je dus dat businesses samen moeten groepen!!!!!!!

The next chapter will elaborate on a local field study, on informal businesses that trade international. An explanation is given on how these businesses trade on the global market as a lesson for other industries. Moreover it elaborates on who profits from international trade.
As described in the previous chapters, the world is roughly divided in developing and developed countries. Globalisation has led to a wider separation of poor and rich people, even within countries. The gap between the poor and the rich is described as to be dividable into an economic gap, the gap in infrastructural organisation and a gap that is created between markets by international rules and regulations.

This chapter will give insights in the operations of local businesses derived from an local field study in the slum Dharavi.

How do local businesses operate?

Due to developments and globalisation countries start to urbanise more and more. People from rural areas move to cities to find a job and hope to profit from the domestic economic growth due to globalisation. Cities become mega cities and since city-plans cannot cope with this enormous growth, slums rise.

Governments do often not recognize slums, resulting in slums becoming informal settlements. Within these settlements a socioeconomic isolation exists. Moved to the city, to profit from economic growth, entrepreneurs struggle when they are located in slums, due to lack of affordable and accessible space.

The businesses of these entrepreneurs are the ones that, if international trade is organised fairly, can profit the most. Export to foreign economies will give them access to foreign currency and will strengthen them to finally get out of isolation.

Developing countries as India can be an example for underdeveloped countries in this world. The slum Dharavi in the city of Mumbai is said to have an annual turnover of $4.5 billion (Prahalad, Hammond, 2002).

Dharavi, to find out how a slum can reach an annual turnover of this number, has been the location for a case study.

A local field research, two weeklong deep dive (IDEO, 2011), on local entrepreneurial businesses is done.

This research gave insight in the operations of local businesses and provided insights on how local businesses can be supported to grow to a level to profit from the global market and international trade.

This chapter will introduce you to Dharavi, a slum in the heart of Mumbai that is buzzing with entrepreneurial minds.
Dharavi is one of the 30 biggest, and probably Asia’s biggest, slum of the world. This slum is located in the heart of the city of Mumbai (fig.18), the business capital of India, one of Asia’s rapidly growing cities (UN Habitat, 2010/2011). Increased migration to cities and the continuation of the world population both form reason for this size.

Growth of the urban economy due to globalisation:
The urban growth in Asia is 27 percent higher as the growth of other countries an the total Asian urban population is around 3 times higher than in industrialized countries. Two third of the population of western Asia lives in urban areas.

Continuation of the world population
The child rights group Plan International (BBC, 31st October, 2011), declared the, 7th billionth person to be born in India. This declaration indicates India’s enormous population growth. The number of people living in India is estimated to 1.198 003 000 and is expected to reach the number of people living in China soon. (World Health Observatory, WHO India 2011)
Around 30 percent of India’s population lives in urban areas. (fig. 19)

Mumbai
India’s biggest urban area is Mumbai, According to the UN (2003) Mumbai will be the second biggest city in the world, after the developed city of Tokyo, in 2015. The number of urban settlers will then grow to 26.1 million. Since the city does not have enough facilities and resources to formally absorb this enormous amount of people, the size of slum areas will increase.

The city of Mumbai is already buzzing of people; on every second street one can find groups of pavement or slum dwellers. Since Mumbai, or in that time Bombay, became an industrial city it has known slums. Mumbai is often referred to as Slumbai or Slumbay and probably has the most slum-dwellers in the world (over six million). In the very centre of this metropolis lays one of Asia’s biggest slums, and one of the world’s 30 mega-slums, Dharavi.

Dharavi
Although, Dharavi is spread over 1.75 square kilometres, around 500 football pitches, the slum is very dense. Per square kilometre live 570 000 people, this is 20 times more dense than the city of Mumbai, which is already one of the most dense cities in the world, 30 000 persons per square km.

Developed over the years more and more people and industries, from all over India, came to settle on this ground. (See figure xx and appendix xxx for development of Dharavi over the years). All sorts of cultures and religions, castes and ethnics depend on each other on economical, social and cultural point of view. The population represents a third Tamilians, a third Maharashtra’s, and one third from, Uttar Pradesh, Kernataka, Andhra Pradesh, Gujarat and Kerala. (figuur 20)

A former fisher village grew out to a booming slum with an incredible density, representing settler’s form all over India. Dharavi is responsible for a large share of Mumbai’s export.

Although argued by its settlers, Dharavi looks and practically is an
informal settlement. The ground on which Dharavi is build is very worthy, being in the hart of the city, close to the airport, close to the BKC and because of good the public transport facilities. City developers are willing to pay a lot to buy the ground.

The government, owning the ground on which Dharavi is build, will not allow developers to demolish the area for two reasons. First, a huge amount of people living in Dharavi have been acknowledged by the government in 1995 and demolishing the area would mean that all these settlers have to be replaced. Second, these settlers lived and worked in Dharavi from generation on generation and developed Dharavi to an incredible booming business area. Dharavi’s market is responsible for a large share of Mumbai’s domestic economy.

Why is business in Dharavi so booming?
There are three main causes why Dharavi has such a booming industry. Dharavi’s infrastructure, the strong business mentality of inhabitants and the possibility to work together due to the geographical situation and the location of Dharavi in the very centre of the metropolis Mumbai.

Location
Dharavi is neighbouring an important upcoming business district, the Bandra-Kurla Complex (BKC). And is located very close to the airport.
It is ‘hart shaped’ lying between two railways and is bounded by the Mahim creek. Public transport to and from Dharavi is accessible since three stations surround the slum, the Mahim station, left top, the Sion station, right top and the Matunga station, at the most southern point.

Infra structure
Dharavis’ infrastructure is, from a business perspective, quit well arranged. The proximity of three different train stations and a relatively well organised road network enable businesses and entrepreneurs to distrubute of goods in and out.

Roads
The transportation of goods in and out of Dharavi is easy due to its relatively well-organised road network.

Dharavi is divided into different sub areas by three main roads, the Mahim-Sion road, the 60ft road and 80 ft road. Small roads and alleys, some where trucks or bikes can drive others only accessible by foot, form a maze within these sub areas.

Addresses
Since every shack built after 2000 has become ‘legal’, formal addresses exist. (see figure 21 ) However, it is doubtable whether this system is adequate.
Houses hidden in the maze of streets are hard to trace. Room numbers are not visible since shacks get painted every different festival; streets lack in street names; it is not sure where exactly which Nagar ends and where the new one starts and different blocks are not identifiable.
Directions are asked to people on the road, but for deliveryman this is an inefficient system. “I sometimes had to leave my goods behind
to be able to ask for directions” (Akki, Appendix XXX). Therefore, most businesses have outlets on the main roads of Dharavi. Shops and businesses that are located, or have their drop off and pick up points, along these main roads are easy to find. (photo address Jafar)

Cooperating – strength in number-
Different parts, compounds or blocks represent commercial and residential areas. These areas are divided in Nagars, communities that settled together when coming to Dharavi, and Chawls, shacks build by industries and companies to house their workers.
The high number of people and the fact that people live and work so close together binds people on both personal and professional grounds. There is a strong community feeling and people can depend on each other for all sorts of things. (foto 30)

The strong working collaboration between people and businesses is expressed by the existence of nagars functioning as working cooperation’s and by the manufactories, in production or recycling business, that are built up out of strongly linked units.

In example the Kumbharwada nagar, where potters share ovens, buy clay in bulk and share responsibility over sales and production within all members of the ‘family’.
In the 13th Compound the plastic manufactory business is built up out of several units that all highly depend on each other representing different links in the plastic recycling chain. (fig. 22)

Business mentality

A typical thing for the slum Dharavi is its productivity, seven days a week even on a holiday people work at least 10 hours a day. Trash is recycled into raw materials, clay is formed into pots, sheep, cow and goat skins are transformed in perfect leather pieces, gold is traded, al kinds of food is produced, the most fine looking clothes are tailored, goods are transported worldwide and vegetables are sold on street markets.

Time is money and the only thing that stops people from working are chai or praying moments. “TV? We don’t have time for that” (appendix xxx, interviews dharavi)

Business mentality, cooperation and infrastructure are main reasons for the size of Dharavi’s economy. The economy has grown over the years when more and more entrepreneurs started businesses in Dharavi. As a result Dharavi houses a large number of shops, manufacturers and recycling units.

All sorts of goods are sold in shops, located along the roads that circle trough Dharavi or hidden in the maze of Nagars. These shops sell everything from food, clothes, mobile phones, gold and raw materials to furniture.
Recycling businesses change, useless goods, into new goods or raw materials.
Approximately 10,000 different businesses in Dharavi are responsible for an annual production of goods of about Rs. 30 billion (US$665 million) (Appendix tour info). From hardware to health care, you name it Dharavi will produce it.
The following pages will give a overview of all different shops.
Clothes shop
Dharavi counts a large number of clothes shops, most of them located on the Mahim-Sion Link Road. The shops sell all kind of Indian style clothes, mostly to local, but sometimes to people from villages and cities all over India.

Clothes shops are not supplied directly by Dharavi’s tailoring businesses, the assortment is limited and clothes produced in Dharavi are produced on demand or get sold directly to whole sellers. The shop owner buys his supply on the wholesale market. All different sorts of Indian style clothes, produced either in Dharavi or elsewhere near In India are sold here.

Mobile phone shop
Every fifth shop on the Mahim-Sion Link road (see figure 23) is a Mobile phone shop. These shops sell simcards, credit and all sorts of mobile phones. The phones vary from expensive smart phones, china phones (copied phones from china) to the simplest Nokia phones.

Whole sellers, selling goods at big wholesale markets in the south of Mumbai, supply the shops with an assortment of phones. If the shop owner is out of supply he pays the whole seller and demands for new supply.

This business is often combined with business activities, such as a printing or administrative things like transferring money.

Food shops
Food shops, supermarkets, bakeries and vegetable or fruit markets, sell locally produced food and food purchased from wholesale markets. Shops mostly sell pre packed goods that do not get out of date quickly, crackers, bread, sweets and buns.
Leather

The leather industry, originally from Tamilnadu and moved to Dharavi in 1887, was one of the first and is one of the most dominant trades Dharavi is associated with. At least 30 leather hides and leather goods manufacturers employing 5000 people are responsible for an annual turnover of Rs. 60 crore.

Today finished goods are the main business. Ninety percent is sold for export to people all over the country and world. The surplus or rejects from the production for export are displayed in the shops in Dharavi.

Pottery

Around 2000 families live in the Kumbharwada Nagar since 1933, after they were forced out of south Bombay. The families living in this Nagar, an area of 4200 sq km, are responsible for the production of pots. Some houses face the 60ft road where pots and other finished goods are sold. Other houses face the shared workshop.

The potters have space nor money for new technologies, techniques or materials such as ceramics. The industry has not experienced a growth like other industries since this industry knows no export and the production is mainly don for local sales.
Plastic recycling

A survey from the National slum dweller federation has found that the plastic recycling industry of Dharavi is India’s biggest recycling industry. Around 5000 people work in over 722 plastic, drum and can recycling units of which 359 are legal, work together closely.

Plastic comes in from Rag pickers all over the city collect plastic, local hospitals, hotels, restaurants, shops and from countries that bring huge amounts of plastic on big container ships since they cannot deal with their own trash.

All these businesses work together closely and each fulfil one part of the recycling chain. The recycling business makes an annual turnover of at least 60 lakh a year (number measured in 1986).

The plastic comes in from Rag pickers that form all over the city, collect plastic, local hospitals, hotels, restaurants, shops from countries that bring huge amounts of plastic on big container ships since they cannot deal with their own trash.

Aluminium factories produce grinders for food mixers out of aluminium blocks. These aluminium blocks are recycled by another unit just around the corner. Under bad working conditions workers make days of 8-10 hours in front of the oven. The employer most of the time takes care of the costs when an employee gets injured.

Vegetable oil cans - form everywhere in the city, restaurants, houses by people buy empty vegetable oil cans for around Rs. 10-12 and bring them to Dharavi to sell it for Rs.15-16. The cans get cleaned and formed back into their shape before they get sent back to the manufacturer who buy the cans for Rs 35-40.

Paint drums - cleaned both on the outside, by placing the drums in an oven to melt of the logo’s and prints and the inside by hand in water and chemicals to remove rests of paint. Like the vegetable oil cans, the drums are sold back to manufacturers that refill them.

Recycling

The main recycling area of Dharavi is called 13th Compound. In this area all kinds of recycle units, around 722 plastic, drum and can recycling units of which 359 are legal, work together closely.

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Food

The food industry, another main industry in Dharavi, is responsible for a daily production of 3.5 tons of food per day. Dharavi counts 152 industries that produce food items, 111 restaurants serving the finest meals, whereof part is distributed all over Dharavi via the 'Dabbawalla system' (see appendix Dabbawalla). 25 bakeries, producing savoury snacks made from rice or chickpea flower, biscuits and fresh breads and the largest sweets factory in Mumbai, The Punjab Ghasitaram Halwai Karachiwala factory.

The location of production is not always mentioned on the food since this might scare people that buy the food, but the food is distributed all over India and all over the world.

The production of food is largely home based and offers jobs and an income of Rs. 80 to Rs. 25 a day, to a lot of women.

Textiles

The textile industry employs 600 people and is one of the major businesses in Dharavi. When the textile industry in Bombay fell back and declined in 1950-60 the industry moved to Dharavi and kept on running on an informal matter. There is a strong collaboration between all the sub industries producing garments. The industry separates different units, weaving, printing, colouring, embroidery and tailoring.

Embroidered garments, both by hand, 'zardosi', and by machine, are produced for the local market. Other garments get sold both locally and worldwide. Some manufacturers get samples sent and manufacture a large quantity of garment for one specific company.

Printing

50 printing industries print and design visual art and graphics such as logos on boxes, plastic bags and posters or print booklets, flyers and papers.
Value proposition
Latif makes real leather pieces out of sheep, goat and even cow hides, varying in quality, size and thickness. A certain texture and/or colour can be given to the leather. A perfect shining crocodile skin can be purchased for around $5.

Resources
Tanned leather hides, pigment, human resources and machinery.

Partners
The leather is bought from traders that buy it in bulk at the tanners. These tanners buy the hides from traders that take of the leather at butcher houses.

Customers
The customers of Latif’s business are both traders and distributors. Traders who sell the leather hides for export directly to companies and manufactory’s that produce leather goods and distributors who sell to leather goods local manufactories, where the leather is formed into leather goods to later be directly exported worldwide or sold at the local wholesale markets.

Activities
The main activity of Latif’s industry is colouring the hides using pigment, ironing the hides to make them ready for processing and pressing a certain structure. Before sales the leather is measured and weighted.

Customer relation ship
Latif is highly depending on his ‘customers’, the trader and the distributor, and therefore has to maintain a good relationship with them. When Latif get’s a certain demand the he makes sure to manufacture the demanded supply within the set amount of time and for the demanded price.

Channels
The leather hides are distributed via distributors and traded via traders that have connections with either, customers, who demand processed leather skins, or partners, who supply tanned skins and pigment. When a Latif gets a demand for supply via this trader, he contacts a provider to supply him with purchased hides. The hides get processed and made ready and Latif finally hands them over to the trader that demanded for it. Transportation, advertisement and networking are all taken care of by these traders.

Organisation
Latif’s business has an evident organisation, different employees are responsible for a different task, one measures the leather, one irons it, one colours it, one presses a certain structure, and one sorts it in colour and quality.

Revenue
Revenue streams directly come from the sales of leather pieces. The price of the leather depends of the thickness, size and quality and is measured securely by high-tech measuring machines.

Costs
Costs are mainly made on the supply of material, leather that is bought from butcher houses. The tanning, since it is outsourced, forms another costs stream. The rest of the costs are made on chemicals to colour the pieces, machine costs, rent of the shop, and on human resources.
Value proposition
Wax printed and embroidered fabrics, ready for the transformation into garments are the value proposition of Falak’s business. Prints of all kinds and colours can be printed on fabric and both, hand and machine embroidery, can upgrade the fabrics even more.

Resources
A workshop, employees and fabric, either produced in Dharavi or purchased via traders at wholesale markets. Wax to make the wax prints, hand wax presses to print the fabrics, beads and yarn for embroidery and machines for hand embroidery.

Partners
Partners are the people that, via traders, supply the Falak’s industry with fabrics, wax, presses and machines. They can either be located in Dharavi or elsewhere on the global market.

Customers
The fabrics get sold locally and will be made into Indian style and Europe style clothes. As well Falak’s goods are exported globally to companies that fabricate the fabrics into sheets, clothes, lining etc.

Activities
The textile gets printed by hand, using wax presses and/or embroidered by hand or machines. The embroidery by hand, ‘zardosi’, is a very precise task. Falak’s workers get paid per piece and make long working days. The more pieces the workers make the more they earn.

Customer relation ship
The fabrics get sold based both on a specific demand and on available supply. Falak’s industry therefore produces a certain amount of varying textiles that are purchased by traders to pay it forward, or are processed on a specific demand within a set time and cost.

Channels
Traders sell Falak’s processed fabrics to garment manufactories locally or globally. Transportation and getting customer demand lies out of Falak’s scope and is arranged by middlemen.

Organisation
Employees, delegated by Falak, perform printing and embroidery.

Revenue
Revenue is gained by the sales of processed fabric to garment manufacturers.

Costs
Un machined textiles, beads, wax and presses form Falak’s main cost. Employees get paid per processed piece of fabric and therefore the employee cost, that differ from day to day, are directly paid back by the sales of the goods.

I’m Falak Afak, 52. I have a big family and we all live together, my brothers and sisters in the Kumbharwada Nagar. I’m married to Asmita Falak and I have four daughters, Pooam, Sunita, Ayanka, and Manasi. Pooam and Sunita are married and I have to save for the weddings of my two other daughters. A part of the money that we earn is sent back to my mother’s sister in Gujranwala.

I’m a hindu and my grand parents moved to Mumbai from Gujranwala years ago. I speak both, Marathi and Hindi and a little English.

My brother took over the families pottery business and I started my own fabric printing and embroidery business when I finished school. We produce high quality printed textile and very pretty embroidered fabrics.

I have 7 employees.

The fabrics we make is sold all over India and get’s exported to Africa, Americas and Europe.
Value proposition
Rash’s industry is in the recycling of plastic into pellets of different colours and materials. Rash’s value proposition are ready to be processed pellets and cleaned, ready to be re-used or recycled elsewhere, plastic bottles.

Resources
All sorts of plastic products, plastic bottles to plastic shoe soles, human resources, plastic grinder machines, cleaning materials and an area to dry the plastic pieces.

Partners
Rash’s industry is highly depending on its partners that supply him with the to be recycled plastic. Rag pickers bring in used plastic products in bulk every day. Middleman close deals with hotels, restaurants and offices to get Rash supplied with plastic trash. Big container ships bring in plastic trash in bulk, purchased from countries all over the world that cannot cope with it.

Customers
Customers come from all over the world and vary from fleece manufactory plants in to toy factories. Rash’s business is one of the businesses that is responsible for a daily export of 3000 sacks of recycled goods.

Activities
The plastic recycling industry, like the one of Rash, is a chain of highly connected and intertwined links. All different units perform different task. When the plastic comes in it is first sorted in quality and material, logo’s and labels get washed of and, the products get cut into small pieces, then it get’s washed, dried on the tops of the roofs, melted and coloured, formed into long strings and then cut into small pieces to finally be packed in big sacks ready for export.

Due to the constant supply of plastic the recycling process never stops,
User group

Businesses that export goods on the global market are chosen to be the user group to base the to be designed service on. Since these businesses are the ones that gave rise to the annual turnover of $4.5 billion, their organisation and approach can form an interesting example to local businesses all over the world.

Local businesses that manufacture goods or raw materials for export contribute to the growth of the domestic economy can therefore be key to a contribution to the elimination of poverty.

Business owners of businesses that export goods and raw materials on the global market are chosen to be the main user group for the to be designed service.

Three distinctive profiles are made of businesses that operate in this context. These profiles help to familiarise with, Rash the plastic recycler, Latif and his leather business and Falak the fabric tailor.

Doing business in Dharavi

As explained above the operations of industries in Dharavi differ. Businesses vary in specialisation or value proposition. Key activities and resources diverge and costs and revenue streams are unequal, some businesses employ 5000 people while other businesses employ 600 people.

However the organisation structure of the business, and the organisation with respect to customers, customer channels and partners do not differ. See figure 30 for an illustration of this general business structure.

All units united

Typical for Dharavi’s industries is the strong collaboration. Industries are divided into collaborating sub industries carrying out the same activity. Industries, having a large production chain, are divided into strongly cooperating units responsible for one part of the chain. By dividing industries in units, the industry gets survey able to owners and managers. Within these sub industries tasks are divided into all small subtasks giving employees just enough responsibility to cope with their tasks and perform well.

The size of Dharavi’s industry is big. All together they seem to form a wealthy economy. The yearly turnover of Dharavi in total counts $4.5 billion. However the production of goods only does not lead to this ‘wealthy economy’. To gain revenue, industries are depending on the export of goods for global trade. Business owners lack in information, investments and knowledge to connect to the global market and, as to be red in the profiles of Rash, Latif and Falak, the leather, textile and plastic recycling industry, the industries are highly depending on middlemen.

One middleman fits all?

In indicating why Dharavi’s businesses are so booming, the important role of middleman has not yet been mentioned. A middleman knows the market and can combine the qualities of different businesses to produce a demanded goods or services. Middleman can take care of the distribution of goods since they have knowledge of and access to information about transportation channels. Middleman form an important a spill in the exchange
of goods having connections to both a network of customers and suppliers.

Due to the economic and social isolation of businesses owners in Dharavi, the middlemen have a very unique position. Middlemen connect businesses to both the suppliers and buyers, and take responsibility for tasks that business owners themselves cannot take. Middlemen highly contribute to Dharavi’s export and import number and get a share of the gained profit.

In the article ‘Rethinking the Role of Middleman (Gadde & Snehota, 2009) an elaboration is made on the three faces a middleman can have. The trader, distributor and provider have a shared function, linking buyers to suppliers. However the specific role of each middleman can differ. An explanation of these different middleman ‘heads’ can be found in table 40.

Middlemen are beneficial to businesses. However it is also due to middlemen that the business owners are and, will continue to be, social and economical isolated from the market. See figure 31 for an illustration on how businesses operate in exports.

Access to the market?
Dharavi’s export number indicates that goods produced in Dharavi are traded on the global market, from this could be concluded that businesses in Dharavi are connected to the global market. However, when we take a closer look, we find that businesses are not connected directly and do therefore not fully profit from the global market.

Why are businesses not directly connected?
Businesses in informal settlements operate in socioeconomic isolation and suffer from trade barriers and market institutions that, as described in the previous chapter, make it hard for local businesses to access the global market.

The large number of export indicates that Dharavi is connected to the global market. This connection however is indirect. Middlemen provide access to the global market and are for a large share responsible for an annual turnover of $4.5 billion. Both middlemen and business owners are aware of businesses’ dependency. Middleman can take up to 60% of the profit being ‘indispensable’.
The existence of middleman results in a continuation of social and economical isolation of local businesses. Since 60% of the profit of international trade disappears in the pockets of these middlemen, local businesses are not able to flourish and Dharavi’s economy cannot rise above a certain level.

It is hard for local businesses to pass these middlemen and access the markets by them selves. Trade barriers and trade agreements are not in their gain and information and knowledge on connections to customers and suppliers or transportation is, due to the isolation, not easy to access.

This, not only being the situation for Dharavi’s market but also for markets and countries on other parts of the world, as described in the article about a mobile-based e marketplace, Cellbazaar (Zainudeen, Samarajiva and Sivaparagasam, 2010)
Devil
or
Sea
As S Sivakumar, Chief Executive of the Agri Business Division of ITC Limited, India, describes that local farmers have to choose between the devil and the deep sea. (Patel, 2009)

‘The middlemen blocked market information and tied down the farmer in a vicious cycle of dependency, whereas institutional credit, co-operatives and mandis raised search and travel costs.’

The devil
Dharavi’s location and the infrastructure both contribute to the annual turnover of $4.5 billion. However the business mentality created by both, the entrepreneurial spirit of business owners and the exploitation by the indispensable middleman are main reasons for this number.

This middlemen can be seen as ‘the devil’, who is not only a middleman but also a broker. A broker is exploiting businesses by purchasing goods for a minimum price and in the same time demands an extra fee to carry out the exchange. The profit made by this middleman is then not, or just, in equilibrium with the costs made by the business to produce the good. The middleman benefits from this trade, however businesses, like the ones in Dharavi, stay poor and the economy will not rise above a certain level.

Deep sea?
When market institutions do not support businesses in poor countries and rich countries equally, the differences between both parties will only grow bigger and a false equilibrium will rise.
Free trade agreements will make the global market a deep sea as long as domestic economies do not get a change to grow to a stronger level and equal trade is not possible

As described in the previous chapter local businesses find difficulties in accessing the global market. For smaller, less professional companies, like the local industries in Dharavi, market institutions block access. High tariff barriers have to be overcome resulting in minimal benefits of export for local businesses and unfair competition will exist due to subsidies.

Eliminate parasite middlemen or reclaim the see?
Different solutions to lift markets out of poverty and to give poor businesses access to the market are discussed in the previous chapters. Not only the existence of the ‘devil’ and the ‘deep sea’ also lacking infrastructure and economical status form a limitation for local businesses to access and benefit from the global market.

Reclaiming the sea
Reclaiming the sea can be done if regional trade arrangements are made between countries of the same level this could make poor countries stand a change in international competition. Strengthened by number poor countries can develop their domestic economy. A growth of domestic economy can be further stimulated by the protection of domestic production and the carry out of subsidising local businesses

Eliminate parasite middleman
Since middlemen take, for a large share, responsibility to connect businesses to the global market, eliminating them will mean that local businesses have to carry out all these tasks them selves.
This will not be beneficial and as long as informal business owners are not able to perform these tasks they have to depend on middleman.

However, by providing business owners with information and knowledge on how to access this market, they can become less dependent of these parasite middleman.

The next part of this report that will elaborate on how a service that connects local businesses to national and international markets, can be made interpretable, trusted, accessible and motivating for all its different users.
Enable and stimulate to interact
Chapter 3
Reclaiming the deep sea, or bridging it, to get access to the market for local businesses and the global market to recognize this local businesses so interaction between both can exist: contains different elements, two ‘worlds’ have to become one, therefor these worlds have to understand one another, have to be connected to each other (literally), have to trust each other, and both parties have to be motivated to interact.

3.1 Understand cross-cultural
3.1.1 Universals
3.1.2 Differences
3.1.3 Level people, 1 world

Leveling both parties is one thing but connecting both parties is something else, how can we connect the market?
3.2 Connect; become connected via communication technology
3.2.1 How are we connected on this world to knowledge (wikipedia: internet versie 1.0): to people Social media (internet 2.0)(facebook, linkedin, twitter) =>to markets??
3.2.2 How do we connect markets: E-commerce
3.2.3 How do we include the BOP market: M-commerce

But if we connect parties that do not know each other and make them trade we must assure both parties will trust each other, to ensure the success of this global commerce

3.3 Trust; What is trust
3.3.1 Trust when trading face to face
3.3.2 Trust when not trading face to face
3.3.3 How to improve the level of trust

Now we made people understand each other, be connected to one another and trust one another but how can people be motivated to trade?

3.4 Motivate: motivation through gamification
3.4.1 What is gamification
3.4.2 Why will this motivate people (voorbeeld van die vrouw in haar praatje over youtube in Africa, used for fun and later on used in emerging situations (all people understood since they where familiar with the technology due to the fun part of it)
3.4.3 Examples of motivation in other products
http://www.texttochange.org/news/power-sms ook een goed voorbeeld van het succes van technology!
Globalisation due to technology

Technological changes and development are long term drivers of economic growth. In the western world the technological revolution started in England has led to a divide in the economies of the developed knowledge based western world and the undeveloped emerging countries. (D. Kleine; T. Unwin, 2009)

Technological development is a way to address to emerging global challenges and globalization. The speed and power of new digital technologies gives possibilities to reach people on great scales and many technologies exist, but not all are suitable for the market to design for. Importance is in choosing the right technology for the right market.

The physical constraints, capital constraints, and social identity constraints, which are linked to and influence by each other. constraints of Ict must be taken into account (I, Medhi; R. Kuriyan)

Since the number of mobile phone subscribers rises compared to the number of PC’s in emerging markets, the mobile phone is more likely to bridge the digital divide than the PC (Parbat, 2005; Sood 2006). Mobile communications have been found to contribute significantly to enhancing income and improving quality of life (Sood 2006; Waverman, 2005)

Mobile technologies can connect people to overlap high distances and to connect people to family and friends and to information services. Kandachar, de Jongh and Diehl (2009) address to a study that showed a increase 0.6 percent GDP by a rise of mobile subscribers of 10 percent.

The importance of mobile phones for developing countries

The rising number of mobile phones users has induced a ICT revolution. In 1997 3.3 million people had subscribed to a mobile phone. (D. Kleine; T. Unwin, 2009) In 2009 this number has risen to 4 billion people and the in 2012 the number of mobile phones will grow to six billion worldwide (BBC mobile, 2010), meaning almost all world citizens will have access to a mobile phone. Prepaid phones are used most in poorer or by poorer countries people having no internet access whereas richer people can go online via their mobile phones. (D. Kleine; T. Unwin, 2009)

Especially in developing countries mobile phones can improve the day to day life of people. Due to poverty, bad road networks, high distances, lack of information and lack of...
communication people are restricted in living their lives. (P. Kandachar; I. de Jongh; J.C. Diehl, 2009)

Mobile phone growth in India has been quite remarkable; with about eight million new additions in January 2008 (Gupta, 2008), India is projected to be the second largest mobile phone subscriber before the close of 2008 (Z Lalij, J Good). Nowadays 71 percent of the population has access to a mobile phone (Wikipedia: August 2011)

Malik (2006) states however that this growth has been asymmetrical; most growth happened for the elite people, poor people and illiterate users had little effect of this growth.

The speed of mobile adoption in Africa proves the demand for these type of products and the willingness to pay for it.

“Recent study in Tanzania indicated that many students paid as much as five times more for there mobile phone connection charges than on food. (D. Kleine; T. Unwin, 2009).

Since mobile telephony can reach a very big number of people and costs can be kept relatively low due to great numbers. People already use mobile phones to communicate about business, to find work to transfer money, to get informed to store medical information, etc. Villages share mobile phones to lower costs and people have multiple prepaid simcards to use in different occasions.

(P. Kandachar; I. de Jongh; J.C. Diehl, 2009)

Not owning a mobile phone due to a lack of electricity, little exposure to technology, low literacy and linguistic knowledge and different social models, can exclude people from the global information system and causes negative effects to the poorest people. (Kam; Mathur, Kumar and Canny, 2009)

Therefore designing for development also means designing for a culture and context that differs a lot from the western world. Ict must be adapted to unfamiliar culture and traditions, accessibility to local languages, multiple levels of literacy, mistrust of technology, local infrastructure, environment (dust, heat, humidity).

The different products that exist in this field

Explanation of examples as: Cellbazaar, Slimtrader, tiendatek, Mpesa

Conclusion:

_distances can become larger if they feel shorter_
Trust
What is trust

Trust is the extent to which one dares to give control, information, or valuables to another. Giddens (1990) defines trust as confidence in the reliability of a person or a system. Having confidence in the reliability person is needed when one is depending on this person. People are naturally set to trust, bad experiences in the past however will lower the level of trust between people.

Trust face to face transactions

When goods are exchanged face to face buyer and seller can both judge the trustworthiness of each other and the quality of the to be exchanged products. A face to face interaction is done locally, the seller is most of the time known by the buyer from previous transactions (frequency of interaction will if evaluated good build a level of trust). Next to this a local reputation of a seller can be shared among clients, also reputation in other context can make a seller more trustworthy (i.e. if the seller has a good reputation in personal context). The years of experience as a seller (during the years a seller can built up reputation) or the link to a reliable partner (i.e. the link to a well known company) can provide reliability. Association with trusted brand names and the presence of neat showrooms (assure to have enough resources) can make a seller trusted by the buyer.

Changing from face to face to technology

Due to the change of face to face transactions and interactions to technology mediated transactions and interactions, a higher level of trust, which is key factor in commercial transaction, is needed (Liu, 1996).

In technology mediated transactions a lack of information about the seller will occur. Giddens (1990) states this lack of information arises a need for trust. In these type of transactions the buyer does not have the possibility to check the good before purchasing it.

In e-commerce, computer based or mobile based, mostly both interaction parties never met or spoke to each other, there is no formal way of building trust as described in the first alinea, a new way of building trust needs to be found.
According to Siua, Sheng and Nah (2003) trust in the seller; the buyer; the electronic network and trust in the e-marketplace is necessary to make a mobile/computer based e-market a reliable source. A transaction via e-commerce should not require face to face interaction. Already a lot in transactions take place via virtual markets, i.e. ‘marktplaats’ and ‘bol.com’ without people having to meet. This suggests that there is sufficient trust between the parties for transactions to occur, and that the e-marketplace provider can play an important role in building trust. “What is surprising is the vast shuttling of both new and second hand goods among distant strangers on the Internet, through such mechanisms as eBay and the Yahoo auction site. Buyers, who must pay before inspecting or receiving their items, must put considerable dollars at risk.” (Resnick; Zeckhauser, 2001:2)

How can we gain a higher level of trust?

Empathy gains trust, when giving information about a person in the context of his business and in his social context one can empathize and familiarise with this person. As a result of this higher levels of trust between two parties can be gained. In Examples adding a photo, address of personal description to the information given to the buyer or sellers will enable parties to empathise and familiarise.

When the transaction, as in our case, also includes the payment via technological mediation, the seller must trust the buyer to make a payment when the good is delivered (here for the buyer needs to trust the way the money is transferred), or the buyer must trust the seller will send the product when the payment is made. When both parties are not willing to take a risk, neither of them will make the first move in the transaction. However when a mediator comes between both the reliability of the transaction will rise.

Conclusion:

_We trust the trusted_
Getting to the design
The previous elaborations on three fields, ‘the global market’, ‘businesses in informal settlements’, and ‘the gap’ have given a better insight in the domain.

Conclusions from these studies have given rise to the question that can be used as a starting point for the VIP method. How can we use modern technologies, such as an geo code address, e-markets and mobile markets, to give local bop businesses access to the market?

This VIP method [Hekkert, Lloyd, 2011] uses a context within a set domain as a starting point for the design. This context can be described as the designer’s view of the world within this domain. Instead of immediately designing a product first a vision is derived. This vision will describe the aimed experience that the product should evoke within the set context.

Determining the interaction with certain interaction qualities, between the product and the user is the next step. These interaction qualities will then, naturally, lead into product qualities, and will be used as a frame to fill in the concept design. The context is build up out of different factors or clusters of factors. These factors are derived from literature, cases studies, and everyday observations.

The context is projected in a time frame. This time frame can be far away in ‘the future’. For this project however is chosen to design the concept for the current time.

This chapter will give insight in the factors that have been derived from the pervious chapters. All factors will be linked to these specific chapters where background information can be found.

Clustering these factors will create two contradicting fields. This field of tension created by the contradiction, will lead to a statement. This statement forms the fundament of the vision and will be the main thought behind the design. The final concept will therefore be validated to the statement.
Within the VIP method a distinction is made between trends, developments, states and principles. In order to make the design as valid as possible and apply able within cross-cultural countries, being opinionated that between every cultural difference cultural universals exist, I have tried to narrow down, trends, developments and states to principles.

We are proud on what is ours – part two -

When walking through Dharavi and talking to its settlers and business owners the feeling of pride cannot be missed. However living circumstances may lack in all sorts of services in our eyes, Dharavi’s settlers present them proudly.

It is hard to choose when there is no variety – part 1 –

Due to socio economic isolation people cannot access markets, as Prahalad describes (2002) they have no capacity to consume. Being excluded from the local market limits the offer of goods and thereby lowers the ability to choose.

We trust the trusted – 3-

Trust is the extend to which one dares to give control, information or valuables to another. Giddens (1990) defines trust as confidence in the reliability of a person or a system.

Having confidence in the reliability of person is needed when one is depending in this person. People are naturally set to trust, bad experiences in the past will, however, lower the level of trust between people.

A formal deal needs an informal part -3-

Before a business deal is closed, Indians drink a cup of Chai and the French invite their business partner to join them for lunch. The Dutch carryout this ‘informal part’ of a business deal afterwards, celebrating it over a beer.

We think others are stupid -2 -

The existence of Nagars, communities, within Dharavi indicates the settlers tendency to group. People want to belong to a group and to feel save. To make the feeling in this group stronger we tend distinguish ourselves from others. To make our group feel better we often value people belonging to other groups, cultures, origins, religions or social layers as ‘different’ or ‘less’

We like to share news – part 3 -

People like to share news, to tell others things they know and to hear things from others that they do not know. News is shared to build an identity, to be valued smart, good, nice or funny.

We need others to survive –part 1,2 -

Shared responsibility lowers the level of risk and the amount of work. The principle of strength by number can be found in the collaborative business organisations in Dharavi.
We think the other is stupid

We need others to share

Distances can become larger if they feel shorter

We play to learn

We need error to love trial

We like to share new things

We need arrogance to show – part 3 –

Key to the success of social media, like ‘Facebook’, ‘Twitter’ and ‘LinkedIn’ is the narcissism people have. Without a certain level of proud, arrogance and egoism people would not share thoughts, secrets or news since their insecurity would stop them from doing so.

Distances can become larger if they feel smaller – part 1, 3 -

Technology connected people over the years, globalisation is for a big share led by technological development, the development of vehicles, infrastructure, mail, and landlines have been of major influence to, relatively, shorten distances. Developments in mobile phone technology and the development of the Internet are catalysts for further globalisation.

We play to learn and discover – part 3-

People of all sorts and origins like to play. Small kids have an enormous drive to learn and discover and do so by playing.

We need error to love trial – part 3 -

People want to be challenged. Things that are too easy are not fun and accomplished goals are more rewarding if error has been part of it. Trying is fun if it is rewarding and it will only be rewarding if it is challenging enough, in other words if error could occur.

Time is money – part 2 -

In a capitalistic world time is money. This becomes very clear when you look at the business mentality of industries in Dharavi. People have to work a minimum of 12 hours a day to be able to produce enough to earn a living. Competition on the market makes people work more and more and more.
We play to learn
We need error to love trial

Control
It is easy to choose when there is less variety
Time is money
Distances can become larger if they feel shorter

Curiousness

Clustering
These factors are first placed into four groups, to identify their common base and to make, the created context workable.

Later these groups are further grouped into two contradicting groups to indicate the relation between the groups and by doing this a tension field is created.

These factors can be clustered in the following four groups:

Curiousness: The need to discover the world
Control: The tendency to control and monitor things around you
Exhibitionism
We are proud on what is ours
We need arrogance to show
We like to share new things

Familiarity
We trust the trusted
A formal deal needs an informal part
We think the other is stupid
We need others to share

Exhibitionism: The need to express yourselves amongst others
Familiarity: The ease to stay with the known and the familiar
These four groups can be further grouped to two groups.

Familiarity and control have the common value of acting within the known and between borders. The first group is characterised by the dependency to the known and the controllable.

Exhibitionism and curiousness have the common value of seeking borders and interacting with the unknown world. The second group is characterised by the tendency to express to others and to discover the world. The homo ludens.

A contradiction between these two groups exists and by placing them in relation to each other a tension field is created.

This tension field highlights the area, within the context of local businesses that interact on the global market, where a service or product can add value. This desired addition within this context can be formulated as the statement.
I want to trigger informal business owners to discover and share the value of their product and experience the flow of being in control while interacting on the global market.

Socioeconomic isolation limits local businesses to stay with the familiar and the controlled. The tendency to discover and express outside the borders of this isolation, has been an infeasible path.

The statement I make aims to give businesses a solid fundament of control and familiarity in order to make them ‘open up’ to the global market. This ‘move’ will enable local businesses to discover and express the value of their business.
Interaction qualities
Securing, inviting, proud, triggering and playful exploration are all interaction qualities suiting to this statement. These interaction qualities are expressed visually in the collages below and summed up in figure above.
Vision
The qualities together form a vision and can be explained best using a metaphor, the metaphor of a street soccer game.

A soccer game makes people want to cooperate, probe, perform, control and affect. All these qualities can be linked to the interaction qualities. The interaction between players and the game is: securing since the game is controllable, inviting, since the game evokes cooperation, proud, since it will elicit to perform well and triggering, since one can affect the game.

A typical street soccer game is hard to resist... Let's play.

You will play in a team meaning that you are not fully responsible and you and your team members have to cooperate. The game is dynamic and constantly changing which makes it exiting and since the outcome is not predicted your team has to probe. It is important that all individual players together, build a strong team and therefore you try to perform at your very best. Luckily you can control the game, since the rules of the game are known and the conditions are set. And even being just one link in the chain, you can personally affect the outcome. Present yourself, take the ball and score!

Interaction vision: as irresistible as a street soccer game.
Product
The product in this sense refers to a broader scope than only a physical product. The domain of this project is to design a service that enables businesses in informal settlements to interact at the global market.

Service design refers to the design of a combination of products and the links between those products, the service has different touch points, in example an interface, and combines different parts into one, the service. Deff. Service design??

And therefore I will refer to the service qualities, a service concept and a service design, instead of product qualities, product concept and product design.

The service is to link the concept of geo code addresses and mobile payment to the need of local businesses.

This need, changed into a possibility for added value, is narrowed down from the context. The statement: to trigger business owners, interacting on the global market, to discover and share the value of their product, while experiencing the flow of being in control, formulates this. The opposed interaction qualities and the interaction vision give colour to this statement. I want the service to be as irresistible as a street soccer game.

Service qualities
If a certain interaction is to be evoked a service and its qualities can contribute to this and therefore the service qualities are directly derived from the interaction qualities and the vision. See figuur XXXX

The quality trusted is derived from the interaction quality securing and indicates that the service must be familiar and trusted in order to make the user experience a secure interaction with the service.

A proud interaction will be evoked if a service is rewarding.

The quality sharable is derived from the interaction quality inviting. A sharable service, open and accessible, will evoke an inviting interaction.

A service that is new, or constantly renewed will evoke playful exploration.

If an interaction between the service and user is triggering it means that the service will evoke the user to perform a certain action. An influenceable service will evoke this action.

Concluding; the service should be trusted, rewarding, sharable, new and influenceable. (appendix brainstorm)

Linking to the context, statement and user
Placing these qualities within the context in relation to the users will explain how the opposed result, indicated with the statement is realisable. (fig. 700)
Owners of businesses in informal settlements that due to a socioeconomic isolation do not profit from the global, international nor domestic market are addressed by the created vision.

Local businesses, as described in chapter 1, 2 and 3 and summarized in the context, could profit enormously form the local market if trade is arranged in such a way that they can, themselves, join it. Of course problems such as unfair markets, the existence of parasite middleman and the lack of investments should be solved to create a sustainable and equal market. However within the scope of this project and within the design of this service I cannot force governments to change institutions, I cannot actively eliminate parasite middleman and I will not try to contribute to the execution of investments.

The design of the service will connect bottom down initiatives such as geo-code addresses, mobile payments and adapted logistic solutions, to simple bottom up needs for the empowerment of local businesses. The formed qualities suit to a realistic world that business owners experience and integrating these qualities into a service will contribute to the success of local businesses.

A service that suits to the context of local businesses should, as narrowed down from the context and vision, be irresistible. The service that is, trusted, rewarding, sharable, new and influenceable, will evoke a securing, inviting, proud, triggering and exploring interaction.

The total of the service, integrating all its components, will be a support in doing business on the global market. Shaped by the determined qualities, its characteristics will empower local businesses to experience doing business on the global market as a natural thing.
concept
I make perfect leather

Real leather | Mumbai

I make perfect leather

Punjab sheep | Mumbai

I make perfect leather

Perfect leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I make perfect leather

Krishna leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I make perfect leather

Ashram leather | Mumbai

I Need 300

M 2

Kg

Pieces

Leather

Con
To make the link between the product qualities derived from the vision and context to the, to be designed, service, a service framework is used. This framework is an adapted version of a framework designed by R. Bartle (1996).

In this framework Bartle lines out Players versus the world, x-axis, and acting versus interacting on the y-axis. The four quarters that are created by these axes, each represent a specific type of gamer.

Quarter one, framed by ‘acting’ and the players, represents the ‘Killer’

Killers seek to simply win or lose a game. They want to act on players and are triggered to play and dominate.

Quarter two is framed by ‘acting’ and ‘the world’ and represents the ‘Achiever’

Achievers want to master a game and are proud on the status they have achieved within a certain world.

Quarter three, framed by ‘the world’ and ‘interacting’ represents the ‘explorer’

Explorers interact with the world and seek to feed their sense to wonder, discover and be surprised.

Quarter four, framed by ‘interacting’ and ‘players’ represents the ‘socialiser’.

Socialisers want to find out about other players, get to know them and interact with them.

See figure XXX

In the middle of this framework a fifth type can be added, the ‘controller’.

The controller likes to overview the game and is most comfortable by ‘having a bit of it all’. The controller doesn’t want to win, does not aim to be the best among others and
does not need to socialise or be surprised.

By adding the ‘controller’ in the middle, this framework can be put on the set interaction qualities and the service qualities derived from the context and statement.

The interaction between the service and the ‘Killer’ is triggering and the service quality is influenceable.

The ‘achiever’ seeks a proud interaction and the service has to be rewarding.

For the explorer the interaction with the service can be characterised by exploration and to achieve this the service has to be ‘new’.

For the ‘socialiser’ the interaction is inviting when the service is sharable.

The ‘controller’ will have a securing interaction with the service as long as it is trusted.

See figure XXX
De flow
When assuming that players of a game are never one of these prescribed characters, but always a combination of characters, a flow can be initiated. This flow will lead players through all these quarters making them experience all stages.

Specific to the to be designed service this means that the business owners will experience a flow while using this service.

The flow assumes the business owner to be a controller at start.

When the service, which is irresistible, triggers him to be pulled over to use it, he will become a killer, for a moment.

He wants to win the gain but to do so he needs to know what this gain is. He will be curious to explore and via his controller position he becomes an explorer.

While exploring he notices that the service invites him to share information in order to get access to information shared by others.

The business owner falls back into his controlling position, for a moment and than becomes a socialiser giving and receiving.

Being a socialiser he discovers his value and becomes proud. He notices that showing this value will be rewarded and via his familiar controlling position he becomes an achiever.

The achiever stands out in the market and is aware of its unique value and able to sell this value.

After selling and succeeding the business owner can fall back in his trusted controlling position, ready to experience the flow again.

... Control - Being pulled over – control - explore - control – share – control – present – control ....
The concept of the service design combines three components that demand touch points with the user. (see figure 800)

The first component is the storage of ones address, the geo-code address. An interface to store this address is needed. (fig. 800.a)

The second component is the component where market access is generated, this component is build on three principles, the act of a market system, demand and supply, the principle of sharing information and the presentation of suppliers within groups. Sharing information means that once you share information you can get access to shared information by others. (fig. 800.b)

The third component, (fig. 800.c) is the payment and distribution of the good. The service aims to link local businesses to the global market meaning that it links two parties, the buyer and the supplier. The supplier will only supply his good when exchanged to value, transferred money, with the buyer. The buyer will only transfer money if this is exchanged to goods or raw materials. This touch point therefore is the touch point that demands a high level of trust.
A business owner gets confronted with a market screen in front of one of the Mpesa stores. Information is exchanged and constantly updated. The screen evokes curiosity by the business owner and he starts exploring.

A WeAre serviceman can explain him about the service, he shows the platform and informs the business owner about the advantages of it, information about the market is shared and a profiling tool will help business owners updating their profile.

The serviceman at the Mpesa office assures the businessman that payment and transportation is arranged via the office. All members of the service have stored a geo-code address, the first step to registering. Members that have successfully updated a profile have been given access to the interactive part of the platform and they have received a WeTrade label.

The total service
Since the geo-code address and the payment and distribution are both concepts that will be elaborated by TNT and Vodafone, I will focus on the second component of the design: the actual marketplace, where market information will be exchanged between buyers and suppliers.

The Market place:
As described above, the marketplace is built on five principles. These principles: supply and demand system, the exchange of information, the creation of a profile, the presentation within groups and the linkage to the WeTrade service that makes the service trustable will be explained in the following chapter.

The marketplace itself also contains all these different characteristics

Influenceable
The market place gives an overview of demand and shows the reactions of suppliers on this demand. The marketplace is constantly updated with both, new demands and new supply. The marketplace broadly apparent since it is visible on the street, via a market screen, on a mobile phone, via a mobile infrastructure and on the website, trough both Smartphone and computer.

Interaction with the marketplace is accessible for all who made a profile and have access to a computer or mobile phone.

The demand will be updated constantly and responds to this, supply offered, will directly be posted within this demand. This real-time process will make users experience influence ability of the game of demand and supply. This will trigger them to join and doing so they will be convinced that the market place is indeed influenceable.

Trusted
The platform is part of the WeTrade service, however this initiative is new to users it is set up by two known companies, Vodafone and TNT. The service will have visible outlets, Mpesa offices, since these offices will be built on every XX sq kilometre, within a certain distance form each and every business. (van Ginhowen, 2011)

The platform will only be accessible by members of the service, the Mpesa offices have registered these members and since personal details are restricted to do so, members are traceable. Information given on the platform is nothing but informative and only limited information can be posted since pre set forms are made and will only allow a specific content.

When a business has successfully created a profile he will get a WeTrade label, a control mark. Whenever a business is not playing the game according to the rules access to the platform will be
When a new user decides to create a profile on the marketplace he will get access to an information platform. On this platform profiles of businesses within the same or another specialisation can be explored. Within group profiles, personal profiles, that can be an example for creation, can be discovered.

Sharable
When applying to the platform users will be grouped within a certain specialisation. Groups that share a specialisation can be seen as working unions. Within these groups specific information can be exchanged. All members of the group will be updated about offers that other members make. Group actions like sharing orders, are possible.

Buyers demand for supply can only be posted within a group. Hereby all group members get an equal chance to respond on posted demand. Information about offers made by group members is shared within the group making the process of demand and supply transparent.

The demanding party, the buyer, can only view personal profiles of the businesses that have placed a bid within this specific demand. By viewing these profiles, showing the specific value of a business.

It is up to the buyer to choose a supplier to close the deal.

Rewarding
In order to be able to profit from this platform businesses are asked to create a profile. The creation of this profile is beneficial for two reasons, the first one is, as described above, to give others insight in your business and organisation of your business. The other benefit is the insight in ones own business. Questions asked while updating a profile will give users a better notion of their business’ value.

Users will be asked to think about the business’ organisation and will be stimulated to think about the added value. Users will be encouraged to distinguish from other businesses. Insight in ones partners and customers is created and advise is given on how to present products in an appealing way.

Insight in the value given will be rewarding. Users will feel confident to join the game of trade.
WeTrade.
100 m pink leather. 2wk
30 m brown leather. 2wk
100 L clean cans. 1wk
80 kg blue pallets. 4wk
WeTrade; inleiding

Businesses in informal settlements run almost 24 hours a day producing just enough to earn a living. Time is money. Goods and raw materials, manufactured by these businesses, are exported worldwide. Local Businesses seem fully integrated in the international trade system.

When taking a closer look however, we find owners of businesses and their employees themselves to be disconnected to this market. Businesses are isolated in their own socioeconomic system, and do not step outside the borders of isolation. Businesses highly depend on others to access market relevant information and cannot benefit form the global market.

Business owners, however indirect, are participating in international trade and their goods are exchanged within and across borders. It is a shame that business owners are not aware of the market value of their goods or product, neither in money value nor in importance or usefulness. And are, due to isolation, ignorant to fully experience the benefits of international trade.

In the meanwhile mobile phones, Internet and social media bridge distances and connect people all over the world. Upcoming economies and increased specialisation force the global market to expand.

In a world that is becoming smaller and a market that is continuously globalising, there is a perfect fit for a service that makes use of these new communication technologies to connect the unconnected to the market.

In this chapter I will elaborate on the designed service, which will contribute to the connection of local businesses to the global market: WeTrade.

The name WeTrade is derived from the name WeAre. A concept designed by SC van Ginhoven, 2011, this concept has been a starting point for design.

The service is built on three components. A mobile address, a market information platform and a local office that enables money transfer and worldwide transportation.
WeTrade is a Product-Service System (PSS) that allows local businesses to experience the value of their business on the global and domestic market. WeTrade stimulates and empowers local businesses to actively participate in the game of trade.

Businesses are made locatable by the distribution of geo code addresses. The service makes local businesses aware of their business value, by letting them create their own unique business profile. It places them in a safe environment, a work association. Market information will be given in a real-time demand and supply overview. The service enables local businesses to respond on demands easily since they can place a bid via the website using a computer or Smartphone or the SMS function. And the service gives actual access to the exchanges of goods by giving access to money transfer, MPesa, and take care of the delivery of goods, TNT global logistics network.

The paragraphs above represent the three components, geo code addresses, informative market, money and good exchange point, on which the service is built. In the following paragraphs I will elaborate on all these three components. The second component, the informative market is elaborated in detail since this has been the main focus of the design.

The geo code addresses are a concept of TNT and Vodafone within the WeAre project and only an informative description about these addresses will be given. Detailed information about this concept can be found in appendix WeAre.

The money and goods exchange point are based on existing services, MPesa and TNT’s global logistics network, and will therefore only be mentioned and explained shortly. For detailed information about these specific services I will refer to appendixes TNT GLN&CL and MPesa.

Geocode address: Description on geo-code addresses.

Informative Market

General description of the WeTrade platform
The platform is built on two principles, the principle of profiles and the principle of auctions.

Auctions
The idea for auctions is derived from ideas such as vakantieveiling.nl en bouwspot.nl

Profiles
Inspiration on profiles is derived from social networking services such as facebook, linkedin, google groups/ kiva/ MYC4/ twitter

The WeTrade platform connects sellers to buyers, both locally and globally, and allows businesses to share business specific information.

Sellers
Profiles
Individual businesses create a profile. This profile helps businesses to present the value of their business. This individual profile will be represented to the market within a group that shares the same specialisation.

Within these groups information can be shared and individual businesses can value their business while comparing to other businesses.

Auction
Demands of suppliers are posted within the groups and are visible on both the group and the individual profile walls. Bids on demand are shared among suppliers and are visible for all members of the group, the act of bidding is transparent.

Buyers
Profiles
To access to the platform buyers as well have to register and create a profile. Buyers can only get access to group profiles of suppliers

Auctions
Within this group profile a certain demand can be placed. When suppliers respond on this demand, by placing a bid, their individual profiles get shared with the buyers.

When the bidding process is closed, buyers can compare different profiles of businesses that made a bid.

Touchpoints
The market place is a cloud that can be expressed and accessed via different channels. Via all these channels real-time information of the market is given.

A big screen on the street in front of the WeAre shops
Figure xxx plaatje made by moi

A computer that has access to internet: at home, at the WeAre shop, in internet café’s
Figure xxx computer afak

A Smartphone that has access to internet:
Figure xxx smartphone akki

Accessing the platform is only admitted if one has created a profil to register
Creating a profile

Creating a profile is key to this service, The profile will give a business owner overview over his business and insight in the value of his business. The profile serves to share information and knowledge within a field of specialisation The profile will convince a buyer to choose one seller above another.
Information kiosk: informs
When a user is introduced to the service for the first time he will be informed about the possibilities of the service by people working in the WeAre shop. At the service desk information about the WeTrade service will be given.

Booklet: explains
A booklet is created specially for new-users to explain the benefits of the service.

Form: guides
The interface of the profile will be designed in such a way that the user is guided through the process of creating a profile. Help of WeTrade service men can be asked to in example update product pictures.

Content of the profile
Profile focuses on Key activities, Key resources, Value proposition and organisation. The service enables and facilitates interactions with customers and partners and keeps track on costs and revenue streams. The liaison with customer and the access to channels are carried out by the service.

The act of creating a profile and the content of this profile is inspired on The Business Model Canvas (Osterwalder & Pigneur, 2009). Within the creation of a profile emphasises is put on the core of the business it’s key activity, key resources, value proposition.

If the total service is mapped in building blocks like done in this business model canvas, the rest of the building blocks are represented by either an individual profile within the WeTrade platform, the WeTrade platform within the WeTrade service or the WeTrade service as a whole.

Cost and revenue streams are monitored within an individual profile since the service keeps track on sales and purchases. The WeTrade platform emphasises the importance of partners and suppliers and enables a connection to both. Customer relationship and channels such as: awareness, evaluation, sales, distribution and after sales, are taken care of by the WeTrade service outside the responsibility of the seller.

Profile
The content of the profile stimulates the user to think about the organisation of his business. By having to fill in all the different fields he is asked to think of his business:
Key activities (these key activities form the basis for groups)
The key activity of a business is the main activity the business has to perform to operate successfully.

Key resources (first profile page)
Key resources are the key things a company needs to run its business and can be of physical, intellectual, financial or human form.

Human resources: Number of employees
Physical resources: machinery / material / space
Financial resources: investments and capital
Value proposition (product page of a business’ profile
A business its value proposition is represented by the offered goods and services. By its value proposition a business can be distinguishable from other businesses
Product details
  Quality / price / material / size / colour /
Uniqueness
  What is unique about your business?

The layout of the profile is inspired by, websites as facebook, linkedin, twitter, kiva and MYC4.
SEE FIGURE XXX EN APPENDIX XXX :

BE LINKED TO A GROUP

Groupmembers
Businesses are grouped based on key activities. These groups function as a working association. Information about business specific organisation, value proposition, customers and suppliers, is shared among members of a group.

Businesses can value their business by looking at other profiles and other profiles can inspire them. Triggered by other profiles businesses can update and adapt their profile in order to make their businesses stand out. Within these groups businesses both inspire and learn from each other and synergy exists.

Outsiders
For outsiders the individual profiles within a group are not visible. The profile of this group will inform them on the key activities of the businesses connected to the group and the number of businesses within the group.

Ranges of prices and product specifications are given. And general sales information is presented: ‘businesses in this group have already sold to Europe, Japan etc etc”

Auction
Since businesses link a certain location to their profile it is possible to keep track of sales on a specific location. For business areas where a certain good or raw material is not traded, it will not make sense to show this demand. Only demands to groups that are represented in a certain area will therefore be shared on the auction.

PLAY THE DEMAND AND SUPPLY GAME
Bring the market to the business. The demand and supply ‘game’, the auction, is a real-time event.

Website
Open
The website contains a open part, the part where an overview of the market is given, and demand and supply are constantly updated and a part that only registered users can access.

Log on
Everyone having a registered geo code can log on to the website. When first logged on, a form asks to create a profile. A distinction is made between market and suppliers. When a profile is created both buyers and suppliers can access the information and market side of the website.

Market side
The market side gives an overview of posted demands and shows bids that businesses made in respond to those demands. Demand and supply can be posted on therefore created forms. A demand, buyer, can be placed in the a specific product group and a bid, supplier, can be placed within this demand posted on the group Supplier’s site.

The supplier’s site is strictly informative. Both group profiles and individual profiles can be viewed, however buyers that are not connected to these groups and can only access group profiles. Suppliers are connected to a group and can view all the profiles of group members, and the general group profile. Profiles can be updated and adapted at all time.

A flow chart of the website is visualised in figure XXXX

Screen
To make this auction more real-time and location based an auction screen is designed. This screen will literally take the market place to the environment of the local businesses. This idea is inspired on a virtual grocery store concept of Homeplus* (* a South Korean supermarket chain). See figuur xxx

The screen is placed near WeAre shops and connects a virtual market place to an actual market place. In other words the WeTrade service brings the market to the businesses and literally bridges the gap.

Using responsive web design:
By the use of CSS3 and Media queries a site can be developed that can automatically adapts to the characteristics of the channel on which it is accessed.

Real-time
Since the auction interface gets updated constantly, showing new demand and supply offers to this demand, it is influenceable and it will trigger businesses to join the game.

Scenario 1: trade on the street
Imagine in example that business owners of the leather industry in Dharavi gather in front of one of the Auction screens on the 60ft road.

When a demand for leather is placed: 30 sq meter - $ 50/70 – 3 weeks, the business owners decide to respond. One of the owners has access to a mobile phone and he bids: 30sq meter $60. Within seconds the bid appears on the screen, directly followed by a bid of a leather business in Sao –Paolo: $55, the business owners decide to lower their bid and text: $50. More businesses respond and the demand get closed.
At the same time a buyer overviews the supply and views the profiles of the businesses that made a bid. Based on a combination of time, price and quality he decides to ask Rash-Leather-Dharavi, to close the deal.

Back at 60ft road, Rash receives a message: 30sq meter leather $50, close deal?

Rash makes a head shake and congratulates his colleagues with the new order, he closes the deal by sending: OK, and returns to his business to start making the order.

When the order is finished Rash lets the pieces be packed and he delivers the package at the WeAre shop. By handing over the package the WeAre shop pays the transferred money to Rash and the goods are transported to the buyer.

When the buyer receives his order he can reward Rash his company and formally close the deal (till rewarding the deal is open and access to the profile is given) is dat zo??

Scenario 2: at home via a Smartphone

A business owner wife, Latika, has access to a smartphone, her son taught her how to use it, and while babysitting her little daughter she can keep updated with the online market place. Her husband is working in the plastic recycling industry. He spends the whole day at the business and together they decided she would keep track of upcoming demands.

Latika logs on the WeTrade platform after a short while she sees a new demand coming up: 300 kg plastic pellets – $20/40 – 5 weeks.

She waits to see what others bid and after a view bids she decides to respond as well $30.

After the auction being closed Latika awaits to see if the buyer wants to make a deal. After a view minutes the buyer indeed contacts her and suggests to close the deal: 300 KG – $30 – 5 weeks.? She OK's the deal and closes it.

After closing the deal Latika contacts her husband to shares the new order. Her husband is thankful for this order since he has enough stock to deliver directly he starts preparing for distribution immediately.

The packed goods are brought to the Mpesa shop and the goods get sent for delivery. At the moment the good is handed over to the distributor, the money is transferred.
Validation