MASTER

The revitalization of a Business Park
a model for financing the revitalization of a Business Park

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Graduate Report

The revitalization of a Business Park
A model for financing the revitalization of a Business Park

25 February 2009
Definitive

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4 March 2009
Colophon

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Summary

The total area of constructed business parks increased the last decennia explosively. A growth is predicted from 33% to 56% between 2000 and 2030. However the maintenance of these business parks has been forgotten or was by the municipality qualified as less important in contrast with investments in public spaces and services for the inhabitants. The result was that the business parks get obsolete economically, technically, socially and/or spatially.

To avoid these business parks will get more and more obsolete, reconstructing of these parks is inevitable. A bottleneck in the reconstructing assignment is most of the times the financing part. The parties which are established on the business park (the private- and the public parties) expect from each other to finance the projects. The public parties claim the financing from private site because they have benefit from the public investments like a well maintained infrastructure and safety. On the other hand the private parties expect from municipal site financings because they pay already property tax.

To achieve more insight and understanding of the situation with respect to the financing of the revitalization of business parks, and to present advices which type of strategy or financing in a particular situation the best can be applied, the research is divided in two main phases, this are the explorative analysing phase and the qualitative designing phase. The first phase is executed by a literature study and interviews with experts. Main subjects are types of obsolete business parks, types of reconstructing, the new ground exploitation law, business improvement districts and finance methods.

In line of the explorative analysing phase the most noticeable outcomes, with respect to the financing of the revitalization of a business park, are described in the following enumeration:

- It is more cheap to develop new terrains, than to reconstruct existing ones;
- New terrains compete with older terrains;
- There are insufficient subsidies;
- The application procedure and period of subsidy request is too long and unreliable, with as in these private parties will redraw;
- Municipalities must participate active in the revitalization process;
- Great investments are needed to replace businesses to another terrain;
- Financing the replacement of businesses is seen as public support.

In the second phase of the research (the qualitative designing phase) four cases where selected. These cases are existing obsolete mixed used business parks which must be revitalizes. From every case three experts who are involved in the revitalization process where interviewed. These experts where besides five process managers from the BHB, an account manager businesses affair, a policy advisor special economic affair, a chairman entrepreneur-association, a project manager of a municipality, a project developer and a senior plan economist ground affair. These interviews where based on
A model for financing the revitalization of a Business Park.

a financial strength- and weakness analyse, more precise this is an analysis to the internal factors (strengths and weaknesses) and the external factors (opportunities and threats) with respect to the financing of the revitalization of the business park. The results of the interviews where after small adjustments enumerated. From this enumeration the most common answers where selected to setup. With help of the interaction matrix relations between the internal and external issues could be identified.

With help of the scenario matrix which is developed by Weihrich, H. in 1982 on a systematic way matches between the external threats and opportunities and the internal strengths and weaknesses of the financing aspects in the revitalization process could be found. With this tool the necessary strategies, tactics and finance methods which are needed in the revitalization process have been described.

Notable strategies, tactics and finance methods which came out the matrix are:
- Shortage the project duration, invest in process management and a collective effort.
- Provide a sufficient and firm subsidy with short procedures.
- Involve private parties in financing the revitalization and present calculation of the expected return on investment.
- Oblige park management, raise by region the property tax and transfer the property tax incomes to the organization.
- Convert created surplus value by an exploitation permit.
- Park management must be stimulated and be obliged.

The described tactics or strategies must carefully be discussed before take them into account because in some situations these can conflict with the law and regulations.

Striking fact is that the applying of a park management organization is a often called strategy which can contribute to a higher quality business park, this by, involving the private parties, make them feel more responsible, transferring the maintenance of the public space and by collective purchasing and applying collective services.

From the results of the literature study and experts interviews in the explorative and designing phase the method how the revitalization of a business park should be financed can be described as follows: The municipality finance the projects with an advanced saved budget and by granting subsidies when possible. Other public parties like the European Union and the Government can participate with subsidies if possible. The owners and users (the private parties) who are established on the business park will be asked to participate the revitalization by face-lifting there property. Also a contribution for the establishment of a park management organization will be asked of the private parties. The municipality will shift there maintenance budget after the revitalization to the park management organization to avoid insufficient funds.

It can be concluded that various conditions are related with a specific finance method. For example dependable of the special situation and regulation, the interest and power of all the direct and indirect stakeholders, the grant of subsidies, the financial position of the municipality, environmental issues, the economic situation, etc.
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Summarized: The applying of a finance method is dependable of the situation and must carefully be inventoried and considered.

For further research more interviews must be applied, this to achieve a more suitable and subjective research and during the interviews more attention must be paid to the fact that the internal issues will not be weaved with the external ones, and the other way around. This is especially important at the moment the ANP method will be applied. With the ANP method a relation between an internal (strength or weakness) and an external (opportunity or threat) can be proofed by determining of each strength- and weakness the importance in scale 1 to 9 followed up by several analytical methods. In further study this method can be applied to the results of the strength- and weakness analysis which are in this research determined.
Preface

In this graduate report the results of various financing methods for the revitalization of Business Parks are described. This graduate report is the last phase of the master thesis, “Construction Management and Engineering at the University of Technology of Eindhoven”.

This report would not have been possible without the support, advice and cooperation of the Brabantse Ontwikkelings Maatschappij (BOM) in Tilburg. A sub-division of the BOM is the Brabantse Herstructurerings Maatschappij voor Bedrijventerreinen (BHB) which is established to assist municipalities that are struggling with the process and finance of the redevelopment of Business Parks. The results of the research can help the BHB determine what kind of financial instrument or situation must be created to tackle those with positive financing issues bottlenecks in negative financing issues.

Over the past 10 years I have completed progressively more complex technical studies. This report is the culmination of my studies and represents the final assignment of my formal college based education. Herewith, I would like to thank in first place the council leadership; Wim Schaefer and Kees Kokke from the University of Technology of Eindhoven as well as Rob Gordon from the BHB. Rob went out of his way to support me over the past 6 months and I sincerely appreciate his commitment to my success.

I’m also grateful to my parents, my brother, my girlfriend Maaike Oostram and my fellow students and study partners; Twan Spanjers, Paul van der Zande, Koen Moons, Rolf Drijfhout van Hooff, Martijn Schrover and Oscar van der Vaart. The latter also helped me in making the goal of my research project more transparent.

This research exists of the core report and two appendices. If certain stated facts or issues are not clear I would be more than happy to answer them personally.

Paul Redert
Eindhoven, March 2009
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I Cause of interest

1.1 Introduction

In 1985 the Bureau for urban development Zandvoort, observed that many municipalities were planning the revival of Business Parks. Because of high costs and insufficient management the execution of such plans stagnated. Twenty years later the total area dedicated to Business Parks has grown substantially. Between 1990 and 2003 areas occupied by Business Parks increased from 1.8 percent to 2.6 percent of the total available ground in the Netherlands. Between 2000 and 2030 additional growth of between 33% and 56% is projected. [Needham B, 2006]

The IBIS (national information system Business Parks) reported that, according to municipalities, 45% of the ground areas covered by Business Parks are partly and in some cases entirely obsolete.

The re-development of Business Parks is still not a smooth process in spite of focused political attention and efforts made by the government, provinces and municipalities. During the past sixteen years the primary emphasis has been on the development of new Business Parks. Since 1990, new Business Park developed at a rate of 7:1 versus the redevelopment of existing ones. The gap between the development, of new versus existing Business Parks is widening at an alarming pace. [Olden H., 2007]

The Brabantse Herstructurerings Maatschappij voor Bedrijventerreinen (BHB) was established to assist municipalities that are struggling with the process of redeveloping Business Parks. The BHB is a division of the Brabantse Ontwikkelings Maatschappij (BOM) which has the task to create and stimulate employment and innovation in the province Brabant. The BHB can support the municipalities with the demands of the stakeholders and help provide financing. In spite of the complexity of the process and the financing difficulties, the goal of the BHB is to contribute to the process of the recovery and redevelopment of obsolete Business Parks.
I.II From initiative to prepared building site
Entrepreneurs or other private parties who have the desire to establish their business in a Business Park usually get in touch with the municipality, the developer or the land owner. The park will be prepared by the developer or municipality, which means that infrastructure such as, electricity, water, gas, high speed internet cables, sewer and watercourses will be provided. If the situation permits a patch of grass is created and financed by the public party. Private parties that want to establish in a Business Park will have to pay property taxes for their lot and building to the municipality. From the income generated by the taxes, the municipality takes care of the city maintenance and services. Unfortunately, as experience dictates, Business Parks are often under serviced, which is how the process of obsolete process Business Park gets started. Private parties are of the opinion that the municipality must take care of the maintenance so that the quality of the Business Park will be maintained at a professional level.

I.III Defining ground prices
The defining of the ground prices is more or less decided by the demand and supply of the market. When the demand is higher than the supply, the prices will increase and when the supply is higher than the demand, the prices will drop. The most popular method for defining the ground prices is the competitive method. This means that ground prices will be determined by the value of surrounding ground prices that are used or zoned for the same purpose. Because the intent of the municipalities is to sell as much ground as possible in a Business Park, it can be concluded that the prices they command be competitive with the surrounding municipalities.

The average 2006 ground prices in a Business Park was €110,- m² (see figure 1). It must be noted that the distribution of the average has a wide spread. The lowest asking prices for ground has been asked by the Eemshaven in Delfzeil (province of Groningen); €5,- m², and the highest price at the Wetering in Utrecht; €650,- m². However, more than 80% of the ground prices in the Netherland fall below €150,- m².
The average lowest asking prices ground can be found in the province of Friesland; €35,- m2 and the average maximum asking prices for ground has been in the province of South-Holland, namely €217,- m2. In the Randstad area, ground prices are higher than in the remainder of the Netherlands. This is not surprising considering the scarcity of land and the great demand for Business Parks in this area. The bandwidth of the ground prices in the different provinces is shown in figure 2. In comparison, ground prices for the housing market are 3 or 4 times higher than the ground prices on Business Parks.
I. IV Yield of selling ground

Municipalities develop business, industry and office parks to pursue economic growth. When the economy of a municipality is not growing, it can’t compete with surrounding municipalities that are showing and will have difficulties in many other city or financial activities. When municipalities want to grow they have to sell ground for residencies and business or office parks. Most often the profits will be deposited in a general account. This pot is not reserved for maintenance of the Business Park or for restructuring in the future but is used for investments outside the Business Parks. The result is that the quality and the liveability in the Business Park go down and the park loses value.

Many entrepreneurs, settled in Business Parks are not interested in investing in public areas and in infrastructure because it does not pay for itself. They purchased the ground (lot) for a low price and build for a relative low price a business building on the lot. Moving to a new location is often a better choice for an entrepreneur rather than rebuilding or enlarging their existing building in an environment that is deteriorating. When several businesses move to a new park, vacancies in the old parks are created, which often leads to the park losing value. Most of the lots are too small for individual development. To be attractive for a developer or business, a lot must be at least 2 or 3 ha and 10 ha on average.

The owners most often take temporary rentals or speculate that real estate values will rise. For municipalities it is often difficult to obtain the vacant property because the owners are demanding prices that are too high. At this stage it is often too expensive for municipalities to invest in restructuring. It is more profitable to develop a new Business Park which will generate income by selling the ground. Thus more Business Parks will be created and the lack of occupancy will not be driven back. [Gordon R, and Olden H., September 2008]

The entrepreneurs operating their business don’t care a lot about the quality and liveability of the Business Park where they are established. Of all the business area users, 14% is of the opinion that the business is established in a high quality Business Park. Meanwhile, according to IBIS, 4% of the total amount of Business Parks can be quantified as high quality Business Parks. So it can be concluded that business owners have a different opinion about high quality as far as parks are concerned and seem to be more easily satisfied than policy makers.
I.V Status of existing Business Parks

The pie-chart (see figure 3) shows that from the total amount of released terrain for Business Parks that 45% is obsolete. Some 27,500 gross hectare needs renovated. That is on average 75% of the area of obsolete Business Parks. This pertains to one third of the Business Parks in use.

![Pie chart showing status of Business Parks](image)

*Figure 3: Granted land of Business Parks in order of ageing.*

Gross- and net surface

The surface of a Business Park can be divided in gross- and net surface. The gross surface is the grant ground including the public area. The net ground surface is exclusive the grant surface. Normally the net surface is 70% of the gross surface.

[Olden H., 2007]
Reading Guide

This report is in the first place written for the University of Technology of Eindhoven and can be used by the Brabantse Herstructureringsmaatschappij voor Bedrijventerreinen or municipalities that have the intend to revitalize a mixed used Business Park. Secondly, the results of this report can be used to determine a strategy for the revitalization of a Business Park and give recommendations as to which finance method can be applied.

This report exists of two parts; the first part (chapter 1 -5) is an Explorative and Analytical phase, the second part is a Qualitative Design phase.

Chapter I describes how Business Park are being developed, what the average ground prices are and what the benefits for the municipality are. Chapter II describes the problem definition, target, sub- and main questions and the expected result. In chapter III the research proposal is situated, according to this scheme the research is executed.

In chapter 1 of the explorative and analytical phase the Definitions of a Business Park, a Mixed use Business Park and the Symptoms of Obsolesces are described. Chapter 2 discusses the types of restructuring, the global costs and a description of a park management organization. Chapter 3 includes the new ground exploitation law and business improvement districts. Chapter 4 defines the types of finance instruments like private financings, public financings and an enlightenment of value capturing instruments.

Chapter 5 closes the explorative analyzing phase and gives answers to the first 5 sub-questions.

The second part is the Qualitative Design phase and starts with chapter 6 where the Scenario Matrix and its coming about is described. This defined in cases study research, analyzing of the data, identifying of relations and the setting up of the matrix. Chapter 7 gives the conclusion on the design wherein the last two sub-questions will be answered. Chapter 8 contains the validation of the scenario matrix and the final conclusion.
II Problem description

II.1 Objective
Already in an early phase of planning the reconstruction of a Business Park the financial aspect is a leading factor. Therefore, one of the critical elements of this process is the financing method. For almost every Business Park a new financial and a process methodology must be developed. With help of this both practical and theoretical research finance methods will be evaluated and the use of both public and private parties will be assessed. The goal is to give recommendations as to which finance methods apply to a particular situation. The best case scenario is where both public and private parties are participating in the financing of a Business Park that is to be revitalized.

II.2 Problem definition
The financing for the reconstruction of Business Parks is an obstacle because:

Problem definition:
Neither public nor private parties will fully take the full responsibility for maintaining the public and private area and thus insufficient funds for the revitalization are allocated.

Without proper maintenance and up keep, the Business Park will become obsolete and ultimately the cost for renovation is too high for one particular party. Because the private and public parties are struggling with the financing of the revitalization and maintenance, the target of my research can be formulated as follows:

Target:
The target of the study is to establish a formula that leads to a recommendation as to what type of financing method is to be used the best in a particular situation.

II.3 Main subject
The subject of the research can be described as:
The reconstruction of existing Business Parks based on the demands of the different stakeholders and the lack of available financing.

Main question:
What kind of public and private financing methods can be used for the revitalization of an existing mixed use Business Park and what kind of conditions are related to these methods?
II.IV Sub questions
- What is the definition of a mixed-use Business Park?
- What is revitalization with respect to a mixed-use Business Park?
- Why is the financing of revitalization a problem?
- Which stakeholders are involved with the revitalization of a Business Park?
- What of financing methods can be used for revitalizing a Business Park?
- What are, with respect to the financing aspects, the strong, weak, opportunities and threats for the revitalization of a Business Park?
- What should a financial model look like so that a Business Park can be revitalized by public-private investments?

II.V Type of research
The research is divided in two parts; the first part is the Explorative Analytical phase, the second part is the Qualitative Design phase. Herein a close exploration of the strong, weak, opportunities and threats, with respect to financing methods, will be discussed. The research is a qualitative research, because it is an open and not very specific research where many factors influence the final result. Because the result of this research will present recommendations as to which type of strategy or financial model should be applied, I have decided to do a qualitative explorative research project. The theoretic boundary will be enclosed by an exploration of the subject and its surrounding areas. This is to avoid missing crucial information to accomplish the target goal.

II.VI Focus
To ensure the target of the research will be reached the research must be well defined. I want to mention the following boundaries:
- The intent of this research is to identify an improvement in the financing methods of the regeneration of Business Parks, which should lead to a growing and stimulating economy in the province Brabant.
- This research will be conducted on four Dutch obsolete Business Parks which will be qualified for revitalization. I choose for revitalization because the regeneration in general consists of 53% of the revitalization projects.
- Business Parks can be divided in five types of activities. Because 88% of the Business Parks are mixed-use areas, which means that several types of businesses are established in the Business Park, the research concentrates on mixed-use areas.
- Legal and law aspects will not intensively be discussed. The assumption is that the financing method will not conflict with the law.
- Financing aspects will mainly be related to the ground exploitation and not specific on the benefits of a particular high-quality designed building.
- The research will be conducted on a financing method whereby both public and private parties are involved.
- With the aspect 'private party' is meant owner or user.
- Owner and user will not be distinguished from each other.
II.VII  Expected result
In this report an answer will be given to the main- and sub questions. Some sub questions will be answered by analyzing literature, documents, media and exploratory interviews with experts. Other sub-questions can be answered after a more specific way of analyzing. The research will lead to recommendations which type of finance method can be used in a particular situation; this will be valuated by experts. Finally it is the intent to give a conclusion on the method and make recommendations for further research.

II.VIII  Different analysis methods
Several methods can be used to find an answer on the different sub questions. Every method will be explained in this report in the time they are conducted.
- Desk research;
- Orientating interviews;
- Stakeholder analysis;
- Strength- and weakness analysis;
- Case studies;
- Depth interviews;
- Scenario matrix.

II.IX  Context
The execution of the research will be under authority of the Brabantse Ontwikkelings Maatschappij (BOM) and the University of Technology of Eindhoven.
III Research proposal

- Desk research
  - Input BOM
  - Input TUE
  - Interviews experts
- Analysing specific literature
- Interview experts
- Global problem definition
- Product Title: Research Proposal
- Literature study
- Selecting cases
- Analysis on financing bottlenecks and opportunities
- Input internal factors from analyse
- Design scenario matrix
- Input external factors from analyse
- Design finance method
- Conclusion from theory and case study
- Product Title: Research Report including recommendations
1. Types of obsolete Business Parks

1.1 Introduction

The definition of a Business Park sometimes is confused with an office park or an industrial park. In this chapter the definition and the types of Business Parks including the most common activities on such will be described. In paragraph four and five the types of obsolescence and their symptoms are summed up.

1.2 Definition of a Business Park

During the past century several definitions of Business Parks have been used by different sources. The IBIS, work locations, 2007, use the next definition: A densely occupied terrain used for trade, industry and commercial services. Within this description there are also sections within the Business Parks, which are partly designed and suitable for office space. Not included in the definition are terrains that are especially designed for hospitals, sewage plants, schools, municipality buildings and police stations.

The Central Statistical Office, 2007 (CBS) defines a Business Park as a terrain where trade and industry and professional services are executed. The next types of terrains are counted as a Business Park or part of it:
- Factory terrain;
- Harbour terrain;
- Public sale terrain;
- A terrain for exhibition;
- Live stock market;
- A Wholesale complex;
- A terrain for banks and insurance companies;
- Garage (including parking garage and garage for bus companies);
- Office buildings;
- Accompanying parking places.

Not included are included undeveloped terrains and / or terrains which are not ready for building.

The great dictionary of the Dutch language 14th edition, describes a Business Park as: An area where several businesses can be established.
1.3 Business Park types

Business Parks exist in many forms and are distinguished by the activities they employ. The different types of Business Parks that can be distinguished as described below. The quantity of each type of park is drawn up in table 1.

- Heavy industry Business Park – an area which has as a destiny a heavy environmental harmful industry (minimum category harmfulness is 5).
- Harbour area – an area with load- and unload platform besides a deep waterway, accessible for large sea ships.
- Mixed-use Business Park – an area for regular activities, except high quality business, or distribution park (category harmfulness 1 -4 is prohibited).
- High quality Business Park – an area specific for businesses which employing high quality activities.
- Distribution Business Park – an area specifically designed for transport and distribution for wholesale businesses.

[Taskforce, 2008]

The Province of Flevoland (2008), describes the types of Business Parks more in detail including descriptions the kind of businesses that are established in such Business Parks.

- Heavy industry Business Park: terrain where establishment any kind of businesses in prohibited (including environmental harmful businesses). This is especially designed for businesses with a minimum category 5 weight. This kind of Business Park is dedicated to the heavy environmental industry.

- Harbour area: a terrain with a load and unload wharf along deep water which is accessible for large sea ships. Harbour area’s in for instance Amsterdam, Delfzijl, Rotterdam and Terneuzen have a lot of heavy industry but are still identified as “harbour area”.

- Mixed-use Business Park: Terrains with a nuisance classification of 1, 2, 3 and 4, meant for regular activity and can not be compared with terrains which can be described as distribution - or high quality park. These terrains have a varied offer of activities mainly in light modern and other modal industry. In some situations small heavy environmental harmful industries or a small amount of distribution businesses can come across. Characteristic for these Business Parks are businesses in the food and luxury food, textile, clothing, shoe- and leather, wood- and furniture, paper and paper ware, building materials, earthenware, glass industry, metal production, machine, electro technical, transportation, instrument, building trade and building installation industries. To a lesser degree wholesale businesses can also be established on a mixed-use Business Park.

- High quality Business Park: Characteristic of this type of area is the presence of electro technical, instrumental, and optical and other high quality industries like music and photo laboratories. Also the IT-industry where the core business focus is on research, development and the production of IT-equipment. In a few situations industries mentioned under ‘mixed-use area’ are established in high quality parks, but these may not be dominant in the park.
- Distribution Business Park: An area which is specifically focused on transportation, distribution, and wholesale businesses. Examples are businesses that have as core, business activities around railways, road transport and inland shipping. Included are warehouse and loader businesses.

Table 1 shows the quantity per Business Park type. These quantities are distributed in gross- and net surface hectares. Notable is that the mixed-use area’s are the absolute majority of all types of area’s.

<table>
<thead>
<tr>
<th>Location Type</th>
<th>Number of Business Parks</th>
<th>Gross surface in hectares</th>
<th>Net surface in hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absolute</td>
<td>Relative</td>
<td>Absolute</td>
</tr>
<tr>
<td>Heavy industry</td>
<td>147</td>
<td>4%</td>
<td>10.558</td>
</tr>
<tr>
<td>Harbour area</td>
<td>53</td>
<td>2%</td>
<td>17.492</td>
</tr>
<tr>
<td>Mixed-use area</td>
<td>3.156</td>
<td>88%</td>
<td>60.286</td>
</tr>
<tr>
<td>High quality</td>
<td>142</td>
<td>4%</td>
<td>3.914</td>
</tr>
<tr>
<td>Distribution park</td>
<td>64</td>
<td>2%</td>
<td>4.697</td>
</tr>
<tr>
<td>Unknown</td>
<td>44</td>
<td>1%</td>
<td>346</td>
</tr>
<tr>
<td>Total</td>
<td>3.606</td>
<td>100%</td>
<td>97.293</td>
</tr>
</tbody>
</table>

*Table 1: The quantity per type of Business Park. [Taskforce, 2008]*

1.4 Types of obsolete

To examine if a Business Park is degenerated, the age of the park is not a determining factor. Aged Business Parks can have an important economic, special or social function and a facelift in the past already could have taken place. However, to track obsolete Business Parks the parks age can be used as a good indicator.

The CPB, 2001, (Dutch Bureau for Economic Policy Analysis) describes that the type of obsolesces can be distinguished in four types.

- **Technical obsolescence:** by a lack of maintaining or new standards.
  The area does not fulfil the requirements which were originally deemed necessary due to a lack of maintaining the infrastructure and private property. The private owners and the public party must maintain the Business Park.

- **Economic obsolescence:** by a change in the development in the market.
  The determined demands which the market needs are changed by the time. The interest of the location is reduced and the Business Park must change into new forms of use and the demands of the users.

- **Social obsolescence:** due to legal changes such as environmental, safety, working conditions, etc. The feasibility of the Business Park is decreased and as result of new legal regulations the park doesn’t meet the demands.

- **Spatial change:** because of conflicts between different land users.
  The geographic environment has changed in such way, e.g. urban expansion, so that the Business Park doesn’t fit any longer in the present environment. There are conflicts arising between the new surroundings of the park and the existing Business Park. The users and the municipality don’t have any influence on this process.
According to Pen en Hiethaar (1998) a Business Park is obsolete the moment infrastructure, special, representative, environmental, economical and organizational ground strengthen themselves negatively. This is a consequence of the current demands of modern Business Parks and the environment. [CPB, 2001]

1.5 The symptoms of obsolescence:
The four types of obsolescence are described above, however the symptoms, which cause these obsolesces are important to come closer to the source of the degenerated Business Parks.

Symptoms of obsolete business can be distinguished in four main issues:
- Ineffective use of space e.g. vacancy, inefficient allotment and a lack of development space.
- A poor appearance e.g. impoverished public area and private property, poor signposting, street litter.
- Poor connection to the area e.g. lack of accessibility, poor internal infrastructure with a lack of maintenance, a lack of parking places, etc.
- Environmental load e.g. ground and noise pollution, air pollution, fine dust and stench inconvenience, etc.
[Limpt van A., 2008]

1.6 Conclusion
The definitions that the taskforce and the Province of Flevoland have used are nearly the same. Activities on the for example, heavy industry- and harbour area are more distinguished characteristically than the mixed-used terrain with respect to the distribution Business Park. On the mixed-use Business Park all kinds of activities take place, including logistics. So the distinguishing factor between one and another Business Park type is sometimes not as easy as it seems, with as a result the definition of a kind of Business Park type that is difficult to describe.

The degree of obsolescence is in some cases difficult to describe because the view and emotions of someone can have an influence. The symptoms of obsolesces can, according to Limpt van A., (2008), be distinguished in ineffective use of space, a poor appearance, poor connection and environmental loads.
2. Types of restructuring

2.1 Introduction

In the next paragraph the definition of reconstructing and what it entails will be discussed. Also distinguishing how many times a municipality can choose for a type of reconstructing will be described in paragraph four. Finally the global costs of the restructuring task per hectare and the park management will be treated in paragraph four respectively five.

2.2 Definition of restructuring

The definition of restructuring is often discussed in trade literature. Heidemij Advies (1996), distinguished the restructuring job as a “large maintenance (reorganization), restructuring and revitalization (upgrading) process”. Restructuring distinguishes itself by a more integral approach whereby economic, special, traffic, transport and environmental issues are enclosed. The total upgrading of the Business Park (or part of it) whereby the Business Park will be made suitable for high quality functions is called revitalization. The confusing part is that ‘restructuring’ also is used as general definition of the three just mentioned set of types.

The Brabantse Herstructurering Maatschappij voor Bedrijventerreinen (BHB) uses in the ‘Intern Kennisdocument BOM Bedrijventerreinen en BHB’ the next definition: All single interferes, which can not be classified as regular maintenance, with as goal to suppress the obsolescence of the Business Park.

Pen en Hiethaar, (1998), prefer to use the word modernization instead of reconstruction, because reconstruction creates the suggestion that there will be a chance in structure.

2.3 Types of restructuring

To obtain a view of the situation on a Business Park (what kind of intervention must be done to bring the park to a higher level of quality and liveability). Four types of reconstruction can be distinguished such as: Facelift, Revitalization, Re-profiling and Transforming. In practise these four types are not always easy to distinguish from each other, certainly not because there is growing need for mixed-use Business Parks. Also some Business Parks must partly be transformed and partly be renovated (facelift).

2.3.1 Facelift

The facelift is a large renovation of particular public areas. The Taskforce, (2008), sees this not as the core of the reconstructing assignment. The facelift takes care of keeping the quality up to the required level so the unstoppable down gliding process will be prevented. The responsibility of the facelift lays the accent, different than other types of reconstructing, at the area managers and businesses.
2.3.2 Re-profiling

With re-profiling the main case is adding economic functions or otherwise chancing the use of space of Business Parks. The trend on many Business Parks is that the past few years a high quality mix of economic activities has occurred. Introduction of offices, hybrid wholesale business activities (MAKRO's etc.), commercial sport / leisure and other high quality economic functions are changing the original profile. For the financing part for this type of reconstructing it is important that the Business Park gets an upgrade for the destination. The upgrade for the new destination must be set up in such a way that surplus value can be created. With this surplus value the reconstruction of the private real estate and the public part can largely be financed.

For in particular the financing of this type of reconstructing it is important that an upgrading of the destination of the Business Park be accomplished. This is a matter of upgrading the Business Park. This creates chances for value creation by which in principle the costs of the reconstructing of the businesses and the public facility's partly can be financed. [Taskforce, 2008]

2.3.3 Transformation

The transformation task is more or less uncoupled from specific business reconstruction problems. The transforming of inner urban Business Parks goes often in the favour of residential building and must obviously have an impact on the planning and programming of local Business Parks and also addresses the question as to how enough economic functions can be accommodated in the municipality in the future. [Taskforce, 2008]

2.3.4 Revitalization

Revitalization needs an integral approach to combat the partly technical, economical and social obsolescence. The environment for settlement will be upgraded, whereby current economic functions will be on hold. The revitalization encloses by far the largest part of the reconstructing task for Business Parks (see figure 4). However, this type of reconstruction has limited earnings potential, which most often do not repay the investment. [Taskforce, 2008]

The CPB (2001) describes revitalization as a total upgrading of the Business Park, which is made suitable for high quality functions.

2.4 Chosen types of reconstructing

Most of the time municipalities elect revitalization for reconstructing of a Business Park. There are plans that 53% (total gross area) Business Parks will be revitalized (excluding the provinces of Gelderland and Limburg). The circle diagram (figure 4) shows the distribution of the different types of reconstruction that municipalities prefer.
A model for financing the revitalization of a Business Park.

![Figure 4: The distribution of types reconstructing that municipalities prefer.](image)

2.5 Global costs

Based on the IBIS analysis, where 58 of the total 1.061 parks were discussed, the next outcomes can be concluded (also see table 2):

- Of the obsolete gross Business Parks (exclusive transformation) approximately 55% of the areas are considered obsolete. In absolute sense this is 16.570 ha obsolete area of Business Park. From that ca. 14.000 ha needs revitalization, ca. 1000 ha heavy revitalization and ca. 800 ha re-profiling.

- The public investment requirements – over the private investing requirements is no useful basic material available – vary from the mean of €230.000 per ha (revitalization) to €1,4 mln. per ha (heavy revitalization and re-profiling).

- Dealing with the uncertainty of some demonstrable but hard to quantify underestimations the preceding outcomes to a total, public investing need for revitalization (including heavy) and re-profiling of €6,35 mld.

<table>
<thead>
<tr>
<th>Type of reconstructing</th>
<th>Area in ha.</th>
<th>Average costs / ha.</th>
<th>Total costs in €</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revitalizing</td>
<td>14.000</td>
<td>230.000</td>
<td>3.220.000.000</td>
</tr>
<tr>
<td>Heavy Revitalizing</td>
<td>1.000</td>
<td>1.400.000</td>
<td>1.400.000.000</td>
</tr>
<tr>
<td>Re-profiling</td>
<td>800</td>
<td>1.400.000</td>
<td>1.120.000.000</td>
</tr>
<tr>
<td>Total</td>
<td>15.800</td>
<td></td>
<td>5.740.000.000</td>
</tr>
</tbody>
</table>

Table 2: At this moment these marks give the best view of the nature and dimension of the reconstruction task. [Taskforce, 2008]
2.6 Park management

Until the last few years there was not much paid to the quality of the environment by (re)constructing Business Parks. The past few years received, socially, politically and economically more attention, including a collective coordination for the quality of the Business Parks has grown. Park management is an instrument to provide these needs. It is an instrument to adjust the quality of the Business Park on the demand of the concerned entrepreneurs and to keep the quality up to the required level. Thereby, the interests of private and public organizations will be combined and sustainable developments stimulated. After all, if a Business Park keeps its value, reconstruction can hopefully be prevented in the future.

Park management can be tasked with the design, development and maintenance phase of a Business Park. It can be addressed by the organizing of the park, the management of supplies and/or the supervision of public and private areas. For example park management can be tasked to manage the:
- Representation of buildings and environment;
- Quality of the social environment;
- The attractiveness of the working environment by employing employees (collective) services, like sports and child care facilities, mandated refuse collection and energy purchases;
- Careful use of space;
- Accessibility and parking space;
- Safety;
- Etc.

Business Park management can contribute to prevent obsolescence from occurring, but the employing of the park management must most of the time be forced by the municipality. By stimulating the private parties to participate in the park management program they are partly financing the maintenance of the park. This will have a positive result on the value preservation of the Business Park. The municipalities have the following instruments to stimulate (or force) the private parties to participate in the park management program:
- Compelling park management for new Business Parks. Ground lease or selling conditions with a perpetual clause that offers enough possibilities.
- At existing parks in close consultation between businesses and district manager (most of the time the municipality) as many as possible employing the park management strategy. The over handed experimental law, the Business Improvement Districts or BID’s (chapter 3.4), to the lower house, can give an impulse to this.
- At restructuring of parks the condition to financial support must be the employing of park management. Anyway the BID instrument is relevant to this.

Most of the times park management is framed organizationally in a union structure (union of owners). Also regional commitments about compelling park management must materially be in harmony with the rights and duty’s according to the BID-law. [Taskforce, 2008]
2.7 Conclusion

The reconstructing task includes the same approach not in every situation. The one must be transformed because less area of Business Park and more for house-building is needed and the other just needs a facelift which takes care of keeping the quality at the desired level. Revitalization is by far the most common type of reconstruction (more than 50%) and costs in average 230.000 euro per hectare. Park management can be used to adjust the quality of the Business Park on the demand of the concerned entrepreneurs and to keep the quality up to par, to avoid that the Business Park slides down and must be reconstructed.
A model for financing the revitalization of a Business Park.

3. Law and special regulation

3.1 Introduction
The special legal regulation (WRO) changed on the first of July 2008 and will mainly have an impact it's on the ground exploitation law. Most municipalities do not have enough know-how regarding ground exploitation manners. Urban developers are much more aware of this as it is their primary business. The 'GREX-Wet' which is in line with the WRO will be discussed in the next paragraphs.
A tool that can help a municipality drop out off a Business Park is called the Business Improvement District (BID). Municipalities can enforce entrepreneurs or owners that are established in a Business Park to participate in financing the park management. The BID will be discussed in paragraph four and five.

3.2 WRO (Law spatial regulation)
The plans about the special organization of the Netherlands is described by the government, provinces and municipalities in the ‘Wet op de Ruimtelijke Ordening’ (Law Special Regulation). How such plans must be setup and changed is described in the WRO. This law prescribes the task of the government and the rights and duties of the citizens, businesses and institutions. With commencement of 1 July 2008 the ‘New Law Special Regulation’ was put into operation. An important change in this law is the new regulations with respect to the ground exploitation.

3.3 GREX-Wet (New ground exploitation law)
The new ground exploitation law, also known as 'GREX-Wet', can be used as a tool for municipalities to reclaim the earnings of the private parties which have direct profit from the investments done by public parties outside the exploitation border. For the first time municipalities have the tool to reclaim all the costs they have incurred from all the parties that took advantage from public investments by the municipality. This will work out by an exploitation plan whereby three test criteria for the costs will be considered: Profit, Accountability and Proportionality. (See 4.6 for exploitation permit)
The intent is that municipalities and private parties will come to an agreement whereby, the excessive earnings made by private parties, be over handed to the municipality. Hereby, the negative exploitation of a part of the plan will be compensated by the earnings of the other part of the plan. Dividing the earnings and losses between projects on different locations will only be possible at the moment the locations take part in the master plan. Currently private parties are sometimes not willing to cooperate. The GREX-Wet can be used as backup to force the parties by public law. By using this approach, free-riders¹ will have to compete for financing. (Kruif J. de and Boeve D., 2007)

¹ Free riders are parties which only have intention for their own lot and don’t wish freely to contribute to the public services, which they need to run their own business. For example this can contain Public transport, street lighting, and infrastructure.
3.4 Business Improvement District (BID)

In chapter 2.6 under park management, it states that the instrument park management can be launched in the design, development and maintenance phase which is framed organizationally in a union structure (union of owners). However, joining the financing of park management by all entrepreneurs can’t be forced by the municipality or the other entrepreneurs of the park. This way ‘free-riders’ will have benefit from the investments that other entrepreneurs and the municipality have made.

Business Improvement District (BID), in Dutch also known as: ‘Bedrijfgerichte Gebiedsverbetering’ (BGV), makes it possible for municipalities forcing the non cooperating entrepreneurs to invest in the environment of the Business Park.

At this moment the BID is in an experimental phase. The experimental law makes it possible that by the initiative of either the entrepreneurs or the municipalities they can setup in a BID-zone. The collection of the contribution of all entrepreneurs on the Business Park will be managed by the municipality. These incomes will be donated to the union or foundation which will use this grant for executing the agreed upon activities. All entrepreneurs will join this contribution to the municipality, so that free-riders will not get a chance. Issues which can be financed with the BID are:

- Camera surveillance;
- Green spaces;
- Traffic signs;
- Garbage collection;
- Cleaning;
- Fire security;
- Graffiti removal.

BID’s are focused on making Business Parks ‘attractive’ and competitive concerning the real estate owners and entrepreneurs. Small BID’s often starting with one specific goal like the lightening of a park. In general the activities are mostly marketing, cleanup and safety programs that at a later point will be completed with the reorganization of the public area, economic development, accessibility and the organizing of special events. Which activities will be executed depends on the specific wishes of the private participants at the local level.
3.5 The support of BID-zones

The municipality analyses the support of a Business Park to setup a BID. Entrepreneurs get the opportunity to express themselves if they are for, or against a BID district. A majority is obtained when two third of the dutiful entrepreneurs is in favour with a minimal response of 50% of the total dutiful entrepreneurs and the real estate appraisal act.

According to the Taskforce (2008), the attractiveness of the BID-Law is for the practice still uncertain because of the following announcements:

a) The regulation is still an experiment and has a temporary character;
b) Linked with this a limited join in for entrepreneurs is foreseen, after which other interested must wait for the evaluation of the experiment which can continue till 2015;
c) Municipalities are free to chose in joining the BID-zones;
d) Besides possibilities of municipal subsidies, no provision has been made in financially stimulating the BID-zones.

The taskforce (2008) also announced that the municipality must be substantially involved in financing the BID-zones, this by investing partly the incomes of the property taxes.

3.6 Conclusion

The new GREX-Wet which became effective in July 2008 is for a municipality an instrument to stimulate active participation in the ground exploitation issue. With available expertise, municipalities have the possibility to redraw parts of investments from real estate owners or developers. A business improvement districts (BID) makes it possible for municipalities to force the non willing entrepreneurs to invest in the environment of the Business Park. The goal of appointing BID zones is to force ‘free riders’ on the Business Park to cooperate in financing the park management. The municipality and the entrepreneurs will together setup a park management and financing plan. This makes investing in the Business Park more effective and creates a feeling of responsibility by both the owners and entrepreneurs.
4. Finance instruments

4.1 Introduction
For decennia the government has taken on the primary responsibilities for the public parts in urban area's and is concerned about the quality of live and the social value. They made substantial investments in infrastructure, parking places and public transport, also called as uneconomic investments. Because the government is more and more incapable of financing public areas, it is seeking solutions from the private parties such as real estate owners and developers. After all, they are the parties that have the most to gain from the public investments in the form of increased property values. [Offermans, R. and Velde van de D.M., 2006]

The figure above shows that private parties are developing real estate that is profitable. The investments by the government are in green, blue and grey. It shows that the government investment add value to the private real estate by promoting more attractive surrounding area’s and good accessibility. This demonstrates the logic that private parties must be involved in financing off the public area in a Business Park (figure 5). [Kennisplatform verkeer en vervoer et. al., 2005]. The instruments how to involve private parties in the financing of public area’s discussed in the paragraphs 4.2 – 4.6. In paragraphs 4.7 and 4.8 the public and private financing instruments will be discussed.
4.2 Value capturing

One of the instruments that can be used in involving private parties is the ‘Value Capturing’ instrument. In the next paragraphs the process and the method of this approach is described. Some instruments can’t be employed in the Dutch market because this is not possible under the current law in the Netherlands. Mainly there are three levels wherein ‘capturing’ methods can be applied (figure 6).

![Figure 6: Three levels wherein ‘capturing’ methods can be applied. [Offermans R.M. and Velde van de D.M., 2004]](image)

However, there are also parties like shopkeepers and owners of real estate that are not directly using the infrastructure or other services, which are established in the public area, but have great benefit from these services through increases in property values due to the improved accessibility of the public area. The raised property value can be used for investments in new infrastructure. To do so, the raised value must be identified and locked in with the help of value capturing instruments.

**The definition of Value Capturing can be described as:**

“Value Capturing is a generic term for instruments that make it possible to prune away the raised value of real estate, directly or indirectly, created by public investments or dealings\(^2\) and to investment in the parts that created the raising of the value”.


Value capturing can’t be used as an overall financing method. The largest part of the huge investments which must be made for constructing infrastructure will be paid from general funds. The moment a project can’t be financed 100% by the public parties’, a special assessment on the possibility of applying value capturing instruments can be made. This means that projects, important to the public parties, can still be executed with the help of a relatively small investment.

\(^2\) Public investments as green spaces, parks, museums, roads, public transport and policy decisions like zoning plans where the private party has indirectly benefits from while they didn’t directly paid for it.
4.3 Types of Value Capturing instruments

In figure 7 there are two types of value capturing described, namely the direct and indirect value capturing method. The direct value capturing method can be obtained from users of infrastructure like toll road and park fees. The indirect value can be captured from the direct benefits that for example real estate developers earn.

Within the real estate market the following distinction can be made:
- Instruments that concentrate on new real estate developments by using voluntary payments or forced charges.
- Instruments which are pointing on all the real estate in a particular area (not voluntary).
- Instruments which are using internal settlements (voluntary).

<table>
<thead>
<tr>
<th>Direct → User of infrastructure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; By user contribution</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect → Real estate market</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; By value capturing from developers</td>
<td></td>
</tr>
</tbody>
</table>

Voluntary contribution:  
1 Benefit sharing  
2 Development contribution  
3 Development rights  
4 Connection charge

Government interfere:  
5 Active regional zoning policy  
6 Administrative guidance  
7 Exploitation permit  
8 Development charge

> By value capturing from ground- and real estate owners:  
9 Charge districts  
10 Impact fee  
11 Incremental taxes  
12 Local tax and wages

> Internal value capturing:  
13 Total developer

Figure 7: Types of value capturing instruments per category
4.4 Direct Value capturing

Direct value capturing can be applied to situations where the use of infrastructure can be directly correlated to the users. When the real estate's increased value is a direct result of the newly provided infrastructure, the entrepreneur or users can be asked to pay for the service. It is important that the infrastructure where charges will be raised can be pointed and is bounded. The earning from the charges must be invested in only that applicable area. It is important to keep the quality of the infrastructure up to par. When a larger area will be financed with the earnings of a smaller area, the quality will be negatively impacted. Also justifying the destination of the charged taxes to the taxpayers will be more difficult to accomplish.

Direct value capturing boils down to a method of user fees which can be charged in dissimilar ways. So raising the parking fee we should be able to either finance the maintenance or partial reconstruction of infrastructure or the partial financing of public transportation. Another possibility is to charge tolls, time fees, congestion fees or pollution fees. Anyway, it is important to keep in mind that the newly generated income can’t finance the whole project and that the greatest part of the financing must come from the traditional parties. Also, the size of the user fees or charges must be proportionate and explainable. [Offermans R.M. and Velde van de D.M., 2004]

Figure 8: Schematic overview of the value capturing instruments
4.5 Indirect value capturing by voluntary contribution

Instead value capturing will be paid by parking fees or by using the infrastructure in a specific area. Indirect value capturing requires the voluntary or mandatory charging of real estate developers. This is financed in part by the profits made by investing in real estate property.

In the next paragraph, different most likely methods of indirect value capturing will be discussed. For each method the major barriers will be mentioned. These barriers can have a financial, jurisdictional, organizational, and social policy character.

1 Benefit sharing

Benefit sharing can be conducted in Public-Private-Partnership projects where the benefits of the private party partly will be used for the public investments. Nevertheless, the profits on commercial activities would not have been possible without public investments. The most important barrier of benefit sharing can be found in the organizational site of the project [Offermans R.M. and Velde van de O.M., 2004]. According to ReUrbA2 (2006), payment is only due if profits reach a certain predetermined threshold. This way, the private parties can make a fair return on investment (including risk premiums), while possible excessive, windfall profits are shared. The conditions of payment, measurement standards, exemptions etc. must be described in detail.

2 Development contributions

Developer contributions are agreements between a developer and a public agency or agencies through which the developer agrees to contribute property and/or capital costs for a development or service which is beneficial to them. Developers are sometimes even willing to pay, for example, for changes in the route of a transit line or the location of a public facility cluster. These contributions are voluntary, i.e. Developers can choose whether to contribute to ensure that the public investment project goes ahead and possibly in a way that provides them with extra benefits. [ReUrbA2, 2006]

3 Development rights

Selling and leasing development rights is for transporters like NS interesting as they have ground which they do not need for developing a train station. In this situation ground can be sold or leased to private parties that want to establish an enterprise near the station. When entrepreneurs position themselves next to a railway station where they can take advantage of the specific location, the value from this advantage will be calculated in the price, also called development rights.

4 Connection charge

This type of value capturing is not very common in the Netherlands. By connecting one property to another, for example with a station, the entrepreneur who is connected with the station can be asked to pay connection charges because his or her business derives benefits from the connection to the station.
4.6 Value capturing from developers with government interference

5. Active regional zoning policy
The government including municipalities prefer active zoning policies because they have in this position the possibility to pass on the costs for making the ground ready for building to the future proprietors. Grounds leased to proprietors, who may benefit in the future from public infrastructure investments, can be impacted by higher lease prices. By leasing grounds an added advantage is that the municipality or government stays owner and will have final control.

More and more private parties are developing projects themselves within municipality created zoning exploitation areas. For municipalities it is difficult to obtain compensation from the developers for the profits they made from investments done by public parties.

PPP constructions can reach a helping hand to recover the investments which they made for public areas. A less extreme and more useful instrument for municipalities is the exploitation agreement.

6. Administrative guidance
Administrative guidance is a government scheme in which new public infrastructure costs are shared among several participants. The scheme is applicable to, for instance, railway lines to new-town development projects constructed by public and third-sector participants. [ReUrbA2, 2006]

7. Exploitation permit
The ground exploitation law is the continuation of the document ‘ground policy’ which is announced as the ground exploitation permit. It is the intent that rules by law will be setup and make it possible for municipalities to recapture costs within specific boundaries. A part of the regulation will be a detailed cost list specifically stating which cost the municipalities surely can redraw. In the document, this is described as the ‘minimum cost list’, municipalities and developers can freely setup extra agreements to equalize costs. As basis for these agreements three criteria must be mentioned:
- Direct benefit principle: the area must have substantial profit from the facilities that will be constructed.
- Accountability: A clear causal link must be made with specific sunk costs. This means that this cost must be re-paid no matter what.
- Proportionality: At the moment that more locations have profit from a service, the costs will be divided to ratio; when a location has more profit, it will contribute more.

According to these criteria, also ‘above plan costs’ could be assigned to the ground exploitation. More specifically: profits or loses of other projects can be equalized with each other. [Wolff H. de, et al., 2006]

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3 Exploitation agreements are based on local exploitation regulations and are obliged to determine these. In the exploitation agreement are conditions described that the municipality will cooperate with the exploitation of grounds. By this way municipalities can more easily reclaim costs which have made development possible.
8 Development charge
At the moment that municipalities can’t charge a freely contribution from developers which are participating in PPP constructions by active regional zoning plans or exploitation permit, municipalities can make use of a benefit tax to enforce contribution [Offermans R.M. and Velde van de D.M., 2004]. The charges can be lump-sum payments, taxes by lot or surface area, or consist of improvements to adjoining facilities. These charges are usually levied at the time of the new development of properties in the areas that benefit, and are often used as a condition for obtaining site plan approval or a building permit. However, the limited suitability and accountability makes this instrument juridical not useful. [ReUrbA2, 2006]

9 & 10 Value capturing by ground- and real estate owners
An impact fee is a fee that is implemented by a municipality on a new or proposed development to help assist or pay for a portion of the costs that the new development may cause with public services to new developments. They are considered to be a charge on new development to help fund and pay for the construction or needed expansion of offsite capital improvements. [Wikipedia] Charge districts and impact fees can’t be employed in the Netherlands because by law it is not possible to charge extra tax to a specific target group or to a specific area. [Offermans R.M. and Velde van de D.M., 2004]

11 Incremental tax
Currently, the Netherlands has an incremental tax system, namely the property tax. By linking the earnings of the property tax the benefits and costs of a Business Park can partly be equalized. However to fully equalize the costs with the benefits, the property tax must be increased and the equalize-systematic between the municipalities must be adapted. The increased and adapted property tax can be defended from both an economic and political perspective. From a social-political perspective resistance can be expected so that the introduction of this tool will not take place on short notice. [Offermans R.M. and Velde van de D.M., 2004]

12 Local tax and wages
Because there are great modifications needed for applying a local tax and wages system, the choice to apply such value capturing instrument is not very useful. So this instrument will not be used in the Netherlands.

13 Total developer
This can be described as a total development included commercial (profitable) and non commercial (non profitable) developments. The non profitable investments can be equalized with the more profitable investments. Strictly speaking, value is not captured but kept within a single company. [ReUrbA2, 2006]
4.7  **Public investments**

Public parties (the income spending households) exist in many ways and can be divided in the government, her ministries, provinces, municipalities, and local departments. Every party has its own task and responsibilities. The different ways of financing the revitalization of Business Parks is described in the next paragraphs.

4.7.1  **Subsidies**

A subsidy can be a single or recurring financial contribution. In the case of the revitalization of a Business Park it can be used for instance by financing the infrastructure. Subsidies will not be granted when co-financing is not available. The government can subsidize projects that can not fully be financed by the municipality or private parties, which are involved in the revitalization process of the Business Parks. So subsidies will be granted the moment a negative exploitation is inevitable and other financing instruments are unavailable. After the project is finished and the actual exploitation shortage is lower than foreseen, the subsidy must be corrected. This can be done by benefit sharing constructions. Subsidies can be granted by the European Union, the government, the province or municipality.

The following examples give an impression what kinds of subsidies are available:

- **European subsidy:** (OP-South): This is an economic stimulating program reserved for the three southern Dutch provinces.
- **National subsidy:** GSB III (Great City Policy): Target of the GSB is that thirty cities, which were selected in the past, will be strong and powerful cities with a minimum of bureaucratic handlings.
- **National subsidy:** Approach Urgent Business locations (AUB): With this subsidy the ministry intends to lower the crime on Business Parks and/or retail areas.
- **Provincial subsidies:** Realization program Economic policy (UEB): With this program it is the intent to strengthen internationally the competitive position of the trade and industry with as a goal to contribute to the prosperity and sustainable development of the inhabitants of Brabant.
- **Municipal subsidies:** Infrastructure fund - The financing of the constructing and reconstructing of infrastructure intended for passengers and goods, this with respect to (main) motor, water and railways.

[Etin adviseurs, 2007]

4.7.2  **Participation of the BHB BV**

The BHB participates in the collaboration between public and private parties in reconstructing projects in the northern part of Brabant. The goal is to guarantee on a sustainable way a well defined economic climate for entrepreneurs. Along with this the BHB BV has its own financial means available for participating in a reconstruction project with as a goal to a receive return on investments. It must emphatically announced that the participation by BHB BV is not a subsidy.
4.7.3 **TOPPER subsidy**

Because the revitalization of Business Parks is an expensive issue, the ministry of economic affairs introduced the TOPPER regulation. With this regulation the ministry wants to take (financial) co-responsibility of the revitalization projects.

The boundaries of the regulation are as follows:

- The subsidy encounters 50% of the total project costs. This minus the market conform benefits, the contributions of other parties and subsidies of the European Union.
- For the reconstruction of a Business Park the maximum subsidy is limited to €7.500.000,-, this for the period between 2004 and 2008. Because the reconstruction project exists of several subprojects the maximum subsidy can be divided by financing the sub-projects.
- The TOPPER subsidy will only be granted for Business Parks which must be reconstructed, the project must be minimal 150 ha, add economic value and must offer space for category 4 environmental businesses.
- The TOPPER subsidy only can be requested at the moment a master plan of the Business Park has been finalized. The ministry of economic affairs can on basis of the master plan decide if the project complies with the demands that are needed to claim the TOPPER subsidy. For instance the Business Park must fulfil an upper regional function.

[Raadstuk Gemeente Enschede, juni 2005]
4.8 Private investments

Property tax
The municipality is bound by law to facilitate an infrastructure network existing off roads, paths, sewer and future maintenance. The municipality provides its own financing. Private parties that want to move into the Business Park will have to pay the municipality property tax for their lot and building. From these incomes taxes, the municipality finances the maintenance and services on the Business Park. However, this amount is not sufficient to cover the actual costs.

Benefit of collective purchasing
The moment particular products are collectively purchased the entrepreneurs can negotiate for discounts from their suppliers. Products or services can be electricity, internet connection or park security. In a Business Park where an active park management has adopted the collective purchasing process, savings can be achieved to help with the financial support of the park management. Savings can be used for the maintaining or partly reconstructing of the Business Park.

The drive of private parties to invest
Commonly investments by private parties on mixed used Business Parks are scarce because less benefit is flowing back to the investor. Additionally, insufficient funds are the cause for a lack of investments. Larger more powerful companies like Philips have more funds for investing in public space available. The goal is to create more efficiency by concentrating the various divisions of Philips next to each other, which provides for a clustered knowledge base. Another reason could be to create a perception of the business to the outside world. An example of such initiative is the High Tech Campus of Eindhoven (HTCE).

The interest Philips has by the setup of the Master Plan of the HTCE was:
- Philips striving worldwide to create greater synergy, efficiency and return on investment.
- Find a solution for the special organization for the various business properties of Philips and the obsolescence symptoms of them.
- Setup propositions to stimulate sustainable developments with respect to the external and internal environment.

One of the most important issues why private parties will or will not invest in public space is the degree of interest they have and the degree of profit they could earn from it. [Bakker, D., et al., 2008]
4.9 Conclusion

The point of departure for the government and municipalities has changed during the past decennia. In the past the public parties felt full responsibility for the quality and livability of the public area. Because the demands and desires of the market are increasing rapidly, it is getting hard for public parties to carry all these costs. New finance instruments, called 'value capturing', have been developed and introduced. This makes it easier for public parties to involve private parties in the financial aspects of the public area. However some of these ‘value capturing’ instruments are not applicable to the Dutch market because of juridical, organizational, financial or social boundaries. Also the value capturing instrument can’t be used to fully finance a project, but only just a small (just needed) part of the total costs.

Public parties can be divided in the government, her ministries, the province and municipalities. With respect to the revitalization of a Business Park, the municipality will finance the greatest part of the project. Because the costs are often higher than foreseen, subsidies can be requested at the European Union or at lower authorities. A special subsidy is the TOPPER subsidy, which is introduced by the ministry of economic affairs. With this regulation the ministry wants to take her (financial) co-responsibility of the revitalization projects.

Private parties are reserved in financing public area’s because less benefits from the investment is flowing back. Insufficient funds are also a reason for the lack of investments. Larger more powerful companies have a stronger financial position and feel more responsible. Because one of the most important criteria for a private party investing is the degree of profit they could earn. Unless they can earn a return on their investments private party participation will be minimal.

One type of private financing is the property tax which is mandated by the government. From these tax incomes the municipality finances the maintenance and services in the Business Park. However, this amount is not sufficient to cover the actual costs.
5. Conclusion of the analysis

The cause of interest of this research is that many Business Parks are obsolete and public and private parties on average won’t take on the responsibility. This results in conflicts about financing these reconstructing projects. The aim of the research is to give recommendations as to which type of financing method must be used in particular situations by the revitalization of a mixed-use Business Park. In chapter I, the definition of a Business Park is discussed as well as the types of obsolescence in which the degeneration can be divided. In this chapter answers will be given to the in chapter II formulated questions. These are forming the basis for the main question which will be answered in the next paragraph.

5.1 Mixed-use Business Parks

There are in the literature several definitions of a Business Park found, one is more understandable than another. Based on the information I found, Business Parks can be defined as the IBIS defines namely:

A Business Park is a terrain which is because of its destiny useful for trade, industry and commercial services.

It must be noticed that Business Parks can be distinguished in five main categories. The Province of Flevoland (2008) distinguished these in the following categories: heavy industry park, harbor area, mixed used park, high quality and a distribution Business Park. One of the categories is a mixed used Business Park which is, in my opinion, most clearly defined by the Taskforce, (2008) as:

A mixed-use Business Park is an area for regular activities, except high quality business, or distribution park (category harmfulness 1 -4 is prohibited).

5.2 Revitalization with respect to a mixed-use Business Park

Revitalization is one of the aspects of reconstruction. Reconstruction is described by the BHB (2008) as: All single interferes, which can not be classified as regular maintenance, with as goal to suppress the obsolescence of the Business Park.

The greatest part of the reconstruction assignment (53%) must be revitalized. The CPB (2001) describes revitalization as a total upgrading of the Business Park, which is made suitable for high quality functions. The taskforce (2008) adds to this that an integrated approach is needed to combat the part technical, economical and social obsolescence that is taking place. Hereby, the environment for settlement will be upgraded, with special emphasis on the economic functions on the Business Park.

Based on the definitions as described above the revitalization of a mixed-use Business Park can be defined as:
A firm intervention on the physical and thereby social aspects of a Business Park, whereby the Business Park is suitable for regular activities in mainly the modern industry and other modal industry and the current economic functions will be held.

5.3 The financing of revitalization

The answer on this question can’t be described in one line. Firstly, the revitalization of a Business Park isn’t one project but exists of more sub-projects, each with successful or less successful sub-financings. Secondly, most often there are multiple bottlenecks with respect to the financing of a project.

H. Olden did in 2007 research to restraining influences on the regeneration of Business Parks. One of the conclusions of his report was that it is much cheaper to develop new Business Parks than reconstruct the obsolete ones. With as result the construction of new terrains frustrates the reconstruction assignment because of large degree of concurrence.

Also the Government Provinces and municipalities fail in the availability of subsidies for the large reconstruction assignment. This bottleneck is also recognized by several interviewed experts with respect to the financial strength and weakness analysis. It can be added that the period wherein subsidy must be used and the application procedure for the request of the subsidy is too long and unreliable.

The next bottleneck is that private parties as owners, end users or project developers aren’t interested in participating in the reconstruction process when the municipality has a passive attitude, caused by the financial risks or internal discord in the city council. [H. Olden, 2007 Financial strength and weakness analysis].

The last two (related) bottlenecks are the large expenses in time a business must be replaced by another Business Park, this because the activities of the business do not meet the desired activities of the Business Park. Additionally, European laws and regulations prohibit the financing of the replacement of a business; this is seen as public support. [Financial strength and weakness analysis].

The problems with respect to the financing of the revitalization of a Business Park are enumerated:

- It is more economical to develop new terrains;
- New terrains compete with older terrains;
- Insufficient subsidies;
- The application procedure and period of subsidy request is too long and unreliable;
- Municipalities must participate actively in the revitalization process;
- Great investments are needed to move businesses to another terrain;
- Financing the replacement of businesses is seen as public support.
5.4 Involved stakeholders by the revitalization of a Business Park

Many parties are involved in the revitalization process. Parties can be distinguished in public, semi-public and private parties. There’s not one party fully responsible for the obsolescence and not one party can be pointed at as problem solver. All the parties as shown in figure 9 benefit from a well operating Business Park as it reflects the demands and desires of the market. When a Business Park must be reconstructed all the parties are involved in differing degrees. The parties that are placed in the inner circle are more involved compared with the ones in the outside circle. However the parties as visualized below can shift from the inner circle to the outer and the other way around, depending of the situation. [Financial strength- and weakness analysis]

![Diagram of involved stakeholders in the revitalization of a Business Park.](image)

*Figure 9: Parties which are involved in the reconstructing process of a Business Park.*
5.5 Financing methods

Financing methods can be distinguished in basically two main types namely; finance by public parties and finance by private parties. Actually these two types are not financing methods but more financial resources. These sources have different ways and interests of handling the financing of the revitalization of a Business Park. Concentrating on the way (method) a particular party invests, the following differentiation can be made.

Public methods:
- Project finance by the municipality;
- Subsidies from the:
  - European Union; with the goal of stimulating the economy in a specific region.
  - Government; for example to lower the crime on a Business Park.
  - Province; to contribute to the prosperity and sustainable development of the inhabitants of Brabant.
  - Municipality; an infrastructure fund that contributes to the financing of constructing and reconstructing of infrastructure for passengers and goods.

Finance by value capturing methods or private investments:
- Benefit share; can be conducted in Public-Private-Partnership projects where the benefits of the private party partly will be used for public investments that the municipality makes.
- Development contribution; by contributing to public investments, a private party like a developer can choose whether to contribute to ensure that the public investment project goes ahead and possibly in a way that provides them with extra benefits.
- Property tax; private parties which want to establish in the Business Park have to pay the municipality property tax for their lot and building. From these income taxes the municipality takes care of the maintenance and services of the city.
- Exploitation permit; with help of a cost list municipalities can redraw costs by private parties which have the advantage of public investments, within a specific boundary.
- Active regional zoning policy; in the situation a municipality has ground positions in a developing area a private party can lease, instead of buying a lot. The municipality keeps by this way the ownership so it can decide to raise the rent as soon as public investments in the direct area raise the property market value.

With respect to a Business Park which must be revitalized it is difficult to point out a situation and under what set of circumstances a financing method is suitable. Every situation is unique whereby the involved parties together must solve the financing of the revitalization.
6. The scenario matrix

There are many ways whereby good research can be completed. Research can be done by survey, experimental way, case study, desk research and by a well-grounded theoretical approach. I decided to choose a case study based research because it is the most effective way to get an in-depth and integral view of the financing method used to revitalize Business Parks.

Characteristics of a case study based research are:
- Using a small amount of cases has the benefit that the research will be a qualitative research and the observations of different cases will be more or less compared with each other.
- There will be more observations in the depth than in the width of the subject. This can be done by face-to-face interviews.
- Using a strategic sampling method is different from the random selected sample method for research based on the survey approach.

6.1 Cases

For this research four cases are selected by strategic sampling. Because the intent is to find similarities in the four cases, these Business Parks are all mixed-use that have to be revitalized. When the differences are too great it is difficult to find similarities and connections. To get a review of the four cases that form the basis of the interviews, each case is described in appendix A.

6.2 Data

The model (figure 10) as situated below, describes the way how it is my desire to find an answer and give recommendations on the main question. Four cases are selected with the same similarities as described above and will be analyzed on the financial most occurring aspects with respect to the strengths, weaknesses (internal factors), and opportunities and threats (external factors), also known as a strength- and weakness analysis (Cochran C., 2005 and Weihrich, H., 1982). The questions which have been asked to the interviewed experts are described in appendix C. The goal for the interviews was to gain in-sight in what the experts thought about the internal and external factors that impact the financing of the revitalization assignment.

Interviewed experts

For all four cases, a process manager of the BHB is responsible for the process of his or her project. This process manager analyzed the policy documents of the Business Park, the ambitions and desires of the stakeholders, the characteristics of the Business Park and the surrounding area and executed a field of force analysis and an actor analysis. With this information the process manager has a good view about the ins-and-outs of the financing aspects with respect to the reconstruction of the Business Park. Besides the interviews with the process managers, interviews will also be executed with parties
A model for financing the revitalization of a Business Park.

from other disciplines to involve experts who have another view, opinion, experience or statement concerning the revitalization of the Business Park. With this approach it is the
intend to collect as much as information as possible.
Experts who, besides five process managers from the BHB, have been interviewed are an account manager businesses affair, a policy advisor special economic affair, a chairman entrepreneur-association, a project manager of a municipality, a project developer and a senior plan economist ground affair. The outcomes of the interviews are shown in appendix E.

**Figure 10: Research method in the design phase.**
6.3 Analysis
Because a certain degree of bandwidth in the answers is insurmountable the retrieved data given in the interviews must be analyzed and in some cases reformulated so the answers can continue as a strength, weakness, opportunity or threat. The reformulated answers are in appendix F worked out, whereby the most obvious returning answers are enumerated. To gain a manageable database the answers are reformulated in such way they could continue as a main fact or issue considering the strength- and weakness analysis. After this reformulation the most occurring answers will be distinguished from the less occurring ones, this by counting the number of hits the answers return. Nevertheless, the most occurring answers could not all go through as a financial strength, weakness, opportunity or threat. In such cases these answers where replaced with answers which are less mentioned but are more related to the financial aspects. The final enumerated answers which will be used for designing the scenario matrix are worked out in appendix G.

6.4 Identifying relations
Because there are numerous answers obtained by the interviews, it is a complex process to identify relationships between these facts. With help of the interaction matrix from Weihrich, H., (1982) relations will be identified between the strengths and opportunities, the weaknesses and opportunities, the strengths and threats and between the weaknesses and threats. A relation between, for example, an internal strength and an external opportunity is marked with a ‘+’, when there is no match it will be marked with a ‘−’. The interaction matrixes are in table 3 worked out. In figure 13 the method how the relations are been found is visualised in a flow chart.

6.5 The scenario matrix
6.5.1 Why the scenario matrix?
The strength and weakness analysis is used to identify the financial most occurring aspects with respect to the revitalization of a Business Park. However, with the strength- and weakness analysis relations between the external and internal aspects can't be located, Yüksel I., and Dağdeviren M., (2007) and Božac, M.G. (2008). The scenario matrix which is developed by Weihrich, H. in 1982 is a conceptual framework for a systematic analysis that facilitates matching the external threats and opportunities with the internal strengths and weaknesses of the financing aspects in the revitalization process. With this tool the necessary strategies and tactics that are needed in the revitalization process can be formulated. Also the covering of financing the revitalization can be described.
Table 3: Interaction matrixes to identify relations
The meaning of the numbers are outlined in appendix G
6.5.2 Where can the scenario matrix used for?
The set of variables known as strengths, weaknesses, opportunities and threats is not new, but in a systematic fashion is. According to Weihrich, H. (1982) many writers on strategic planning suggest that a firm uses its strength to take advantage of its opportunities, but they ignore other important relationships, such as the challenge of overcoming weaknesses in the enterprise to exploit opportunities. The scenario matrix can be used in general for strategic planning for enterprises in product-oriented firms. In this research the revitalizing of a Business Park is conceivable as a business process which is impressionable by external threats and opportunities and internal strengths and weaknesses. The primary concern is to reach recommendations to choose financing methods and to develop tactics to implement strategies.

6.5.3 How to apply the scenario matrix?
In the scenario matrix the most occurring internal factors have been described in the upper row, these internal facts are distinguished in strengths and weaknesses which were obtained in the above described interviews. On the left side of the matrix, the external facts are enumerated and distinguished in opportunities and threats. The scenario matrix (see figure 12) indicates four conceptually distinct alternative strategies, tactics and actions, these are all in relation to possible financing methods.

In the conceptual matrix the interaction between the strengths (S), weaknesses (W), opportunities (O) and threats (T) are illustrated (see figure 11). In general the WT strategy is to minimize both weaknesses and threats. A process which is faced with both negatives and positives must find a change in strategy or prefer to scrap projects to create space for other more realistic projects.

The WO strategy is attempted to minimize the weaknesses and to make maximal use of the opportunities. The opportunities can be found in the external environment but has internal weaknesses which avoid taking advantage of them.

The ST strategy is based on the strengths of the financing methods that can deal with the threats of the external environment. The aim is to maximize the strengths to minimize the threat.

With the SO strategy the financial strengths can be used to convert in the opportunities which are available in the external environment. For example stimulating the park management can be an achieved by incomes as municipality property tax or

In the matrix (figure 12) scenarios are described as strategies, recommendations, tactics and actions. The presence of a relationship is worked out in paragraph 6.4; on the basis of this interaction matrix the scenario matrix will be completed. Because some of the recommendations overlap, they may be pursued concurrently period. The final outcome must be carefully be identified and discussed before taking them into account.
### A model for financing the revitalization of a Business Park

#### Strengths

| 51 | Subsidy which must be used for the reconstruction of a Business Park; |
| 52 | With upgrading of the Business Park the value of the real estate will increase; |
| 53 | The organization of the entrepreneurs on the Business Park meets park management; |
| 54 | Earnings ground exploitation; |
| 55 | Financing by the municipality, province or government; |
| 56 | Private investments with respect to the own real estate; |
| 57 | Applying of development charge to convert the created surplus value into cash; |
| 58 | Indirect incomes as municipality property tax and other taxes. |

#### Weaknesses

| W1 | High costs for obtaining real estate; |
| W2 | High costs for the demands of public space as infrastructure; |
| W3 | Large interest costs because of the long duration of a project; |
| W4 | Insufficient subsidies are available; |
| W5 | The costs of the process and project management are high; |
| W6 | Park management is for many entrepreneurs too costly. |

#### Opportunities

| O1 | Stimulating the park management organization; |
| O2 | Making maximal use of equalize possibilities; |
| O3 | The raising of the real estate on the longer time; |
| O4 | More wages and less expenses for the municipality with increasing number of jobs and decreasing social assistance; |
| O5 | Partly avoiding vacancy and obsolescence by a pack of tax measures; |
| O6 | Yield of ground exploitation; |
| O7 | The increasing of the municipality tax for partly financing the park management (can only be applied in combination with a Business Improvement Districts). |

#### Strengths VS Opportunity:

- Involve private parties in financing the revitalization and present calculation of the expected return on investment. (S2, O1, O2, O3, O6, O7)
- Oblige park management, raise by region the property tax and transfer the property tax incomes to the organization. (S3, O1, O3, O6)
- Execute active ground policy and handle commercially with wishes of private parties. (S4, O2, O6)
- Raise the property tax (because of increased property value) after the revitalization for partly financing the project. (S6, O3, O5, O6)
- Convert created surplus value by an exploitation permit. (S7, O2, O3, O6)
- Considering with the park management organization by which best way the tax incomes can be invested. (S8, O1, O3, O4, O5, O6, O7)

#### Weaknesses VS Opportunities:

- Advance with public finance the costs for obtaining real estate and create return on investments by active ground policy. (W1, O2, O3, O6)
- Raise the property tax, create more responsibility by the private parties for the quality of there Business Park and maximize use of over plans equalization. (W2, O1, O6, O7)
- Reclaim the extra made interest costs by the source of the delay and finance made interests out of raising property value. (W3, O2, O3, O6)
- Maximal use of equalization possibilities and adjusting obtained real estate to the demands of the market. (W4, O2, O6)
- Finance process cost by the yields of ground exploitation. (W5, O6)
- Overhand the budget for maintaining and incomes of property tax to the park management organization. (W6, O1, O7)

#### Threats

| T1 | The lack of return on investments; |
| T2 | Withdrawing of subsidies; |
| T3 | The redrawing of an investing party because of the risk; |
| T4 | The economic situation; |
| T5 | The not applying of, or withdrawing of, park management, which will run dry the invested capital; |
| T6 | The high costs of obtaining real estate. |

#### Strengths VS Threat:

- Provide a sufficient and firm subsidy with short procedures. (S1, T1, T2, T3, T4, T6)
- Establish after upgrading the Business Park, park management. (S2, T1, T3, T5)
- Park management must be stimulated and be obliged. (S3, T5)
- Obtaining real estate for comfort market prices and apply active zoning plan policy. (S4, T1, T3, T6)
- Private investments can lower risks to keep private parties concerned so park management can by applied. (S5, T1, T3, T5, T6)
- Stimulating by contributing the private investments with as demand the applying of park management. (S6, T1, T3, T4, T5)
- By over plans equalization covering the cost aspects of sub projects. (S7, T1, T6)
- Use the tax incomes in combination with private investments to upgrade the public and private property. (S8, T1, T5, T6)

#### Weaknesses VS Threats:

- Perform active ground policy and attract subsidy (W1, T1, T2, T3, T6)
- With minimum changes lifting up the public space and private real estate and attract subsidy for employing park management. (W2, T1, T2, T3, T5)
- Shortage the project duration, invest in process management and a collective effort. (W3, T3, T6)
- With finances from the municipality a face lift can be executed, this can be employed in combination with a park management organization. (W4, T2, T3, T6)
- Public financings and subsidies which will contribute to a safer and more livable Business Park, this with cooperation with the private parties. (W6, T1, T5)

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*Figure 12: Scenario Matrix*
A model for financing the revitalization of a Business Park.

Figure 13: Flow Chart how internal and external factors turn into scenario's.

The figure above describes the way how problem owners can formulate from the financial strength and weaknesses to scenario's whereby actions or tactics are be formulated. The outcomes of the analysis will be divided in the internal and external factors. The internal factors are the strengths (S1-S8) and weaknesses (W1-W6); the external factors are the opportunities (O1-O7) and the Threats (T1-T6). The relations are linked from the internal to the external factors and are determined from the literature and interviews with experts.
7. Conclusion of the design

In this chapter the conclusion on the design of the scenario matrix will be discussed. The conclusion will be outlined in the following two sub questions. In chapter 8 a final conclusion of the research will be formulated, also recommendations and the way for further research will be pointed out.

7.1 What are, with respect to the financing aspects, the strong, weak, opportunities and threats for the revitalization of a Business Park?

Strong, weak, opportunities and threats can’t be defined in one line. Many aspects and circumstances have influence on success and fail factors of the financing of a revitalization project. In the next enumeration, common aspects are defined.
- The situation on the Business Park (the degree and type of obsolescence);
- The willingness of the entrepreneurs or owners;
- The financial capability of the municipality and the entrepreneurs or owners;
- The availability of subsidies;
- The economic situation;
- (European) law and regulations and,
- The duration of the process.

This enumeration is obtained mainly from the interviews with experts and partly from the literature. One of the financial strong aspects in relation to the revitalization of a Business Park are the earnings of ground exploitation, this can occur by converting strategic surplus value into cash [Interviews experts, appendix F and Offermans R.M. and Velde van de D.M., 2004].

Another strong but scarce aspect is the investments in the own property of the private parties. These investments are scarce because less benefit is flowing back to the investor and sufficient funds are not available. Larger more powerful companies are more willing and capable to invest in their property and direct surroundings to create a good perception of the business to the outside world [Interviews experts, appendix F and Bakker, D., et al., 2008].

An aspect that is according to the interviewed experts and the Taskforce (2008) an opportunity is the applying of park management. This must, according to the revered sources, be stimulated from outside the municipality, with as a goal to create more responsibility by the established entrepreneurs or owners with respect to the quality on the Business Park.

A threat in the financing aspect is the high price that the owners of real estate on the Business Park claim. In spite of long vacancies and heavy obsolete real estate, owners have an emotional relation with the property and hold out for an increase in the value. [Interviews experts, appendix F and Gordon R., and Olden H., September 2008]

The demands of the market whereby, the infrastructure on the Business Park must succeed have been raised in the past. The effect is that much greater investments are needed than is expected. Funds that in the past were established by the municipality are
not sufficient to finance the infrastructure. As a result the revitalization can not be executed [Interviews experts, appendix F]. In appendix F the rest of the most occurring and related facts to the financing of a revitalization process can be read. These strengths, weaknesses, opportunities and threats are the result of the interviews with experts who are involved in one of the four cases as described in chapter 6.2.

7.2 What should a financing model look like for the revitalization of a Business Park by public-private investments?

Each revitalization assignment possesses its own expected and unexpected, positive and negative conditions. The financing aspect is most often the leading factor, and so the most dependable to the situation, whereby the revitalization must take place. Because every situation requires its own financing method there can’t be setup for a specific model. In spite of these fluctuating conditions the next financing model, which is based on the scenario matrix, interviews and the literature study, has been designed (see figure 14).

![Figure 14: Overall finance model among to revitalization process](image)

In this model two aspects are included, namely the financing of the revitalization phase (in red) and after the revitalization, the financing of the maintenance phase (in yellow).

The red arrows will be described in the next part. The investments from the municipality were previously accrued and intended to be used for investing in public infrastructural projects. The other part from municipal site exists of subsidies. These subsidies can be granted for various activities but are dependable on the type of activity with respect to the revitalization process.
Subsidies from 'other public parties' can be provided by e.g. the European Union, the Government or the Province. The granting of these subsidies is dependable of the goal where they will be used for. For example a subsidy can be granted for stimulating the economy in a specific region or to lower the crime on a specific Business Park. The BHB which participates in the reconstruction processes on Business Parks owns the task to create and stimulate the employment and innovation in the province Brabant. The BHB can support the municipalities in the reconstruction process financially.

Owners and users that are established in the Business Park have been asked to participate in the reconstruction process, by providing for a face-lift of their properties, with as a goal to create a more attractive appearance. This can be achieved with a single face-lift or maintenance of the real estate, e.g. cleaning-up the outsider wall and by reorganizing the outer storage site. Also the way parking places are being used and a change in treating the environmental aspects can be asked of the established private parties. So the private parties normally do invest in the Business Park, this concentrated on their own real estate.

**The yellow arrows will be described in the next part**

The yellow arrows provide a visual as it relates to the finance sources in time of the maintenance phase. In this model the 'owners and users' pay property tax to the municipality which shifts the collected property tax to the park management organization. The second yellow arrow from the municipality characterizes the shifting of the regular maintenance budget from the municipality to the park management organization. Instead the municipality executes the maintenance by its own a park management organization is established, existing of appointed owners and users of the Business Park and staff members of the municipality. The idea is that the organization can determine more precisely, and efficiently, what the needs and wishes of the private parties are. Also savings in purchasing of energy, and financing child care facilities or security can be collectively executed. The yellow arrow from the 'owners and users' which is connected with the park management organization are voluntary private investments. With these investments the park management organization can be established and collective services can be applied.
8. Conclusion and Recommendations

8.1 Validation
To confirm the results of the scenario matrix and the designed model how the financing of revitalization should be applied, two process managers of the Brabantse Herstructureringsmaatschappij voor bedrijventerreinen (BHB) have been interviewed. For some scenarios which were described in the matrix it was enough to reformulate them. An adding has been made to opportunity six (06) ‘the increasing of the municipality tax for partly financing the park management’ is supplemented with ‘(can only be applied in combination with a Business Improvement Districts)’. The yellow arrow ‘contribution’ has been added in the finance model as is visualized in figure 14, with as reason that the voluntary contribution of the private parties to the park management organization is increasing.

8.2 Conclusion
By reflecting the results of the scenario matrix and the financial model as described in chapter 7.2, an answer on the main question can be formulated. The main question was:

What kind of public and private financing methods can be used for the revitalization of an existing mixed-use Business Park and what kind of conditions are related to these methods?

In the explorative analysing phase several finance methods have been discussed, these were public and private investments. Also the feasibility of the instrument ‘value capturing’ is described.

Public and private financing methods which can be used and are employed in the scenario matrix are:
- Regular investments from the municipality;
- Subsidies from the municipality, Province, Government or European Union;
- Private contribution to the park management organization;
- Private investments in the own real estate;
- Tax which must be paid to the municipality, also called ‘property tax’;
- Applying exploitation permit to developers;
- Over plans equalization, e.g. using the earnings of ground exploitation for non profitable investment as the reconstructing the sewage system.

Various conditions are related with the above enumerated financing methods. These conditions are for example dependable on the special situation and regulation, the interest and power of all the direct and indirect stakeholders, the grant of subsidies, the financial position of the municipality, environmental issues, the economic situation, etc. Summarized: applying a financing method depends on the situation and must be carefully analyzed.
8.3 Recommendations

1. A strength- and weakness analysis is ideal to execute a case study based qualitative explorative research. With help of this tool the external threats and opportunities and the internal strengths and weaknesses are being analyzed. On basis of this information a strategic plan will be setup. However, according to Yüksel I., and Dağdeviren M., (2007) who did research to 'Using the analytic network process (ANP) in a SWOT Analysis' the analysis does not provide an analytical means to determine the importance of the identified factors or the ability to assess decision alternatives according to these factors.

According to Yüksel I., and Dağdeviren M. the best scenario can be identified by executing the following roughly described next steps:

1. Identifying strength- and weakness sub-factors as is done in this report by the strength- and weaknesses analysis. Determine according to these factors scenarios as in the scenario matrix in chapter six is done.
2. Assume there are no relations between these scenarios the importance of these scenarios can be scaled from 1 to 9. Scaling will be done by the interviewed experts.
3. Determination of each strength- and weakness sub-factor (called sub-factor) the importance in scale 1 to 9.
4. Calculate the way, as is described in the article, the interdependent priorities of the strength- and threat factors.
5. By using the pair wise comparison matrix the local priorities of the strength and weakness sub-factors can be calculated.
6. In this step the overall priorities of the strength and weakness sub-factors must be calculated by multiplying the interdependent priorities of SWOT factors found in step 4 with the local priorities of SWOT sub-factors obtained in step 5.
7. In this step the importance of degrees of the alternative strategies with respect to each strength- and weakness sub-factors must be calculated.
8. Finally, the overall priorities of the alternative strategies, reflecting the interrelationships within the strength- and weakness factors, must be calculated.

Summarized: the degree of importance can be attached to the responses. This is in a scale from 1 to 9. With help of several analytical methods a proofed relation between two responses can be determined. In further study this method can be applied to the results of the strength and weakness analysis are defined in this research.

2. To achieve a more suitable and subjective research, more interviews must be applied. The interviewed persons must all be involved in a revitalization process of a mixed-use Business Park. By involving more presidents of entrepreneur associations in the interviews it seems to be likely that more results with respect to the opportunities will be obtained. Also project developers can contribute to these opportunities.
3. In next interviews more attention must be paid to the fact that the internal issues will not be weaved with the external ones, and the other way around. This is especially important at the moment the ANP method will be applied.

4. A striking issue in the scenario matrix is that a lot of strategic scenario’s as ‘solution’ are ending in stimulating park management organizations. In practice Business Improvement District are in time of writing this report in an experimental phase adopted. With this method free-riders are forced to join the park management organization. Over time this phase can be ended for the involved parties with a positive result, the applying of Business Improvement Districts will not conflict with the results from the scenario matrix.
9. Definitions which are used in the report

Brownfield land: In city planning, Brownfield land is land previously used for industrial purposes or certain commercial uses that may be contaminated by low concentrations of hazardous waste or pollution and has the potential to be reused once it is cleaned up. [Wikipedia]

Business Park: A spatial unbroken or functional connected area which is designed and suitable for use by establishment on behalf of trade, industry, commercial- and non-commercial services, beneath that not included an area in dominant intensity designed for offices, retail trade or hotel and catering industry. [Taskforce, 2008]

Financing: A financial payment, done by a financer who is approached too finances a project. [Commissie Private Financiering van Infrastructuur, 2008]

Office Park: An Office park is defined as a lot or group of connected lots, where buildings are erected that have an exclusive use as an office function.

PPP: PPP (Public Private Partnership) is a collaboration between the government and businesses, wherein a project will be realised on basis of clear risk and task division, this with preservation of the own identity and responsibilities. [Kenniscentrum PPS, 2004]

Price: Price in economics and business is the result of an exchange and from that trade we assign a numerical monetary value to a good, service or asset. The price is determined by the demand and supply of the market. The price is the best example of the situation on the market. A potential seller wants to have a high price for the product or services he supplies. The potential buyer is searching for the lowest price for the best product or services. When the first seller is too expensive, the buyer goes to another seller which is less expensive. When there is a lot of supply the first seller may lower its price to stay in the market. So the market defines the price by demand and supply. [Wikipedia]

Private party: An owner of a property in an exploitation area [VROM and VNG, 2008]
**A model for financing the revitalization of a Business Park.**

<table>
<thead>
<tr>
<th><strong>SER:</strong></th>
<th>Social Economic Board</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surplus Value:</strong></td>
<td>The same quality for a lower price, or a higher quality for the same price. Measuring of possible surplus value can be done by the Public-Private Comparator (PPC) or the Public Sector Comparator (PSC). [Commissie Private Financiering van Infrastructuur, 2008]</td>
</tr>
<tr>
<td><strong>Value capturing:</strong></td>
<td>Value Capturing is a generic term for instruments which make it possible to prune away the raised value of real estate, directly or indirectly, which is created by public investments and to investment in the parts which create the raising value. [Offermans R.M. and Velde van de D.M., 2004]</td>
</tr>
<tr>
<td><strong>Reconstruction:</strong></td>
<td>A one time intervention of the Business Park that was targeted for obsolescence but now has a new lease on life through a face-lift or through more intense procedures. Reconstruction can not be counted under regular maintenance.</td>
</tr>
<tr>
<td><strong>Revitalization:</strong></td>
<td>It concerns the reorganization of the public area and the improvement of the accessibility. Often revitalization is coupled with flanking policy pointed on intensifying of the management (park management), also coupled with the stimulating of intensive use and sustainable use of space and the development of collective projects like collective rubbish collection and corporation on the area of energy policy. [Olden H., 2007]</td>
</tr>
</tbody>
</table>
A model for financing the revitalization of a Business Park.

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