KNOWLEDGE PARK TWENTE

- **an eco-tech vision** -

Final report of the 2001 IsoCaRP
Young Planners Workshop
Enschede, Sept 13-15 2001

Group 2: *economic efficiency* and *pervasive impact of IT*

Alvaro Arellano	Mexico
Dorien Buckers	Netherlands
Andrea Rodera	Argentina
Javier Martinez	Argentina
Justin Baroncea	Romania
Maarten Bosman	Netherlands

Coordinator: Ellen Witte

CONTENTS

INTRODUCTION
SWOT ANALYSIS
INTERPRETING THE SCENARIO KEY POINTS
FUTURE VISION
MANAGEMENT PROPOSALS
DESIGN PROPOSALS
CONCLUSION

INTRODUCTION

The scenario key points for group 2 –economic efficiency and pervasive impact of IT- shape a difficult (demanding) context for the design proposals. The planning and design proposals we made were supposed to reach a high degree of economic efficiency, based on dynamic and versatile systems (rapid changes, different flows) due to the high impact of ICT on the future society.

SWOT ANALYSIS

By doing the SWOT analysis, we tried to describe the main features of the present situation, and identify trends and possible developments (opportunities, threats) in the particular context of our scenario key points (economic efficiency and pervasive impact of IT).

The identified strengths are generated by four main characteristic of site: the presence of extensive green areas, that of companies (and especially big companies), the Twente University and some other local advantages. The presence of green areas provides an identifiable image for the campus, but it also means clean environment and a quite low density of buildings, and these two factors are extremely important in our scenario. The companies located in the Business Park (Texas Instruments, OCE, Ericsson, KPN, CMG, Lucent, Hollandse Signaal etc.) are important partners in the future development of the area; their presence impulses economic development; they act as attractors for local labour force, students, services, etc. The other location advantages are mainly the vicinity to Germany and the good connection with Amsterdam and Rotterdam (which means that our site is located on one of the possible corridors to be developed in the future).

STRENGTHS	**OPPORTUNITIES**
Extensive green areas Clean Environment Low Density Companies Texas Instruments, OCE, Ericsson, KPN CMG, Lucent, Hollandse Signaal Twente University Human Capital ICT Know How ICT Students Location advantage Proximity to Germany Good Connection with Amsterdam and Rotterdam	Ecological Site Dynamics of the Technical Park Vacancy of land Multifunctional use of space Maximise use of space Better connection International environment
WEAKNESSES	**THREATS**
Stereotyped Image No major events ICT is periphery in Netherlands Organizations Exodus of the youngest Small market Missing parking places Lack of enough meeting points	Little economic growth Decrease of higher educated young population Companies move away Nasdaq goes down...ICT are in trouble

The weaknesses concern both local, regional and global level. On a local level, we identified a stereotyped image, the lack of major events (also works for the regional level) and the lack of meeting points. On the regional level, the main features are the exodus of young people

and the small market. On a higher level, we can speak about the peripheral role of ICT in Netherlands organisations.

In our context, the main development opportunities are: promoting the university campus as an Ecological Site, promoting the dynamics of the Technical Park, taking advantage of the vacancy of land, making a multifunctional and maximised use of space, improving the connections and extending them to an international level.

The threats for this future developments are related to global economic factors (global trends which could influence our site and region): a too little economic growth, a decreased amount of higher educated young population, the companies that move away. Especially if Nasdaq goes down...ICT are in trouble.

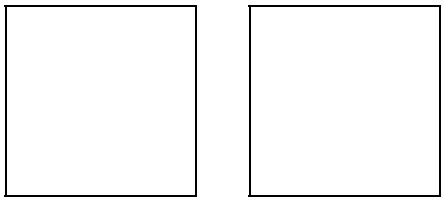
INTERPRETING THE SCENARIO KEY POINTS

Economic Efficiency
• An economic system oriented towards new technology and knowledge investments
• XS companies provide research and new ideas to XL enterprises
• the city never sleeps

Economic Efficient

Economic Domain New technologically embedded products/services XXS and XXL companies and enterprises 24/7, working in shifts	**Socio cultural Domain** From face 2 face -> time 2 time New nomads New demands -> Yuppie-fication Intra -> Gate <- Extra gate (security) New technologically embedded products/services XXS and XXL companies and enterprises 24/7, working in shifts
Policy Domain Flexible rules Autonomy New demands from the population	**Physical Domain** Eco sites <-> techno sites Meeting places Flowing connections Flexible space (architecture) Borders (spatial segregation)

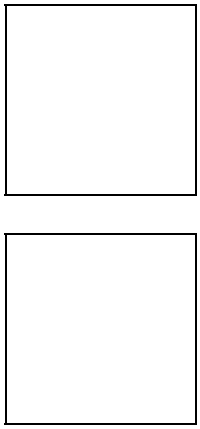
ICT Intensive



Implications in physical space
• Integration of ecology and technology into eco-tech site
• Flexible space provides responsive medium to the changing demands
• Connections between sites will change in relation with main mobility needs of the settlers/nomads
• Meeting places will function as rigid points and local landmarks for a flowing urban system

Policies
• Autonomy: actors (students, companies, etc.) decide about their environment
• Flexible rules that quickly adapt to the new developments
• Population that will demand new functions, new facilities new types of services

FUTURE VISION



MANAGEMENT PROPOSALS

Knowledge Park Management: a public-private joint venture
The core idea is that the Public Agency will shift its role from administrator into enterprise partner. Public Agencies can reduce start-up costs for new firms in exchange for a share in the future profits. Creating wider choices of financial mechanisms to attract growth in the region. Methods of Public Assistance can include:

- Development Loans
- Performance Oriented Tax-Credits
- Zoning and Development Permits
- Land Write Down Cost Subsidy
- Ease and Reduction of Red Tape Regulations
- Lease of Public Property as Financial Mechanisms

Incentives for Public Agencies to enter in a Public-Private Joint Venture

- Create an environment that could help Enschede become an undisputed leader in Telematic and Innovation Technology

- Increase Local Tax Base
- Diversify Local economy with a both Large Companies and micro-enterprises clusters
- Increase High-Skill Labor opportunities
- Bring new money from “Out of the Region”
- Make Best Use of Under-Utilized of Vacant Property and Increase Land Values
- Bring the benefits usually associated with the creativity and innovation that characterizes private enterprises.

Incentives for Private Sector to enter in a Public-Private Joint Venture

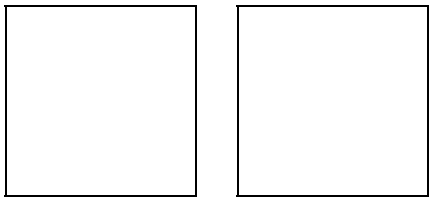
- Local Government Support
- Proactive economic development policies
- Clear and Defined rules for business enterprises
- Reduce risks involved with business Start’ups
- Benefit from synergy derived from the Tecnological District

Incentives for Academic Institutions to enter in a Public-Private Joint Venture

- Provide more opportunities for students for specialized training
- Increase research cooperation efforts with Corporate Labs “Big Companies”
- Integrate International Expertise in Academic Programs

DESIGN PROPOSALS

Scenario implementation strategy
The “knowledge park” needs a very well shaped, specific image, one that could attract small and big companies, and especially ICT related companies. Our proposed image consists of four main points: eco-sites, water-connected micro-places, the reshaping of the present business park according to the campus features, so that they would provide a whole, homogenous image, and new “connecting places” (various types of meeting points).



Eco - tech sites and water connected micro-places.
The water becomes a landmark for the knowledge park.

The presence of a dynamic university campus supposes an important benefit, both from the viewpoint of ICT knowledge and from that of urban life events. The future knowledge park could take advantage of the situation and host a series of important events (annual, biennial etc.) like: ICT related international congresses and seminaries, design festivals, digital art festivals and biennales, etc.

The knowledge park could include a thematic park related to ICT and/or its applications in industrial design; a place where visitors can explore (using ICT instruments) the newest prototypes of cars, home equipment (like “the house of the future”) and communication devices.

These events should make the site attractive permanently, using a year-schedule of activities and *time to time*, *face to face* meetings.

CONCLUSION

The **knowledge park** will be a dynamic place, a place that never sleeps, a place for the “new nomads” (highly educated young people, organized in XS firms related with XL ICT companies). Their training and internship period will take place at the **knowledge park**.