amsmartcity

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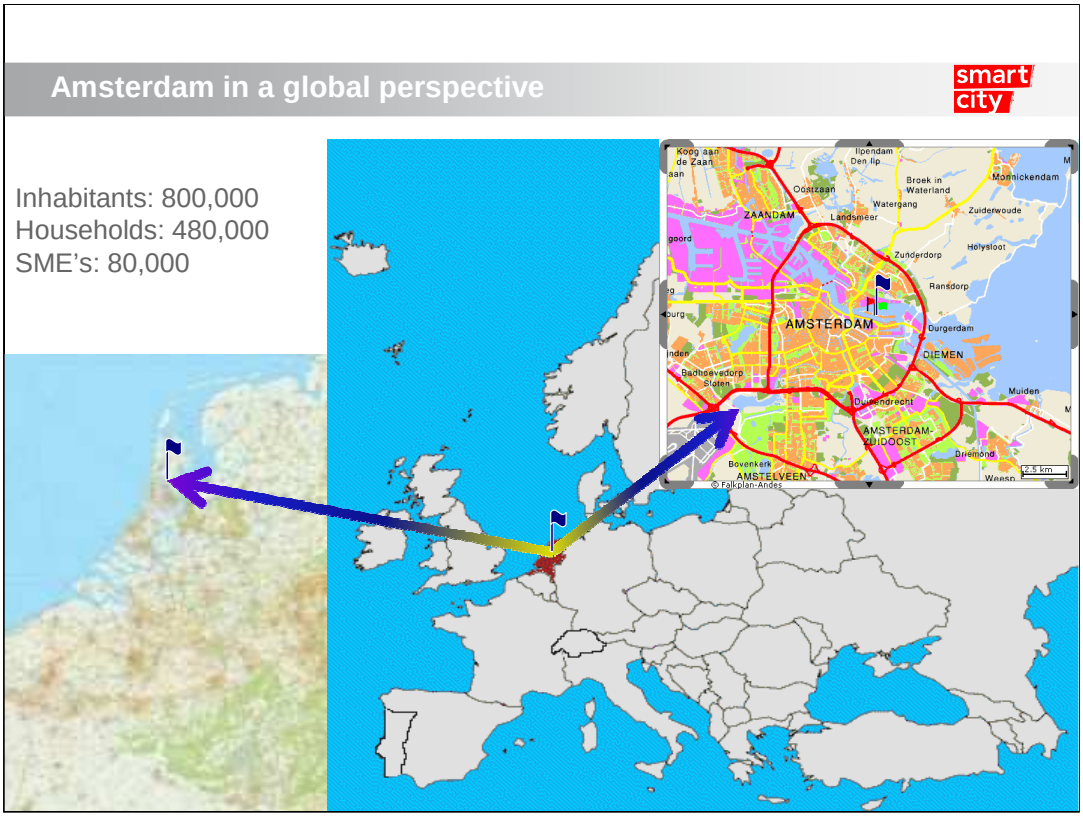
Thanks to the organisation xxxxxxxxxx for having me.

I am going to talk about:

- Please go deeper in to the reasons why the majority of Projects failed.
- Bring real examples of projects which failed explaining why they failed.
- Bring real examples of projects which succeeded an why they did.



Greater Amsterdam region: 2,5 mio people

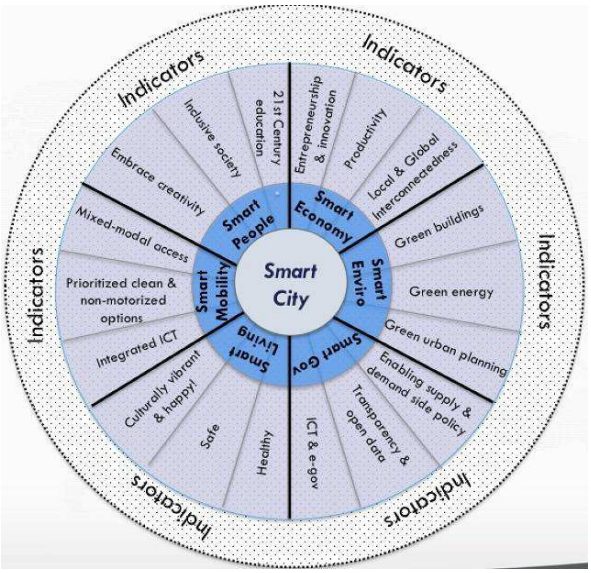
180 nationalities

AMSIX: on of the biggest internet exchanges in the world with up to 2 Gb/s at the moment

Criteria concerning the initial idea:

- **Vision**
- **Impact**
- **Implementation**
- **Scalability**

Smart Cities Wheel – Boyd Cohen



Source
http://www.fastcoexist.com/1680538/what-exactly-is-a-smart-city

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Vision – an idea / project should be **bold** and **creative**, and should include a **fresh new approach**

Impact - an idea / project should address a **serious problem**, **improve customer service for residents**, create **significant government efficiencies**, and/or **increase public engagement**

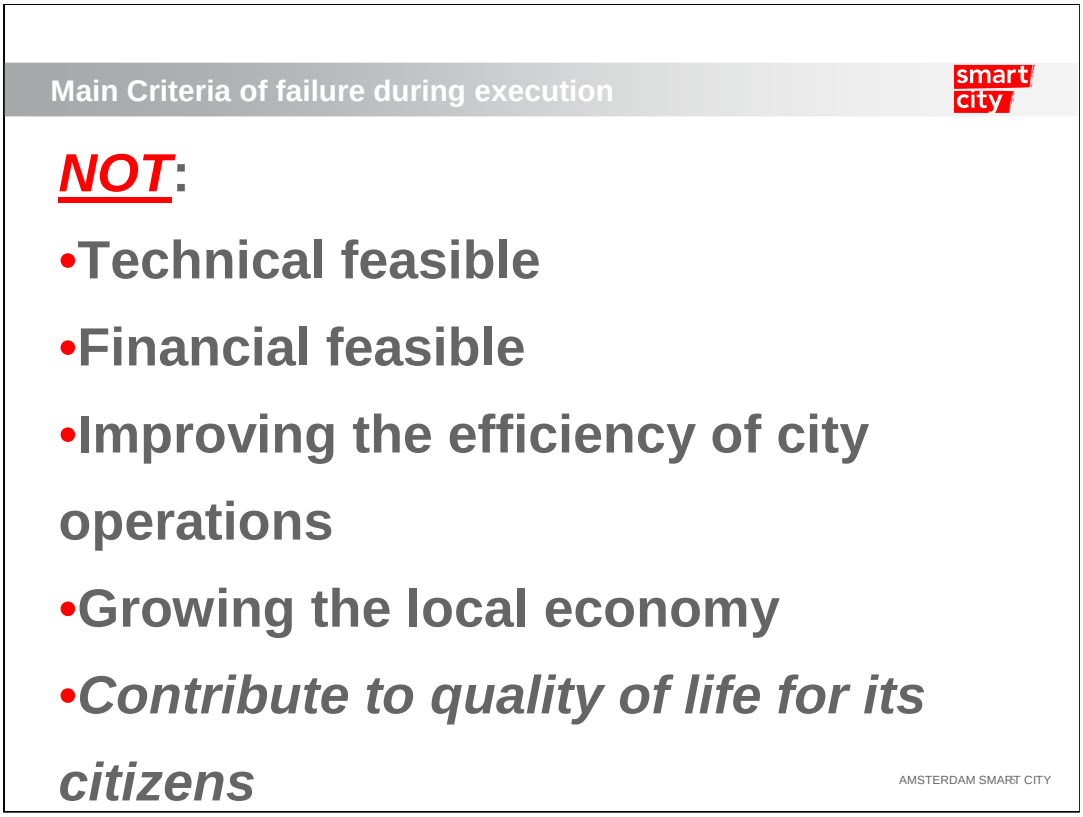
Implementation – Which **steps** should be taken to realise the project? Which **partners** are needed? **Planning**? **Financing** etc

Scalability - **Up scaling solutions** – After the pilot phase, the **most effective solutions** / projects can be **implemented on a larger scale**.

<u>SMART CITIES WHEEL Boyd Cohen</u>

Some people have a narrow view of smart cities that is technology driven: only on the better use of ICT and communication technology

Luckily, a lot of people start to view smart cities as a broad integrated approach



Some brilliant ideas fail because:
-technical difficulties as several different techniques are not ready to comply with each other – a government can play a role in putting parties together and facilitate what is needed to make it happen → example of KPN & Liander, facilitate communication between the several layers of government, come to that example later
-Lack of financial funds in the long run is another main criteria for failure:

- Wrong type of funds
- Running out of funds over time

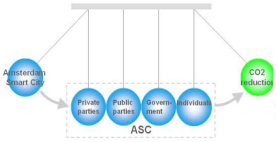
But most importantly: it has to contribute to the quality of life of your citizens
Treat your citizens as customers, bare in mind that they are the ones that can only show their appreciation once every four years. That's why timing is also an important when initiating projects: ideally have them ready for launch at the beginning of the political life cycle

PPPP: Public – Private – ***PEOPLE*** - Partnership

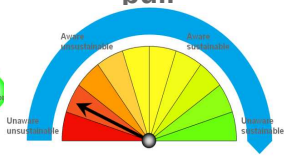
Amsterdam Smart City

Amsterdam Smart City is a **unique collaboration** between the Amsterdam **citizens**, **businesses and governments** in order to illustrate how energy can be saved, now and in the future

Collective effort

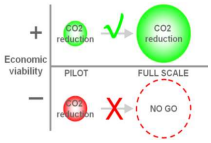


Create *Awareness* Tech push / demand pull



Research & Knowledge sharing

Economic viability



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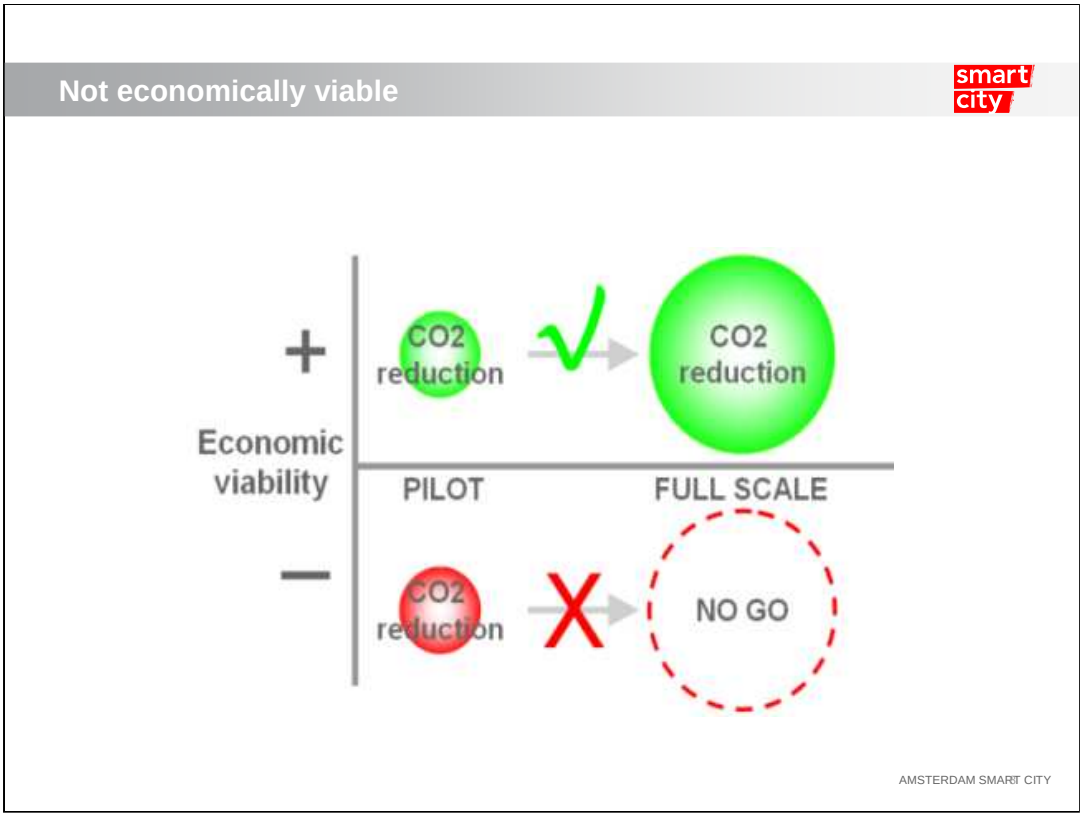
-PLATFORM
-The collaboration is the strength in these kind of processes
- the awareness is a great part of the transition: ***unaware unsustainable*** → Aware unsustainable → Aware sustainable → ***unaware sustainable***
- also the collaboration between universities and knowledge centres but also with the government and private parties will add a great value

- and if you can't earn money with it, forget it → subsidising is not in our vocabulary anymore

Collective approach - Cooperation at every possible level is essential to achieve viable results. Collaboration between businesses, (local) authorities, research institutions and the inhabitants of the city is essential. It could be a public private partnership, but it must incorporate the close involvement of citizens and / or users of an area / city

Top – Down - Wrong department → environmental department, not a holistic approach – urban planning department – development corporation – economic department

Central position citizens - The only way Amsterdam Smart City can succeed in creating a smart city is by enabling its inhabitants to act smartly, by providing them with the appropriate information and by creating the necessary opportunities. In principle, this entails that everybody could participate in the creation and maintenance of Amsterdam as a Smart City. Initiatives / projects should be developed and implement in close cooperation with citizens and / or users of an area / city



Subsidies instead of investment

Economically Viable – The initiative / project should be economically viable. Only economically viable initiatives will ultimately be rolled out on a large scale

No knowledge dissemination

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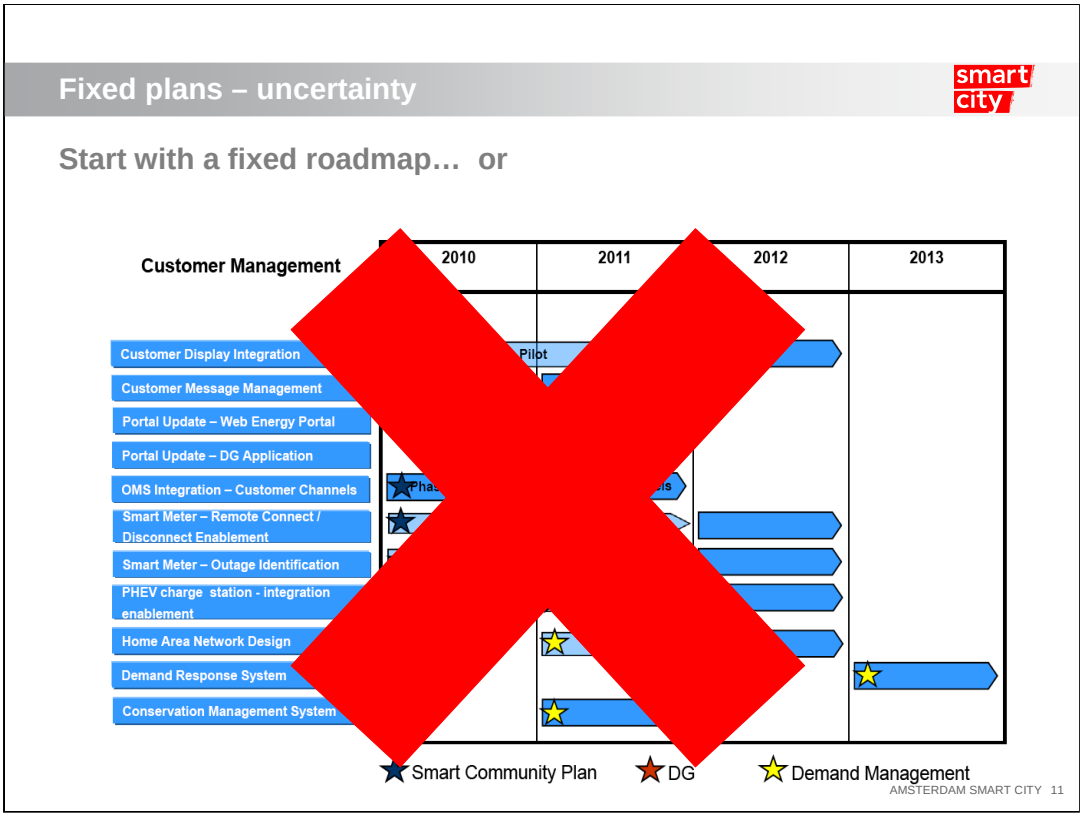
Knowledge dissemination - Knowledge exchange: All the acquired knowledge and experience will be shared via the Amsterdam Smart City **platform**. Learning from pilots is important. The pilot partners should be transparent about the lessons learnt even when these are not positive.

Active role - Partners of Amsterdam Smart City have an active role in our pilots. Joining Amsterdam Smart City means doing!

Political role – political leadership and beginning of the political life cycle

Wrong Role – role of local government – they don't stick to their natural role – and think they can do anything

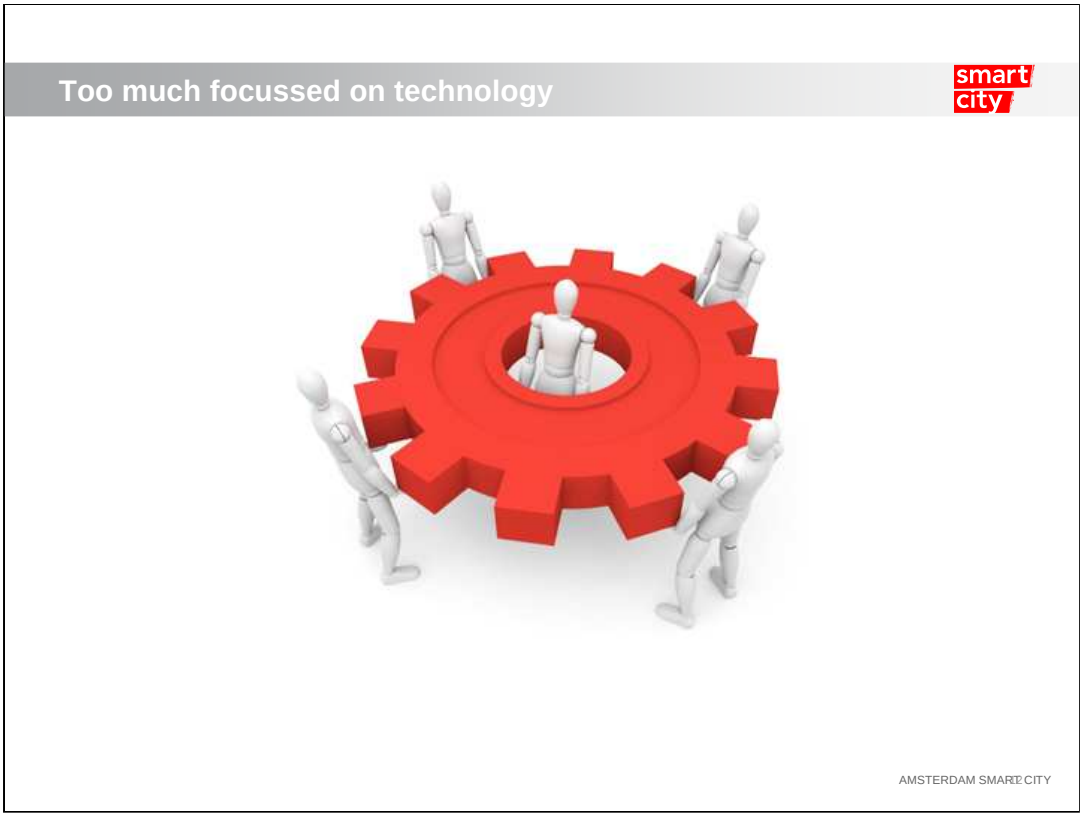


Uncertainty – Not all the steps to be taken in the pilot can be decided upfront.

In a pilot there must be room to let it develop according to the latest

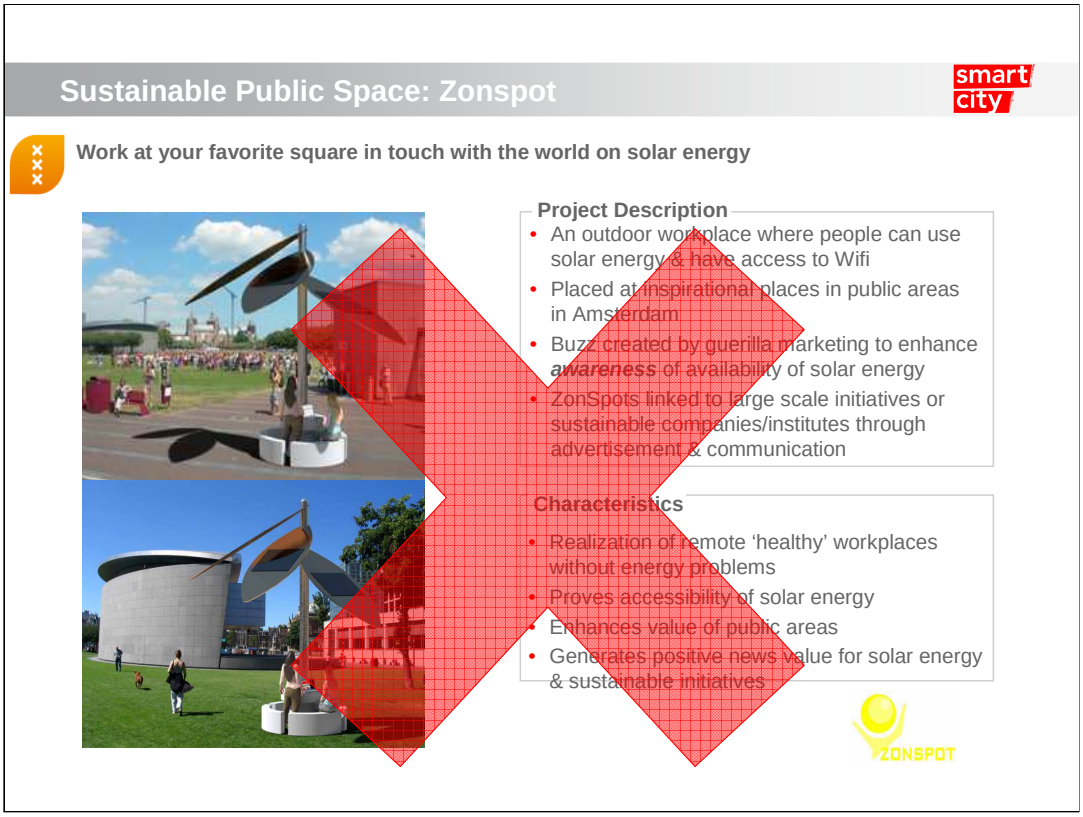
developments
Insights
experiences concerning

stakeholders
the surrounding
technology etc



Smart is more than just technology - Amsterdam Smart City is not only about testing smart technologies. A pilot can also concern a test of a smart collaboration, solution, product, service or approach

Also focus and measure what impact it could have on
your citizens and learn from it

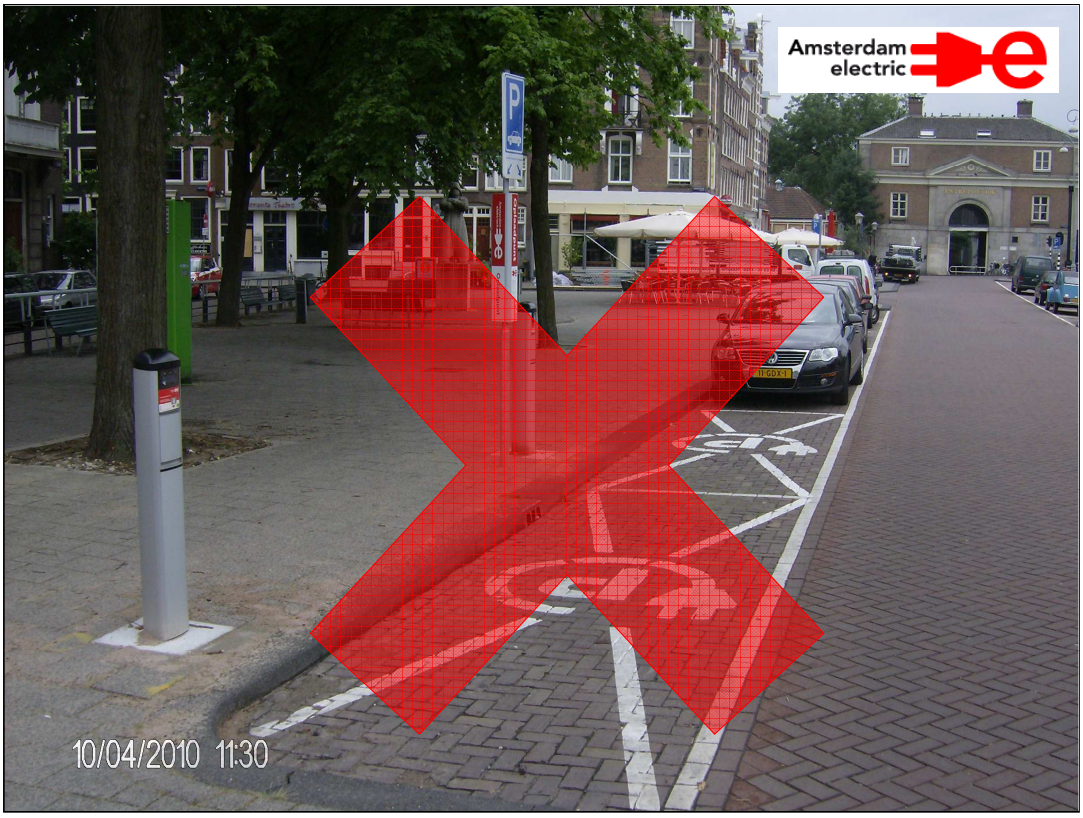


Brilliant idea:

-Boroughs stopped collaboration
-No interest from advertisers
-Initial WiFi internet providers started to charge money

Conclusions:

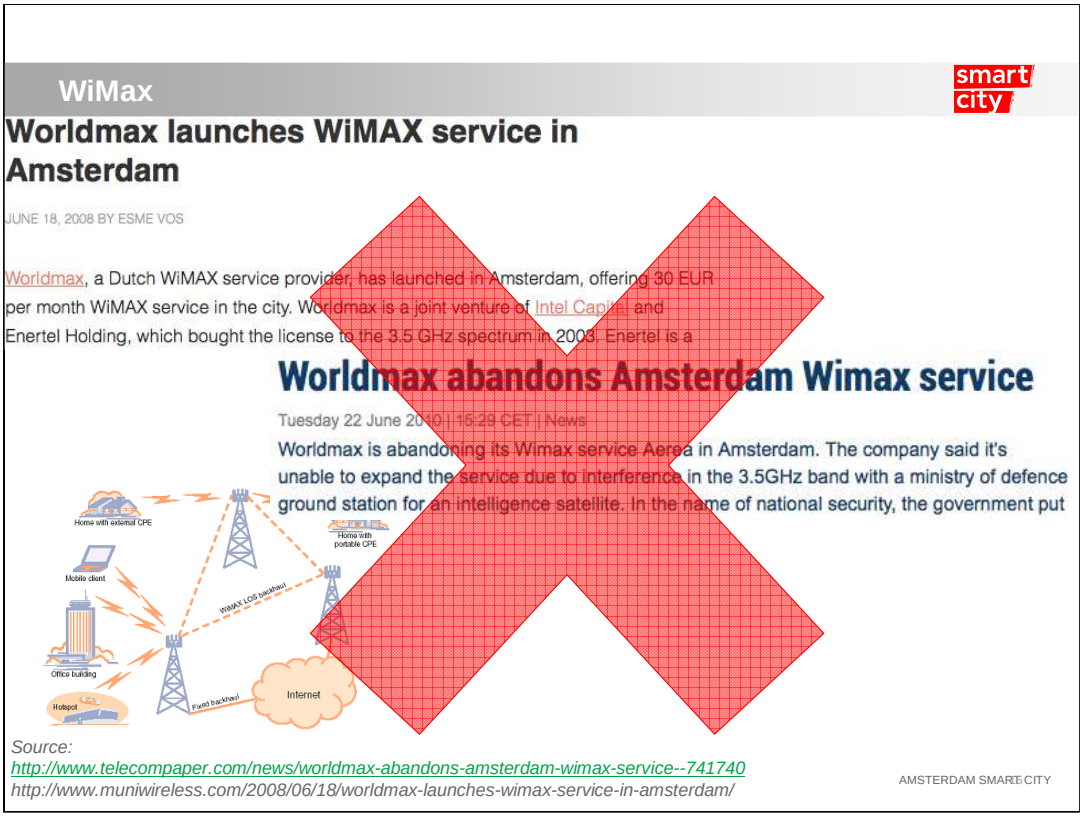
-Subsidies stopped
-No adaption to the changing technology environment



This is a typical Amsterdam street view for people with an electrical vehicle:

Free parking and free electricity, this will stop in the near future.

No open source in the charging pole, if another electricity supplier the need to build their own



Technical reasons: interference in the 3.5 GHz band with Ministry of Defence ground station for an intelligence satellite
In the name of national security

No communications and alignment between local – national government

First Smart Work Center:

The first SWC, part of Quality Center in Almere provides the following:

- Restaurant / Business Club / Catering
- Child day care
- Dentist, GP
- Fitness
- Bank
- IT Support
- Notary and legal advice
- Employment agency

First Smart Work Centre went bankrupt, as it was run by the local governments.
-Wrong business model
-Wrong location
-Wrong timing → towards the end of the political life cycle
-Political leadership was with the mayors → they do not have the money / departments to execute the plans
Lesson learned:
-leave this to private parties who are much better at this. We learned a lot from our mistakes: sold Manhattan to the British
-Government as a facilitator
-No holistic approach --> SWC was a goal on itself
-Top – down approach

1. Diversification in Business models
•Who is going to pay for what service?
•Internal costs vs external cost
•Long term/Short term commitments

2. Quality, Location, Atmosphere
•Where do you want to work?
•What are the things you need? (Except for coffee)

3. Smart, Smarter, Smartest
•Everybody works his/her own way
•Generation differences
•Different types of work allow different types of Smartness

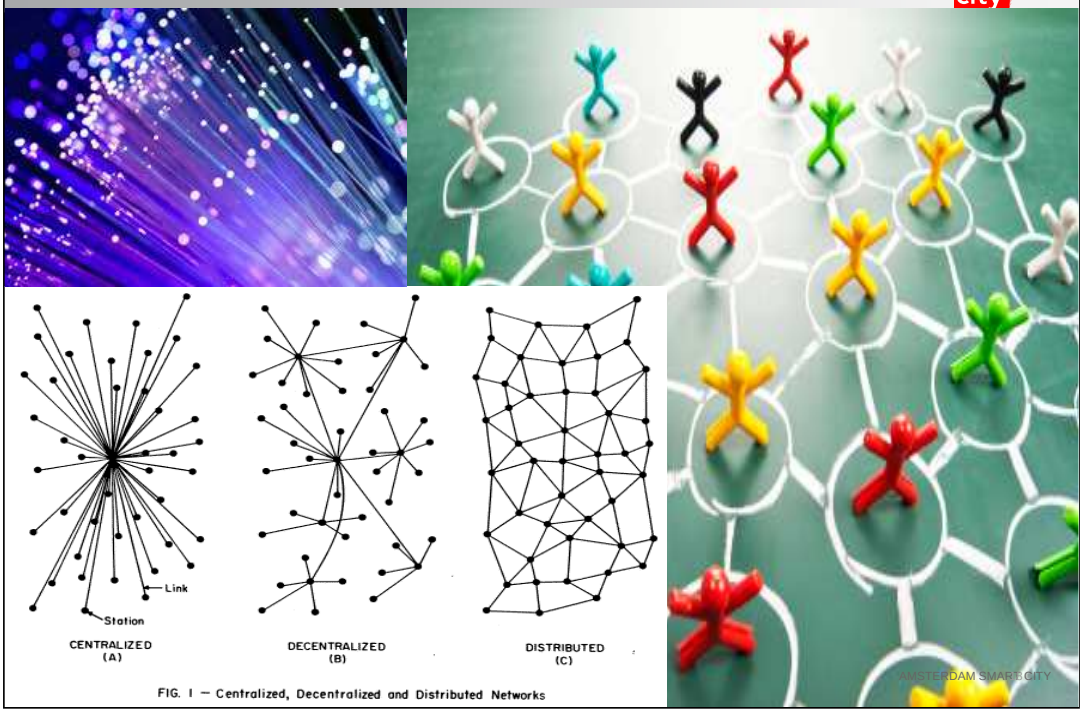
4. But above all, it's about: PEOPLE!

Local government stopped to be a local customer, therefore, Amsterdam to have a holistic appraoch

Amsterdam's Smart Work Strategy

- Encourage municipal workers to work smart: flexible outfits at municipal offices, telework from home, work in Smart Work Centers
- From 200 traditional office buildings to 120
- Reduction of Desk-Employee ratio from 1.3 to 0.7

Imperative Ingredients for Smart+ Connected Environment



- Broadband

- Distributed Network Approach → CIA invention

  Network Effect
  - Network of Public Work Spaces well connected
  - Network of Connected Communities

Living Lab Approach: Climate Street

Saving energy in a climate street

Climate Street

Project description

- Initiated by 140 SME's
- 46 ambassadors
- Focus on energy saving & behavior
- Collective effort & individual approach combined

Example Initiatives

- Centralized logistics
- Sustainable waste collection
- Dimming public lighting
- Sustainable street furniture
- Energy scans
- Smart meter & Energy feedback displays
- Smart plugs

Example

-Lighting in Concerto Music Shop
- Philips LED
- Tradidional
- Saving Bulbs

The Climate street project was initiated by the entrepreneurs from the Climate Street. The idea was to use already planned work to the road to make the street more sustainble. With a group of 46 (of 140) show owners several technologies or solutions were tested making the street also a showcase for smart solutions

Trams and public lighting are powered by electricity generated from the ***garbage*** of the Amsterdam people and small and medium enterprises.
Garbage in this street is collected by a private waste management company that uses electrical vehicles only which is delivered to the Waste Power plant, ***a kind of cradle to cradle***

GARBAGE IS GOLD

Trams stop are powered by solar energy and will be provided with WiFi shortly → attractive for tourists also to stimulate public transport and park their car at the edge of the city

Not supplier orientated but customer orientated

Living Lab Approach: Smart Meters

Making energy part of our daily Life
Energy Management Display

- Co-developed tested with 350 consumers
- Co-Developer with 50 entrepreneurs (Climate Street)
- More interactive (include weather),
  simplified (and clear focus on energy)

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In 2009 the West Orange project was started, a collaboration between Ymere, IBM, FarWest, NUON, UvA, AIM and other. The goal was to develop a Energy Management display that could be used by everyone.
Challenges met:
1.Amsterdammers are not used to manage their energy
2.First display was ugly and
3.Energy management seems to be the hobby of rich people.

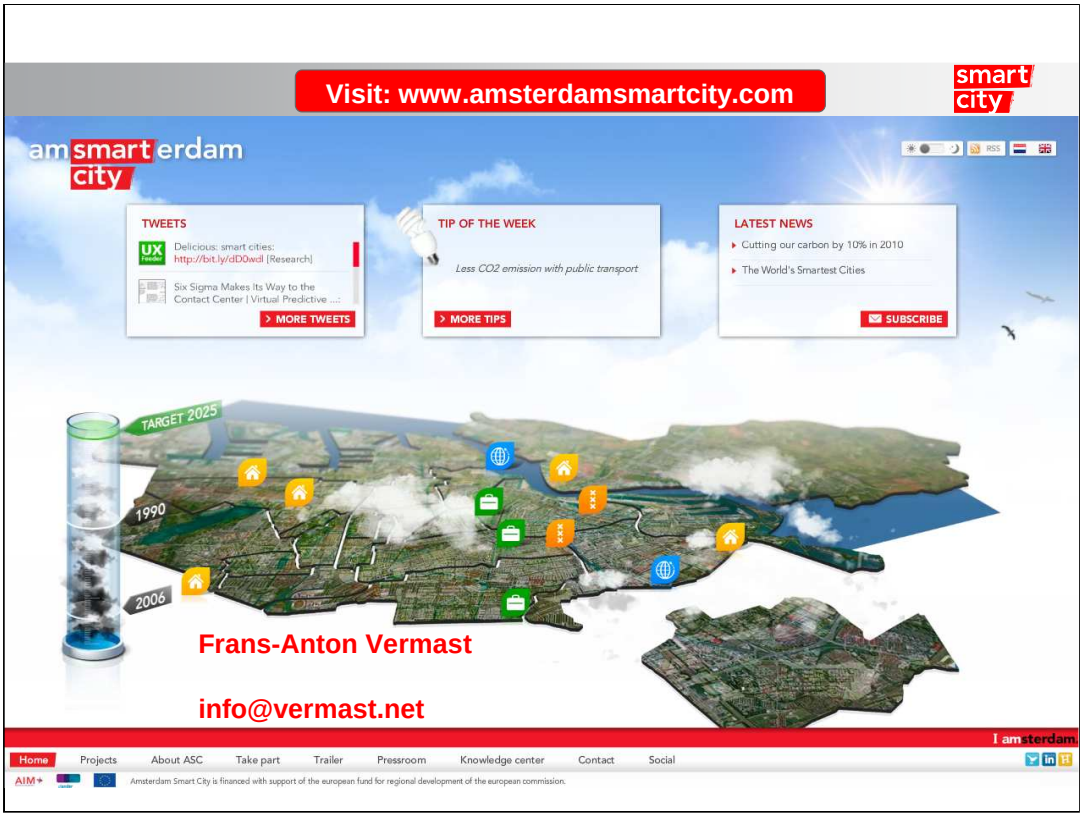
After tests with hundreds of consumers and entrepreneurs, several energy feedback systems a few products are now going to market.
Quby for the moment as most successful one.

Lessons learned

- **Independent Entity hosting public and private players …**
  - …enabling new partnerships
  - …and settling proprietary issues on data
- **Capitalise the political cycle including**
  - Political Sponsorship
  - Governance orchestration
- **Utilizing what has already been created and cross fertilize with other relevant programs**

Conclusions

1. The City is an **Open Platform**
2. Products and Services are **User Centric**
3. The most **liveable cities** will be cities with the **best Apps**
4. Paradigm shift: Ownership vs **Availability**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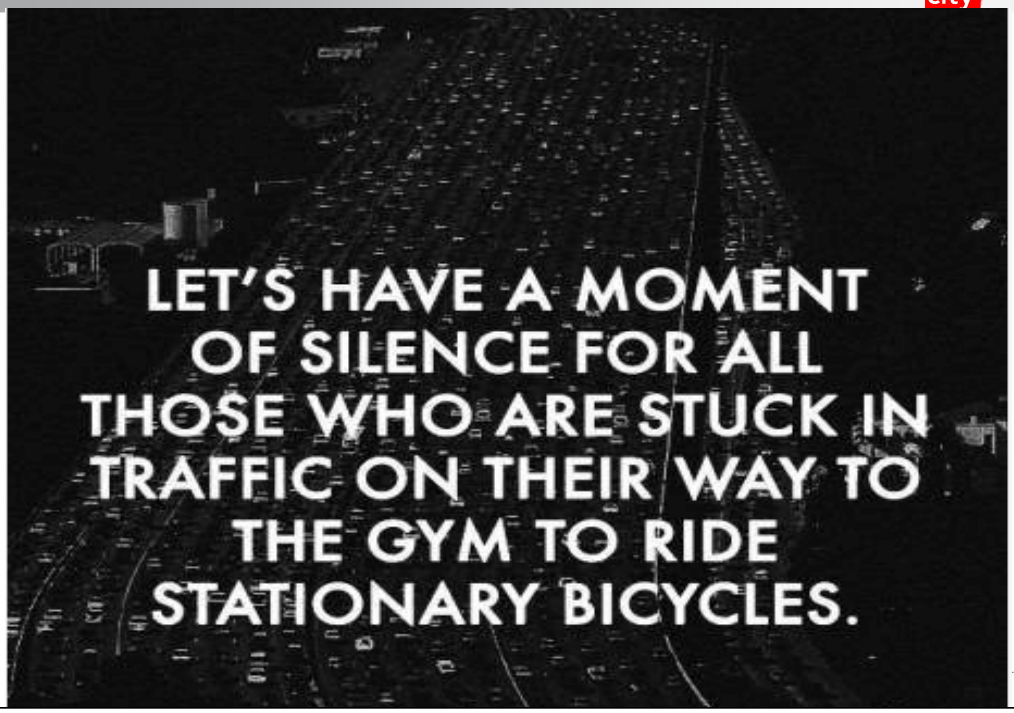
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OF SILENCE FOR ALL
THOSE WHO ARE STUCK IN
TRAFFIC ON THEIR WAY TO
THE GYM TO RIDE
STATIONARY BICYCLES.