



STARDUST

Enlightening
european cities

SOME LESSONS LEARNED ALONG THE WAY

Future-proofing cities – STARDUST solutions and next steps
Tampere, June 7th 2023

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BEYOND
THE
ABSTRACT.

Tampere Smart City Expo & Conference

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STARDUST started on September 2018...





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LIGHTHOUSE CITIES

PAMPLONA
TAMPERE
TRENTO



FOLLOWER CITIES

CLUJ-NAPOCA
DERRY
KOZANI
LITOMERICE

STARDUST PROJECT STARTED IN SEPTEMBER 2018...

but the cities and project partners started planning the activities at least two years earlier...

This means that today we are implementing smart solutions that were designed 7 years ago, and during this time, ... Things happened

- Several partners left the project –including the city of Litometice – and others joined.**
- The framework conditions (economic, political, technological, ...) have changed during this time...**
- In general, many unforeseen issues happened in the three lighthouse cities**

SOME OF THE BIGGEST CHALLENGES THAT STARDUST HAVE FACED HAVE BEEN:

- **Some of the technologies or solutions that were to be implemented did not have consistent and market-conforming business models. This leads to a failure in the implementation of the action (i.e. 5th generation district heating in Trento) or a high difficulty in replicating it in a scenario without external funding.**
- **In the case of long-term technology projects, trends and scenarios can turn out differently than expected in the planning phase. It may be that some of the planned solutions no longer make sense.**
- **Technological issues. Being a pioneer and working on innovative solutions is not easy and takes time. Typically, the innovative solution does not work well the first time. Sometimes not even the second time...**

- Long-term projects are highly exposed and affected by the political ups and downs of cities. Mayors change, city priorities may change, entry into force of new legislation...
- Integration is a sexy word, but in practice it is very difficult to integrate systems, technologies, ownerships... in an efficient and optimised way.
- Innovation is about change. And no one likes to be changed, except babies in wet nappies. There is a certain reaction to the adoption of innovative approaches or solutions by industry, local administration and people.(i.e. difficult to include innovation criteria in public tenders)
- Citizens are sometimes not involved and their opinions are not taken into account in the implementation of projects. This can lead to a lack of participation that makes implementation difficult (e.g. energy renovation of private dwellings).



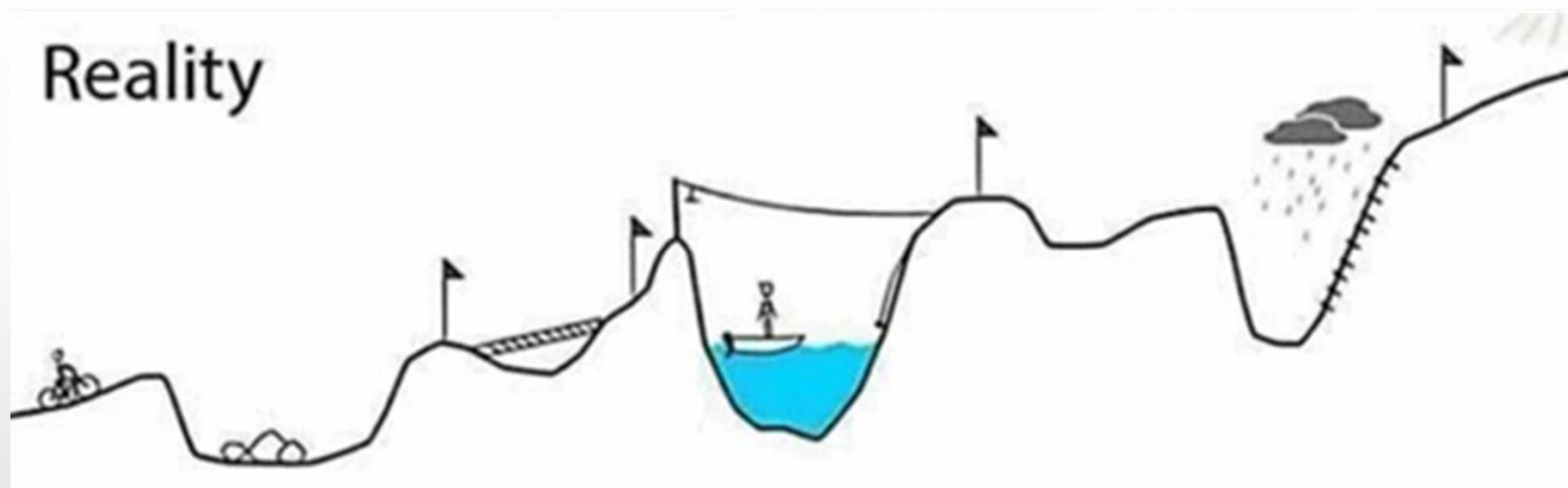
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(thank you Adriano Bisello)



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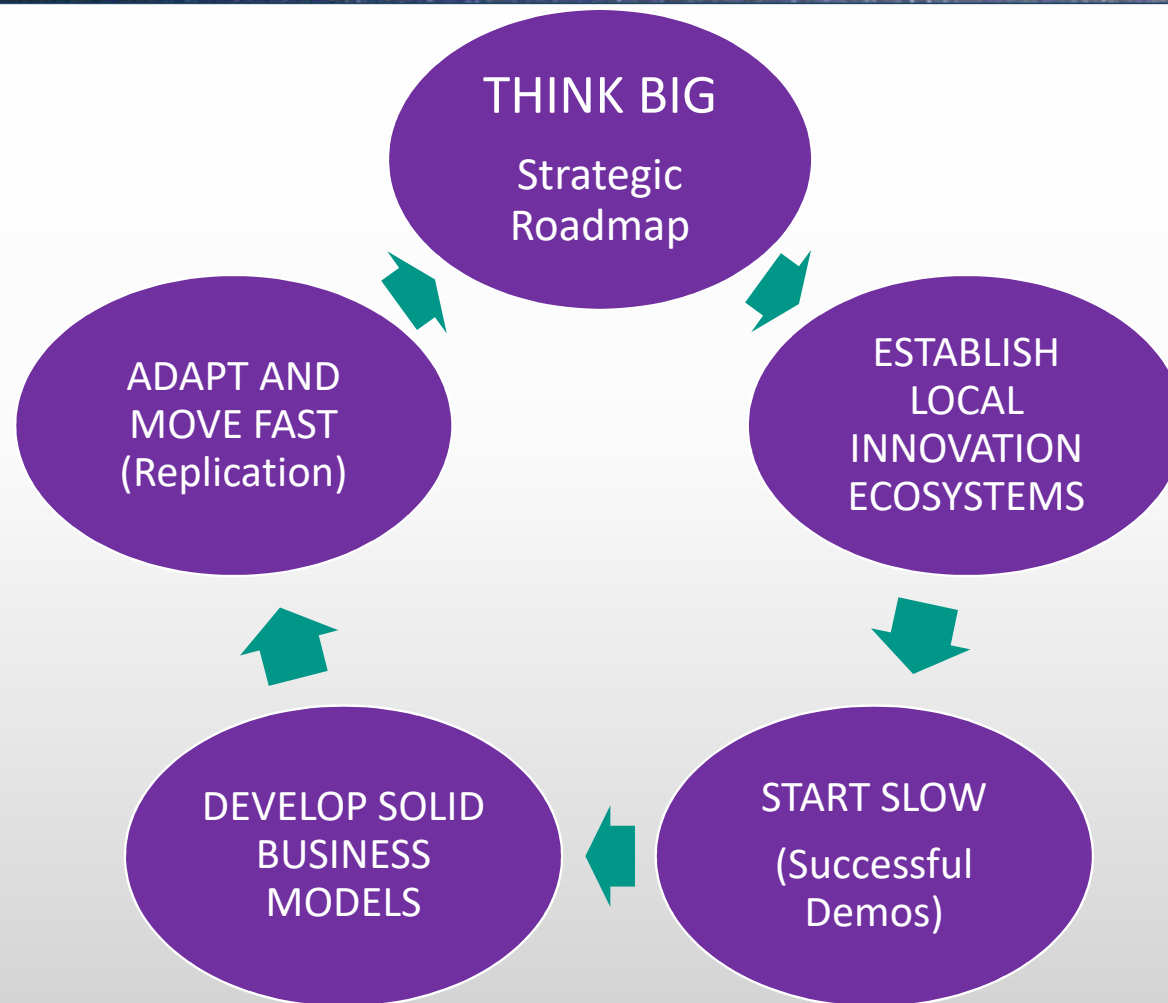




From all of the above, and after 5 years of the project, we can draw some conclusions and we have learnt some lessons. the most important ones are:

- Demonstration actions should be part of a **long-term strategic roadmap for the city**. This strategy must be shared by the stakeholders of the local Innovation Environment. Build consensus between stakeholders and public administration at local level.
- **Strong political commitment** is essential, to survive even if there are changes in local authorities and mayors.
- Energy transition must be **economically viable**. Innovative business models need to be identified, tested and validated so that demos actions can be implemented and replicated in a non-subsidised scenario.

- As nobody expects the Spanish inquisition, cities and their innovation ecosystems must therefore **be ready to adapt to new scenarios** and react quickly.
- **Involve citizens and other stakeholders** from the beginning, not only by informing them of what is going to be done, but also by allowing them to give their opinion on what have to be done and participate in the process



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THANK YOU

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