

# Free Software and Open Standards in Tourism



**16.11.2019**

Patrick Ohnewein

Nature of Innovation.

# Agenda

- Step 1: A Common Vision
- Step 2: Understand the Challenges in Tourism
- Step 3: Open Standards Community
- Step 4: Free Software Community
- Infrastructure: Automation and Procurement

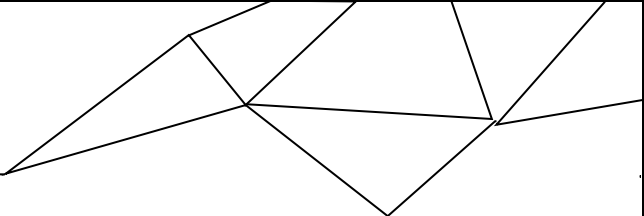
# SMART Green Region





## **Step 2: Understand the Challenges in Tourism**

# Guests ask Voice Assistants



amazon echo  
99,99€



echo dot  
59,99€

echo spot  
129,99€



echo plus  
149,99€





# Guests ask there car Infotainment System?



# Guests will be driven by Autonomous Vehicles



HH Sheikh Mohammed Bin Rashid Al Maktoum fluencer

We are building a new reality for our people, a new future for our chil...

Follow

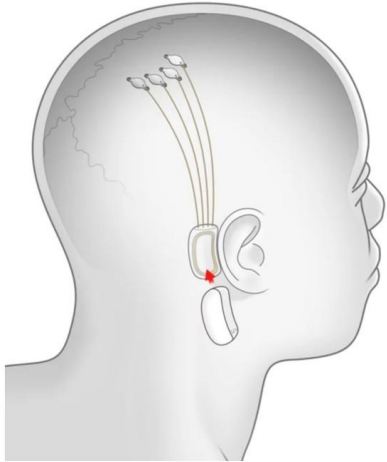
Today we launched Dubai Autonomous Transportation Strategy, by 2030, 25% of all trips in Dubai will be driverless. The strategy will help increase traffic efficiency, productivity, reduce traffic congestions and pollution & save millions of driving hours. We've also launched the Autonomous Transportation Challenge, the world's biggest RFP to global R&D centers to apply this technology in Dubai. Dubai offer's a global unique model for the city of the future & turns itself to the world largest R&D lab for driverless transportation; [show less](#)



## Autonomous Vehicles

By **2030**, **25% of all trips**  
**in Dubai** will be provided by  
**Autonomous Vehicles.**

# Guests will maybe just know?



Elon Musk's **Neuralink** looks to begin outfitting human brains with faster input and output starting next year (2020)

<https://techcrunch.com/2019/07/16/elon-musks-neuralink-looks-to-begin-outfitting-human-brains-with-faster-input-and-output-starting-next-year/>





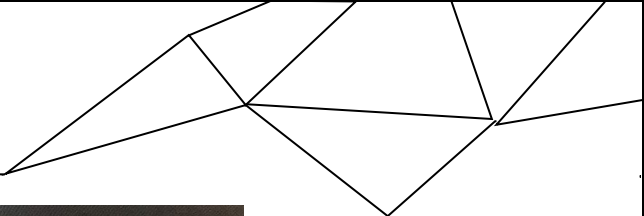
## **Step 3: Open Standards Community**

- Members

- Additive+
- Altea Software Srl
- aries.creative KG SAS
- ASA OHG
- Brandnamic GmbH
- DESTINATION srl
- GardenaNet snc
- Giggle
- HGV
- IDM Südtirol
- Internet Consulting GmbH
- Internet Service GmbH
- LTS
- Marketing Factory GmbH
- MM-One Group srl
- NOI Techpark
- Outdooractive
- PCS GmbH
- Peer GmbH
- Rateboard GmbH
- Schneemenschen GmbH
- SiMedia GmbH
- Südtiroler Bauernbund
- YesAlps
- Yanovis
- ...

# AlpineBits Alliance

[www.alpinebits.org](http://www.alpinebits.org)



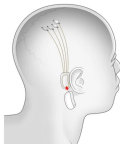


## **Step 4: Free Software Community**



# Open Data Hub Südtirol - Alto Adige

<https://opendatahub.bz.it>



## OPENDATA HUB SÜDTIROL ALTO ADIGE



Agriculture



Commerce



Craftsmanship



Culture



Mobility



**Tourism**

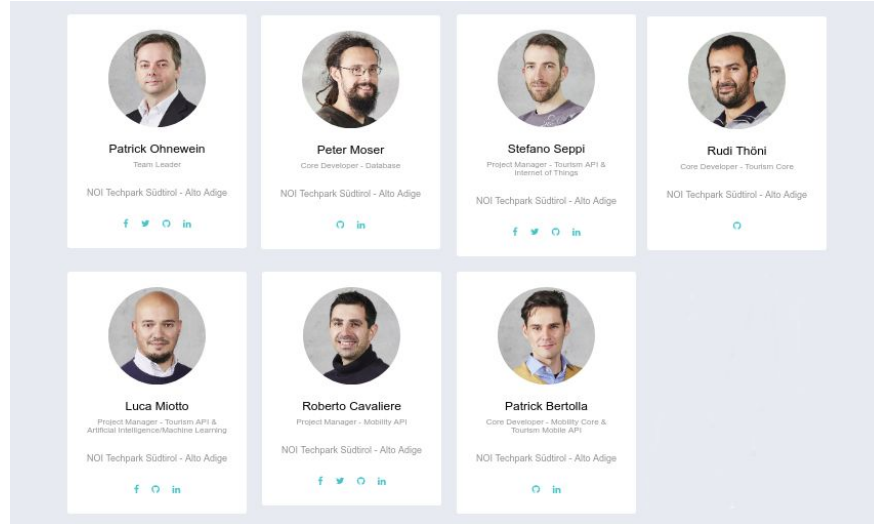


...

# Open Data Hub Team & Community

<https://opendatahub.bz.it>

- Team at NOI Techpark
  - 1 Team Leader
  - 3 Project Managers
  - 3 Software Architects



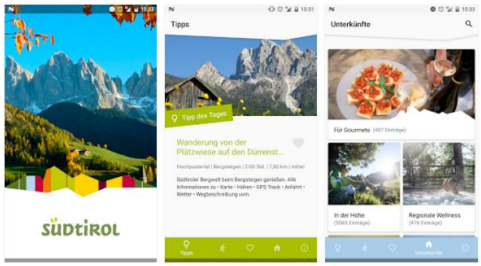
- Companies involved
  - ~60 companies (1006.org, Array, DR, DM, EDP, Enforcer, Konverto, ...)
  - more than 150 developers, project managers and designers



# **Infrastructure: Automation and Procurement**

# Implement processes for community involvement!

## If you can document it, you can automate it!



```

22 public class Dataheriver {
23
24 //GETLIST
25 private List<String> getStationTypes(EntityManager em){
26     List<String> result = null;
27     result = Station.findStationTypes(em);
28     return result;
29 }
30
31 //MPT additions for V2
32 public List<Child> getChildren(String type, String parent){
33     EntityManager em = JPAUtil.createEntityManager();
34     try{
35         Station station = (Station) JPAUtil.getInstanceByType(em, type);
36         List<Child> children = null;
37         if (station != null){
38             children = station.findChildren(em, parent);
39             return children;
40         }
41     }catch(Exception ex){
42         em.printStackTrace();
43     }finally{
44         em.close();
45     }
46     return null;
47 }
48
49 public List<Type> getTypes(String type, String stationId) {
50     List<Type> dataTypes = null;
51     EntityManager em = JPAUtil.createEntityManager();
52     try{
53         Station station = (Station) JPAUtil.getInstanceByType(em, type);
54         if (station != null){
55             dataTypes = station.findTypes(em, stationId);
56         }
57     }catch(Exception ex){
58         em.printStackTrace();
59     }finally{
60         em.close();
61     }
62 }

```



# Clear Requirements in Procurement

## Open Standards



## Open Content



## Free Software





**Thank you**