



# Personal ir Quality onitor

*Life is too short for toxic air*

# Problem Definition



- nontransparent knowledge of pollutants in cities
- only around 500 measuring stations in **whole** Germany
- not in real time
- stationary
- expensive
- not personal



# Applications



Asthma & Allergies  
prevention



Pollution monitoring  
& warning for citizens



Training  
optimization



“Green” route  
planning



# Solution

- Portable air quality sensor
  - tailored for your own needs
- Partnership with companies
  - health insurances
  - manufacturers of sports equipment
  - fashion producers
  - electronic producers
- Real-time database of all sensor readings
  - Mobile app
  - WebApp



# Value proposition



- Costs: € 14,7 billion for the public health sector
- ~180€ per person per year
- 12.3% of deaths as a result from respiratory illnesses

➡ Public services and health insurances have an **economical** incentive to prevent respiratory illnesses

# Hardware Setup





and You

Global database

Customers

SCIENCE HACK

Data

Current position Data  
3IC

Data for route planning  
Internet connection

Settings

Bluetooth

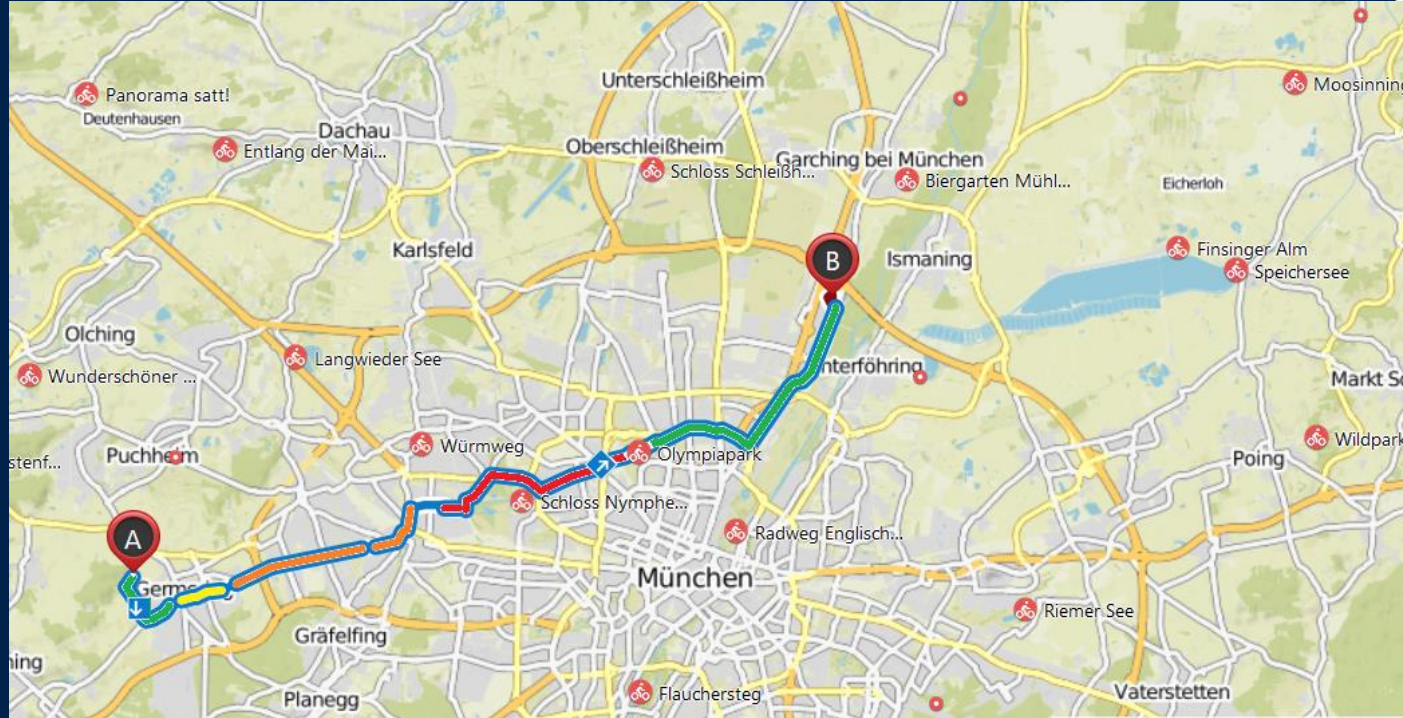
Data for personal use



Mobile phone

# Main Customer Product

SCIENCE HACK




# Case Study: Patients with Asthma

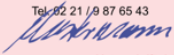
## Early warning and prevention.

- prescription from doctor
- alerts at the current location
- Route planning to avoid danger



<b>Krankenkasse bzw. Kostenträger</b>			<b>BVG</b>		<b>Hilfs- mittel</b>	<b>Impf- stoff</b>	<b>Spr.-St. Bedarf</b>	<b>Begr.- Pflicht</b>	<b>Apotheken-Nummer / IK</b>	
<input checked="" type="checkbox"/> Gesetzlich			6	7	8	9				
<b>Name, Vorname des Versicherten</b>			<b>geb. am</b>		<b>Zuzahlung</b>					
[REDACTED]			[REDACTED]		<b>Gesamt-Brutto</b>					
<input type="checkbox"/> Geb.- pfl.										
<input type="checkbox"/> Nicht- pfl.										
<input type="checkbox"/> Sonstige										
<b>Kassen-Nr.</b>			<b>Versicherten-Nr.</b>		<b>Status</b>					
[REDACTED]			[REDACTED]		1000 1					
<input type="checkbox"/> Unfall										
<b>Betriebsstätten-Nr.</b>			<b>Arzt-Nr.</b>		<b>Datum</b>					
271111100			654321161		02.12.2018					
<input type="checkbox"/> Arbeits- unfall										
<b>Rp.</b> (Bitte Leerräume durchstreichen)										
										
*****										
*****										
<b>27111100</b>										
<b>Abgabedatum</b> in der Apotheke										
<b>Bei Arbeitsunfall</b> auszufüllen!										
<b>Unfalltag</b>										
<b>Unfallbetrieb oder Arbeitgebernummer</b>										
<b>271111100Y</b>										

**Vertragsarztstempel**

27/111100  
Psychologische Gemeinschaftspraxis  
**Dr. med. Markus Mustermann**  
**Dr. rer. nat. Erik Mustermann**  
Dorfeidestraße 1  
Tel. 02 21 / 8 87 65 43  
  
Unterschrift des Arztes  
Muster 16 (7.2008)

# Business model

Data Base



buy data

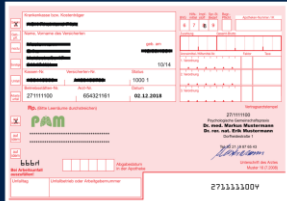
transmits

purchase

access

subsidies

alerts on pollution  
green navigation



# Future Development

- Integrating sensor into smart devices
- Mass production to reduce costs
- Measurements in water will be possible soon
- Installing sensor into drones for research purposes



# Summary

- air pollution is a big issue for billions of people world wide
- high demand
- partnerships
- capital
- save lives
- revolutionary





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