

IBM AgroPad - AI-powered technology to health-check soil and water

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IBM Research - Brazil  
Industrial Technology & Science

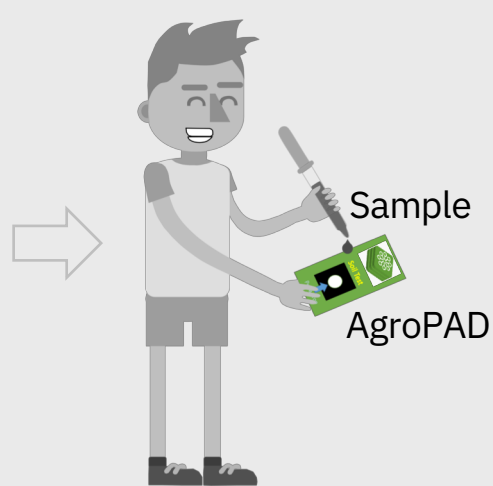
Contact: Mathias Steiner; [msteine@us.ibm.com](mailto:msteine@us.ibm.com), [mathiast@br.ibm.com](mailto:mathiast@br.ibm.com)

# How to use

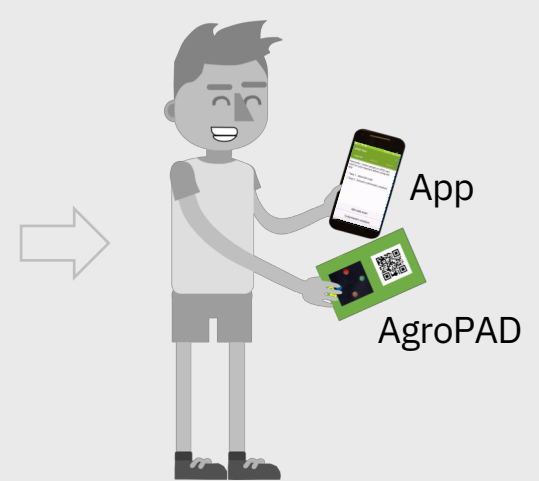
1 – Collect sample



2 – Perform test

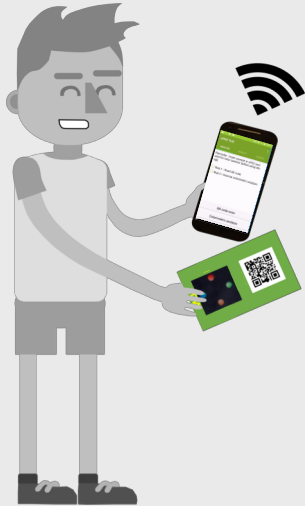


3 – Obtain results

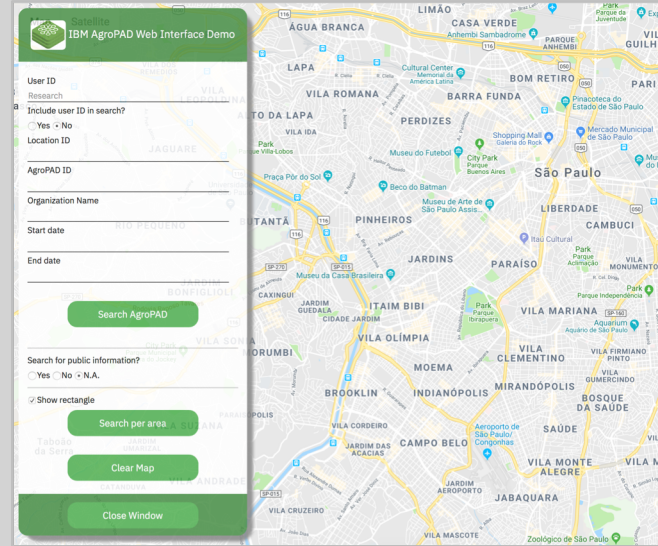


# How to use

## 4 – Send data

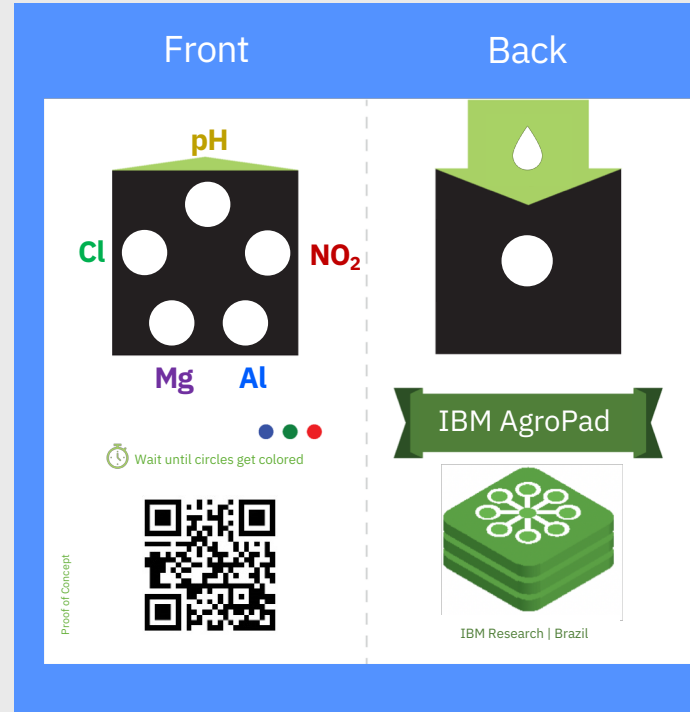
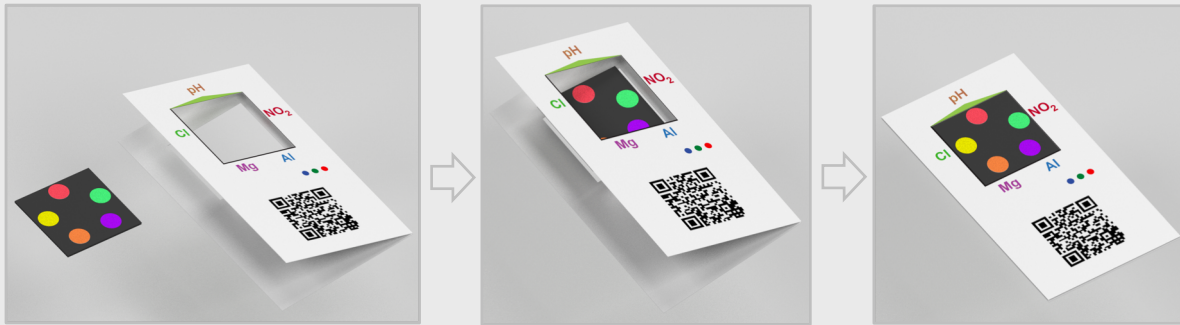


## 5 – Visualize data

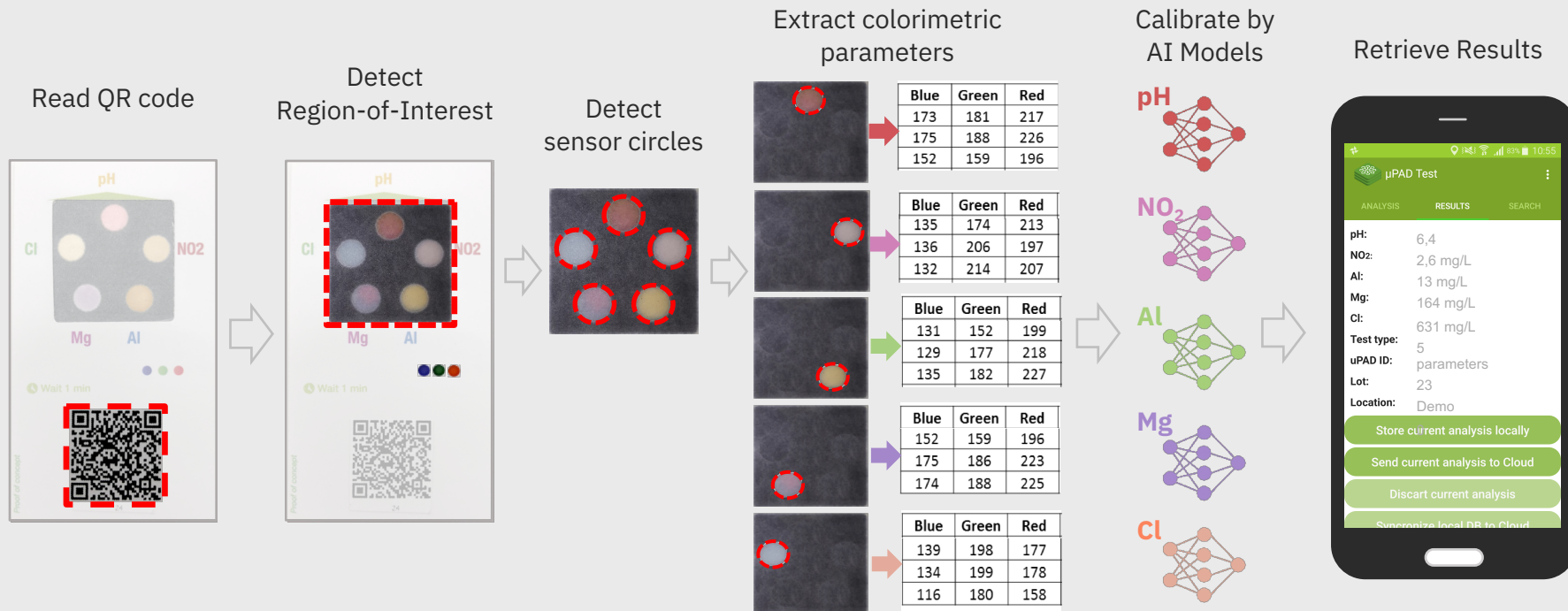


# How it works

- Works through capillary forces in paper; does not require battery.
- Detects 5 chemical parameters in a single test: pH, Cl, Mg, Al, NO<sub>2</sub>
- Low production cost, easily disposable.
- Does not contain electric components.



# Smartphone App: AI on the Edge



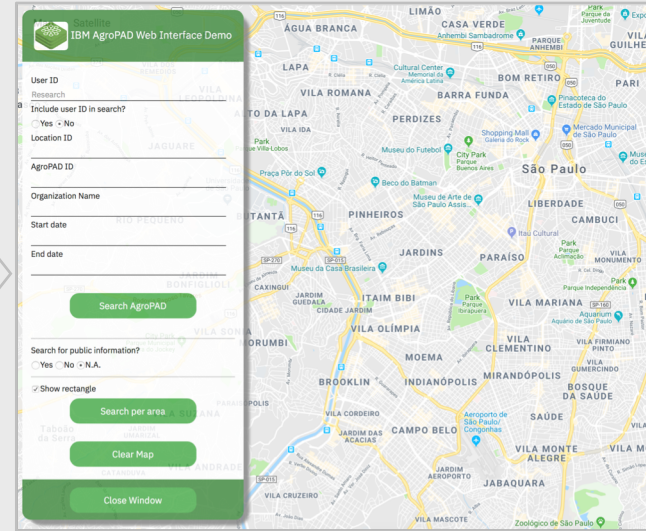
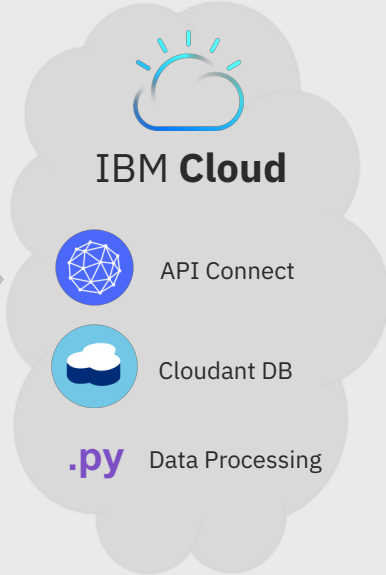
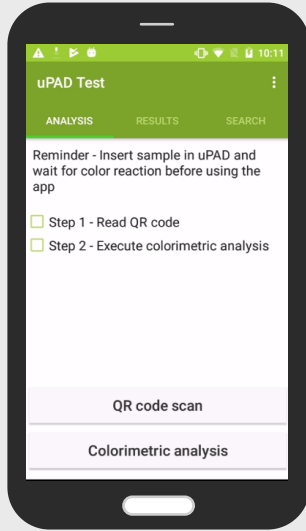
# Data acquisition, management, analysis

## AgroPAD

## Smartphone App

## Cloud Platform

## Web Interface



# More information

No farms, No food: <https://ibm.biz/BdYKHW>

Youtube video: <https://youtu.be/UYVc0TeuK-w>

