Enabling Grid Field Workers with One Mobile Solution

Olaf Nattenberg Westnetz

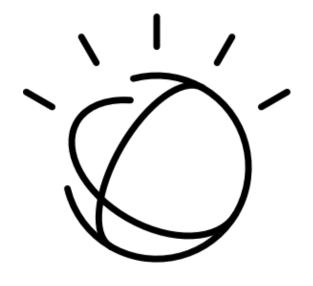
Dr. Danny Fundinger IBM

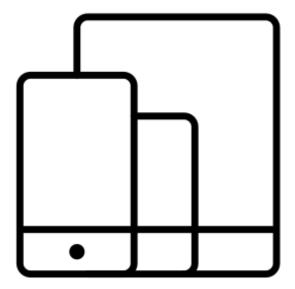
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Digital Reinvention led by Mobile







We make things COSY.



Because of us, your home is warm, comfortable and well-lit.

WESTNETZ

Part of **innogy**



WESTNETZ

largest distribution grid provider in Germany

divisions of electricity, gas, telecommunications, water and heat

51,000sqkm supply area

5,5m house connections

68,000 stations to manage

220,000km electricity and gas network

80,000 grid data changes per year

1,500 field technicians

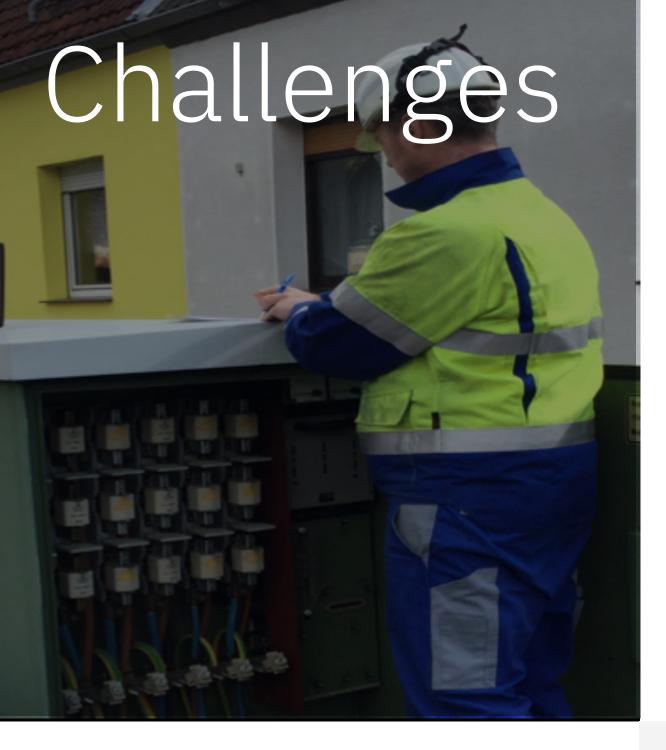
200,000 inspection tasks per year

24/7hr services (maintenance, construction, emergency)

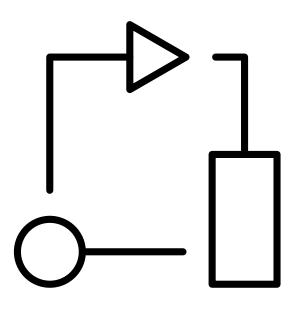


WESTNETZ

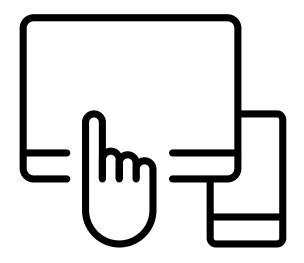




full life cycle services



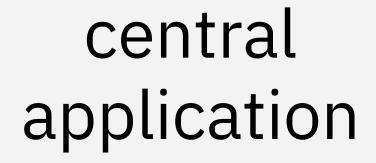
critical data handling

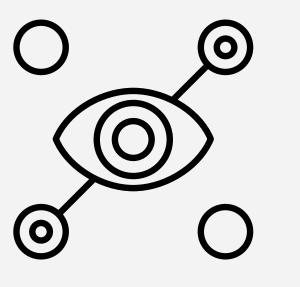


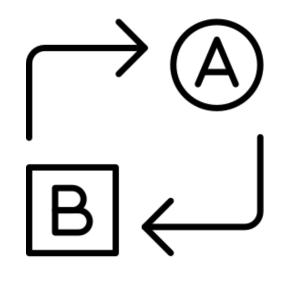
enhanced user experience



process improving

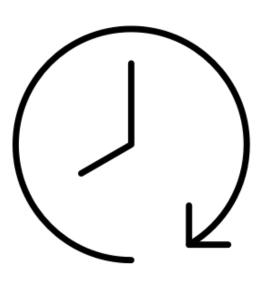


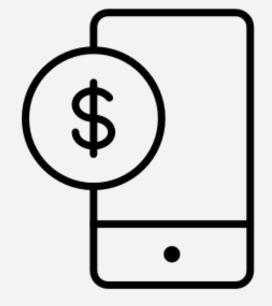




profitable

increased security







Day in a Life of a Field Technician

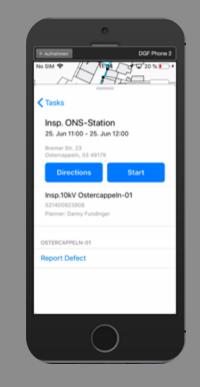
Plan the day

- see planned tasks
- assign tasks

Get to work

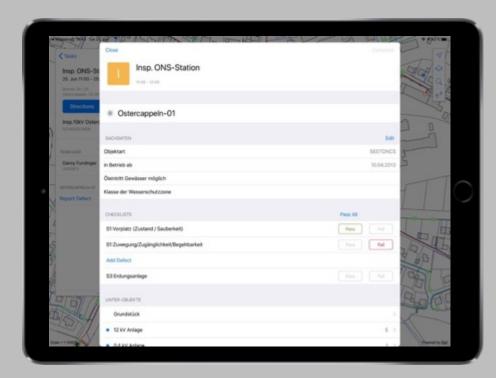
- navigate to an asset
- inspect asset and surroundings
 - align with colleagues





Do the work

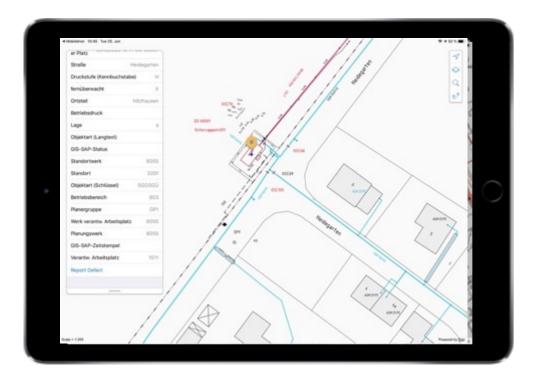
- work on tasks
 - inspect assets
 - report defects
 - do switching



Act on incidents

get an emergency task assigned

- work on resolving the issue
- report on incident

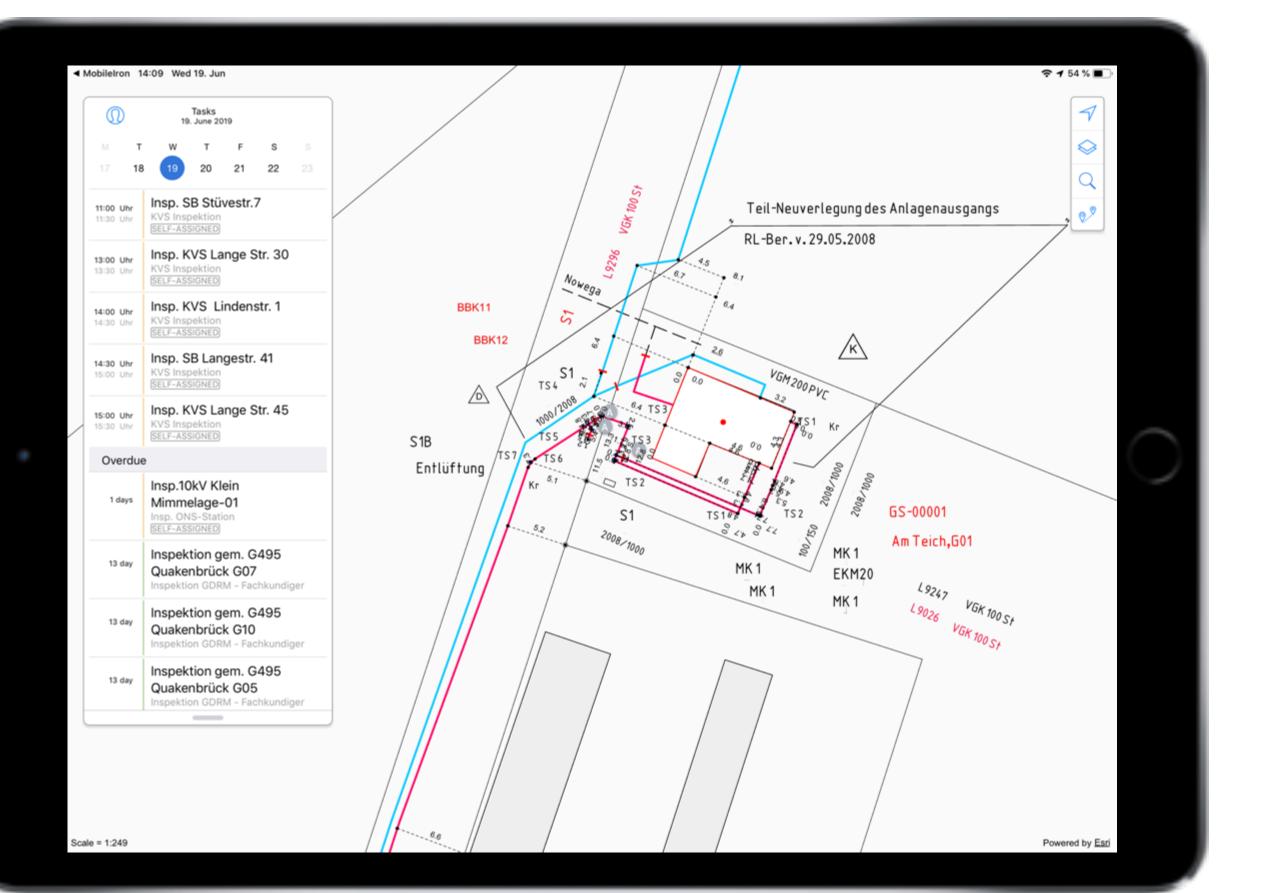






Key Functional Elements

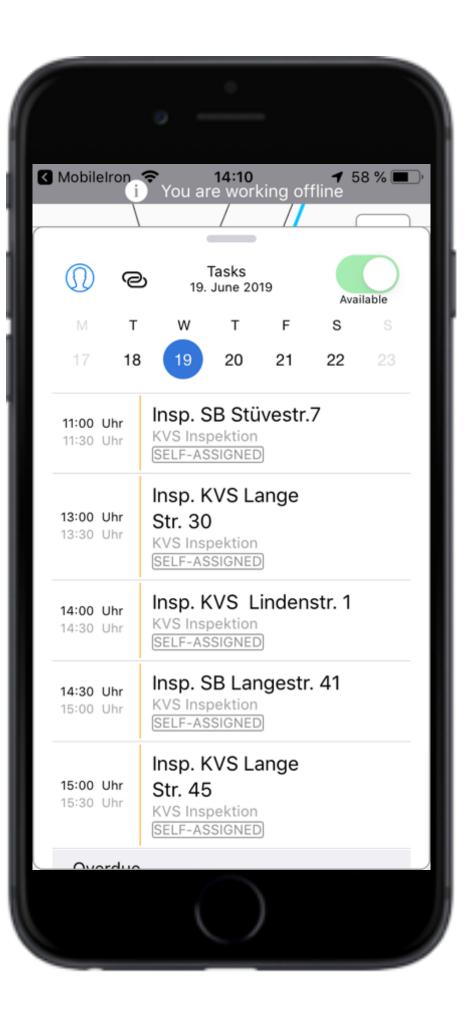
- personal allocated work orders
- direct target navigation
- individual work calendar
- seamlessly zoomable map display
- detailed asset information
- graphical grid display (various divisions)
- configurable asset check lists
- ad-hoc defect reports
- asset and address search on map
- additional documentation
- more



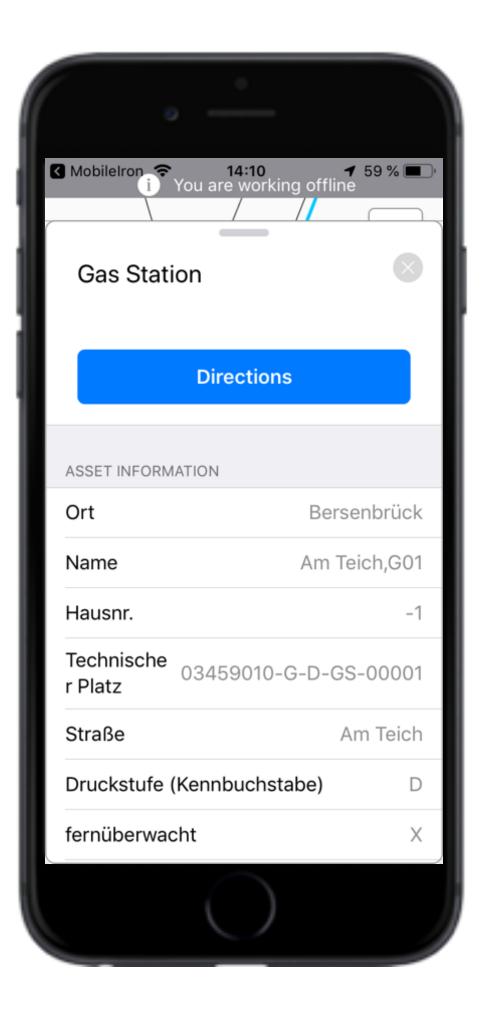


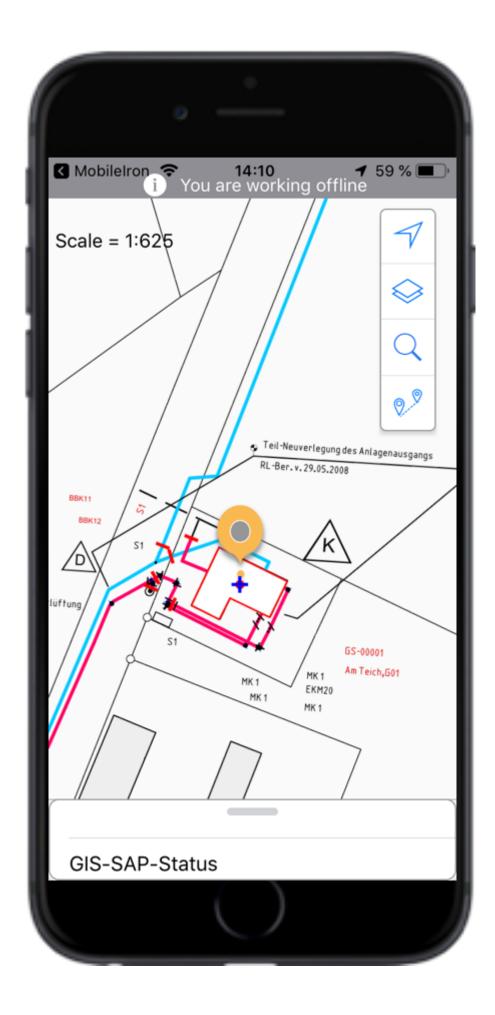
Backup Device

- quick calendar view
- in-car navigation
- quick checklist handling
- expert calls
- more



Largo parts of the Comman grid for electricity, water, gas and fibre-optics is managed by hnogy's Westnetz each pany. With Child Caro, realtino asses to work orders and CLS data.



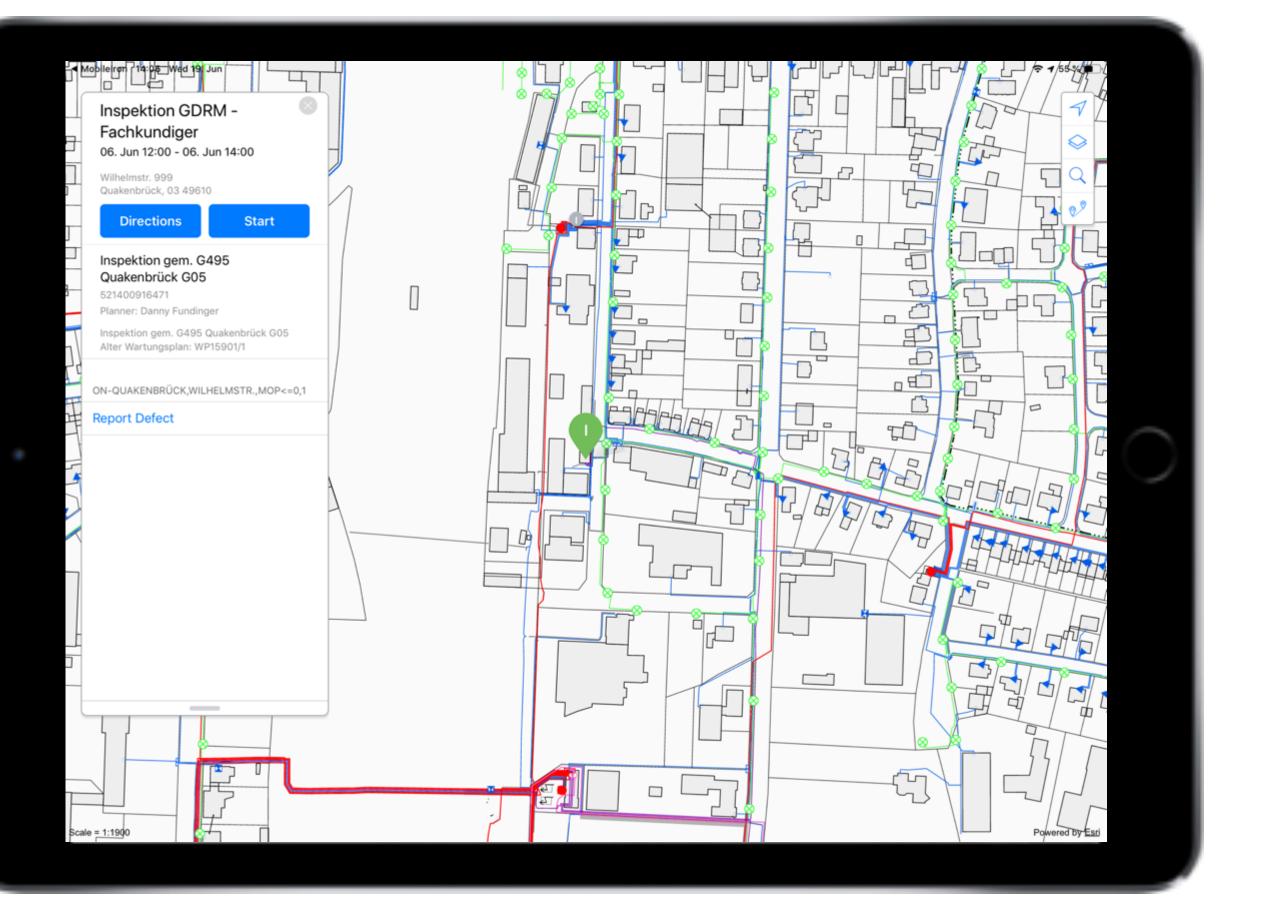




Key Technical Features

- annotation parser intepreting appearance and rotation of custom features
- full offline capability based on mmpk/tpk, mapviews and additional custom data-models
- custom requirements to an industry and client specific UTdatamodel
- optimized synchronization process, leveraging IBM Aspera ulletcloud technologies
- decoupled map creation, transfer and presentation architecture
- strictly strip down of user relevant data to fulfil and optimize his daily work with a minimum of data loads
- extensive full-text search and usage of merged data from GIS and SAP
- external integration with navigation and location services

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Key Takeaways

users

- included from day one
- take their advice and insight
- question and challenge them permanently
- need to do intensive testing
- most valuable source for optimization

mobile

- is a key driver for digitisation via user experience
- drives acceptance by using native functions
- supports aspects of efficiency and profitability
- offline work mode is essential

integration

- extensive use of ESRI SDK
- optimisation of data sync and download
- back end data preparation is half the work
- be agile





Olaf Nattenberg

innogy Netze Deutschland GmbH

+49 162 2511897 olaf.nattenberg@westnetz.de Dr. Danny Fundinger

+49 173 3446496 danny.fundinger@de.ibm.com

