

## APP DEVELOPMENT

### MOBILE SOLUTIONS ALWAYS AT HAND

#### THE APP REPLACES THE DESKTOP SYSTEM

Apps have been adopting classic programs and functions on PCs for years. And for good reasons: A system that we always have at hand, that can notify us of important things at any time and that is easily accessible for everyone, solves many disadvantages of programs on desktop systems. Also, new technologies such as augmented reality or localization can be easily integrated.

#### Many functions bundled?

The growing networking of systems enables a few employees to monitor and control many machines. A high level of mobility and knowledge of many machines are often required.

Employees have a wide range of tasks, from observing and monitoring machine complexes to configuring and setting up machines and troubleshooting in the event of malfunctions.

Technologies are often not uniform but depend on the manufacturer. As a result, the functions for all of these activities are usually distributed across many devices and locations. A smartphone app can help in many ways.



#### The operator becomes remote

Permanent monitoring is no longer necessary by introducing a mobile app. If an operator's attention is required, he can be notified everywhere by a push notification. Actions can also be controlled directly in an app.

The integration of chat tools makes it possible to coordinate, plan, or get help with unknown problems. Video tutorials can also be integrated, which shorten the process of familiarization and enable new features to be conveyed easily and intuitively.

Interfaces such as NFC or QR codes make it easy to identify machines and immediately evaluate its status. Workpieces and tools can also be identified and the correct parameters set automatically.



## APPROACH

### Structuring sustainably and flexibly

In addition to functional requirements, the development of mobile apps must above all meet usability and design. It is therefore inevitable to develop a comprehensive concept for everyone involved, which will be verified by a technical feasibility study.

Based on such a concept, individual user interfaces can be set up that correspond to a valid corporate design.

Functional components can also be worked out. An agile development process with short feedback loops offers the opportunity to respond quickly to innovations and changing requirements at a low cost.

Part of the step-by-step process is an accompanying integration of the application into existing corporate infrastructures, such as cloud and IoT applications.



*“Mobile apps increase access to machines and data and open the gates to the technologies of the future.”*

**Karl-Heinz Wind**  
**Member of Management**

✉ [wind@itq.de](mailto:wind@itq.de)

## BENEFITS

### What are the advantages of an app?

- Bundling many technologies on one app
- 24 hours remote operation possible
- Agile development and adaptation to the latest technologies
- Fast and inexpensive integration into existing infrastructures
- Expanding tools as support e.g. chat or tutorial functions
- Augmented reality features make complicated machines clearer

## SERVICES

### We develop the ideal app for your company

- Teamwork
  - Coaching of methods, patterns, requirement analysis
- Individually tailored holistic architectures
  - Machine operation/HMI
  - IoT solutions
  - Microservice architectures
  - Machine Learning in the industrial environment
- Pronounced operating system and platform experience
- Modular HMIs
- Experience with mobile devices
- Interface technologies
- Project accompanying documentation/ visualization of the architecture
- DevOps