Successful digitalization with Microsoft





We are a consultancy with a strong focus on the development and production of intelligent products for digitalization in industry. We help our customers to introduce digital business models in their enterprises.



Thematic Focus

Smart Systems	Data	Frontend	Hardware
Statistic prediction	Data Warehouse	User experience	Hardware development
Real Time decision making	Data storage Analytics Cubes Business Intelligence	Communication Visualization	Embedded programming Hardware productior

We help our customers to achieve benefits for their products across the boundaries of their sites.

Through centralized analysis we build individual dahsboards and user frontends that help customers keep their entire production site in focus.



Why you should chose ML!PA

• Everything from one source:

We are a single supplier that can offer everything from one hand, starting with project planning and even including development and production of hardware.

From the start you can monitor everything and have full control over all possible changes and decisions.

This enables us to offer a new business model: the customer does not have to cooperate with multiple partners to develop a new IoT solution.

• We have the means to plan, develop and produce the digital products you envision.



Our offer range

Strategic consulting

Feasability and risk analysis

Development of sensors

Development of circuit boards and modules

Embedded development

Cloud Backends

Analytics and Machine Learning



Digitalize your business

- IoT products enable you to connect your products in a smart way and save time and money in your future business.
- The intelligent connectivity between product and software enables you:
- To have a better overview and keep cost intensive operations in your focus.
- To make better and informed decisions and predictions based on collected data.
- To control and monitor your pdoucts easily by sending commands and notifications to connected devices.
- Save significant amounts of time by using connected software and programs that are designed to exactly fit your need.



- Device status, remaining battery livetime and connectivity is always available.
- By security checks and revoking of access permissions for individual devices on demand, the access to confidential information by unauthorized people is impeded and data leakage can be avoided.
- The introduction of new business models using smart electronic products is a very complex process. The path to success is paved with many obstacles that can cause cost explosion or even the stop of development.
- Besides technical challenges, the business context and the market opportunities are often neglegted.
- Based on the experience from multiple projects, we have developed a program with 6 steps to make your IoT project a success.



Our approach

Our approach is divided in two parts:

• The development of an overall concept that matches your need in terms of technical and strategic achitecture. Your data handling and analytics in a software that is tailored to your need.

• The design of electronic designs for your specific individual product



- Our approach enables our customers to rapidly reach their target.
- Together we develop a realistic schedule and evaluate the technical feasability of your product idea.





Problem awareness

- First it is important to discover the current problems together and analyze and understand them.
- The following basic questions need to be answered in this step:
- What are the real problems?
- What are the needs?
- What are current challenges?
- Based on the answers on these questions, we can specify the requirements and find a realistic and strategically reasonable goals.



Product idea and market knowledge

- In the next step, we develop and clarify the detailled requirements in an expert discussion. During this discussion we try to better understand the current status of your enterprise and all relevant procedures, processes and interfaces.
- After that we try to conduct a market analysis and estabish concepts for the technical implementation of your project. We discover which technical approaches you can use and where individual adaption is required.





- Now the last open questions such as the technical specifications, energy management and data transfer need to be answered.
- Based on the use case the rough concecpts are detailled and critical requirements or components are identified. From this step we create a detailled implementation concept.
- The planning of a concrete prototype enables cross-checking the concepts. The focus here should lie on critical components and the interaction of existing products with new components.



Technical development

- After the prototype was created and validated, a first minimal version (MVP = Minimum Viable Product) with basic functionality can be develoed.
- This product ais installed and tested on a live or demo system. Through the minimal viable product, the time to marked is significantly reduced and customer feedback can be collected at an early stage from the field.



Market introduction

- After the MVP has delivered first results from the market and from the users, the product and solution are enhanced and improved step by step.
- The own ideas and use cases and ideally the feedback from the market are included in this process. In this phase of the approach, the topics of support and service are also introduced, supported by ML!PA.



Product Lifecycle

- The last phase of the IoT product lifecycle is decomissioning. It is important to plan the end of life of a device during the design phase. This enables end users and stakeholders to remove a device from the system in a safe manner and supply a new device.
- It has to be ensured that the decomissioned product is not liable to security issues that might cause the entire system to be open to attacks after the removal of the device from the system.
- Let us help you to successfully plan your IoT product lifecycle for your smart product.

