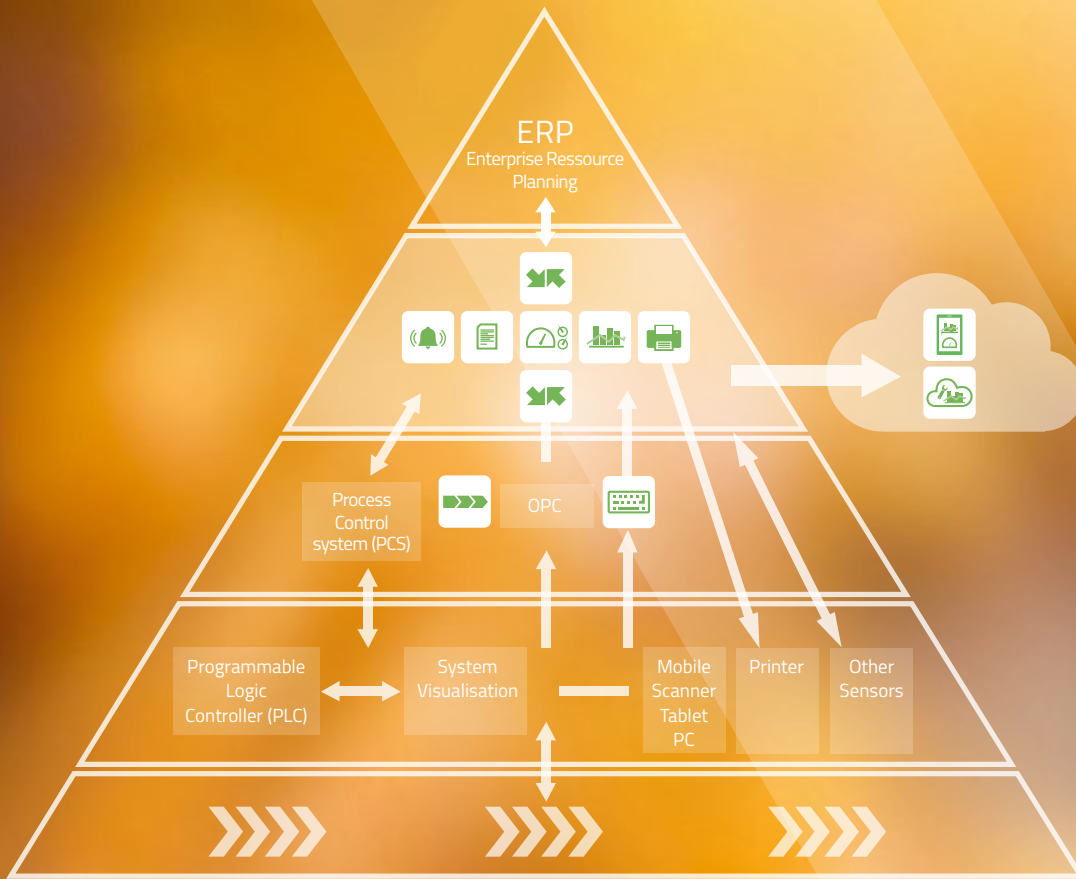# The Digital Factory

- Increasing efficiency and quality
- Permanent data availability
- Digital documentation
- Fully digitalized quality examinations
- Management cockpit for continuous improvements

According to your needs we accompany you in the best committed and innovative manner, from the first idea to commissioning and far beyond: With consulting, strategy development, implementation, and training.

The diagram shows a pyramid with the following labeled levels and components:

- **ERP** — Enterprise Ressource Planning
- **Process Control system (PCS)** — OPC
- **Programmable Logic Controller (PLC)** — System Visualisation — Mobile Scanner Tablet PC — Printer — Other Sensors

# The Future Of Autonomous Production

The intelligent factory (Smart Factory) rises: Due to new communication models, production facilities and logistics systems will be enabled to largely organize themselves. Basic technical concepts are cyber-physical systems which communicates with each other using the Internet (Internet of Things). A product, for instance, brings its own production information in machine-readable form into the manufacturing process. The data will be used to control and supervise the product path through the production facilities and the corresponding individual process steps.

The Autexis IT develops, programs, and implements the necessary software – the «Digital Factory». From the beginning we support our customers with consulting, strategy development and training on their way to the Intelligent Production and Industry 4.0.

New innovative business models and services will be made available using the Smart Factory. Autexis IT AG supports You on the way into the future with the «Digital Factory» software suite.

# Smart Data Instead Of Big Data

**INFORMATION HUB AND
THE DIGITAL FACTORY (DF)**

With its generic and customizable gateways, the Digital Factory acts as an information hub between data management systems and computer-integrated manufacturing. Standardized communication combined with the intelligence of the Digital Factory modules allows to extract and generate "smart data" out of the innumerable bunch of information.

This newly created comprehensive production intelligence which includes processes and systems always provides an up-to-date view of the most important production key figures and enables optimization of the workflow without delay. Orders are automatically passed on to the control systems. The direct transfer of the correct actual values ensures precise traceability of the products and processes.

Moreover, the Autexis DF software opens the way for proactive maintenance of your production equipment and avoids unwanted system downtimes at an early stage. Due to our benefiting mobile solution you are always informed about the current production output and the state of your systems, even when you are on the move. In addition, the new Track & Trace module ensures a complete traceability as well as a validating batch report.

**AUTEXIS** IT AG

Transparency and process reliability:
As a result of the modules and services
offered by the Autexis IT, you can increase
your productivity – whenever you want
and wherever you are.

## Some DF Modules At A Glance

### EQUIPMENT AND ERP CONNECTION

The interconnectivity of the different system levels – from Control Systems and Shop Floor to Enterprise Resource Planning - is the central and base function of the gainful operation of the intelligent factory. Modules which are responsible for a standardized and unified communication lay the foundations to generate "smart data" for optimal monitoring and controlling of the production.

### EQUIPMENT COCKPIT

For all equipment, the current state, the most important production characteristics as well as urgent alarm messages are displayed across all processes in real time. Thus, you always have an overview of your entire production process. In tabular form and/or graphically with clear charts.

### KPI/OEE DASHBOARD

Relevant key figures can be calculated from the production and energy data and will be displayed in any desired form. Key figures such as efficiency (OEE), downtimes, runtime factors, availabilities, order data and energy values can be visualized in favored graphics (waterfall diagram, step chart, bar chart).

### ORDER MANAGEMENT

In the order overview the order plan data are displayed, including details on bill of materials and routing activities. Production orders can be administered and released. In addition, all manually and automatically posted order feedback are displayed. The products can be labeled automatically using a label printing solution.

**AUTEXIS** IT AG

Our consulting, strategy development, implementation, and training will make you fit on the way to embrace Industry 4.0.

### ALARM MANAGEMENT

Thanks to the real time monitoring of the entire production process and its representation using illustrative traffic light system, system malfunctions can be recognized and remedied at an early stage across all processes. Maintenance system downtimes are reduced to a minimum due to the interaction with the modules of KPI/OEE and maintenance.

### DATA COLLECTION AND Q-MANAGEMENT

In case of missing suitable communication means of the equipment to be connected, production data (downtimes, yields, rejects, machine, and personnel times) can be recorded manually, too. Quality assurance documents and process workflows will be displayed and edited on the same display (touch panel).
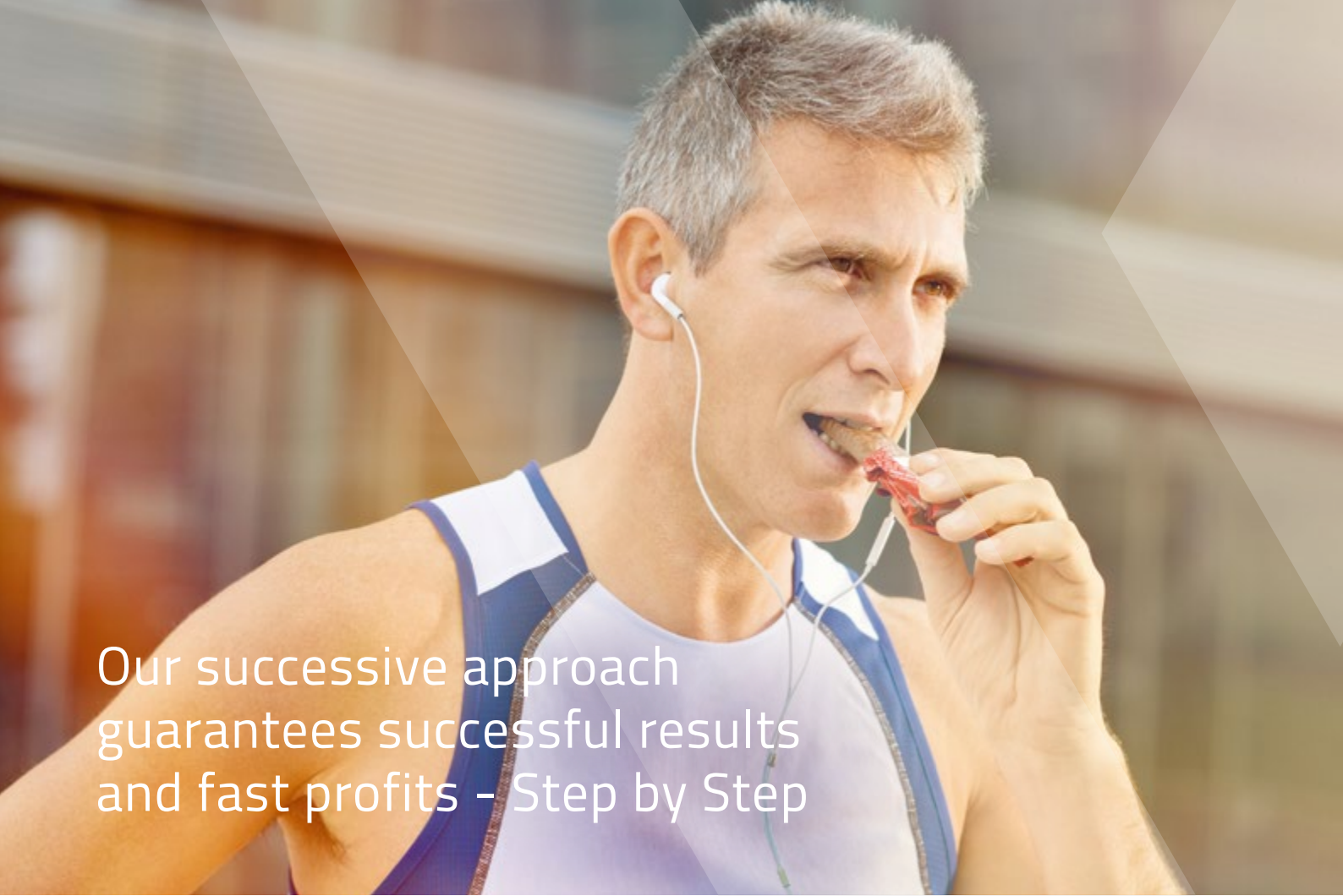
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### MOBILE

All data will be saved in the Digital Factory. Thanks to the secure and standardized mobile accessibility, all modules can be displayed and operated even on the smartphone. You always have an up-to-date overview of the entire production process what implies to be able to react immediately to important events.
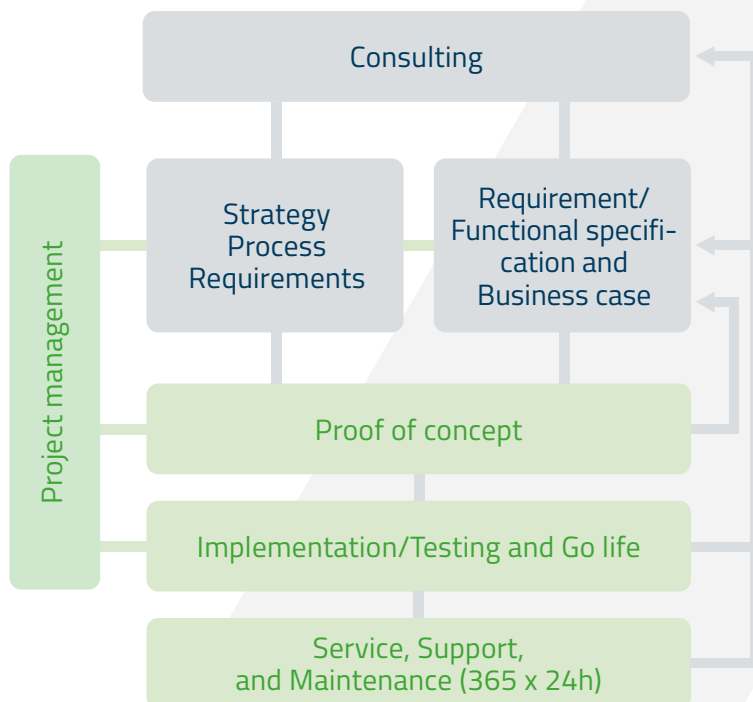
### DIGITAL FACTORY AS A SERVICE

Instead of a local installation, the modules of the Autexis IT Digital Factory are even obtainable as services from the cloud. The securely stored data are continuously evaluated. In the event of possible impending disruptions responsible people are informed proactively. Not even the information about the life cycle of the individual controls is always up to date but also the state of the equipment as well as and the used software.
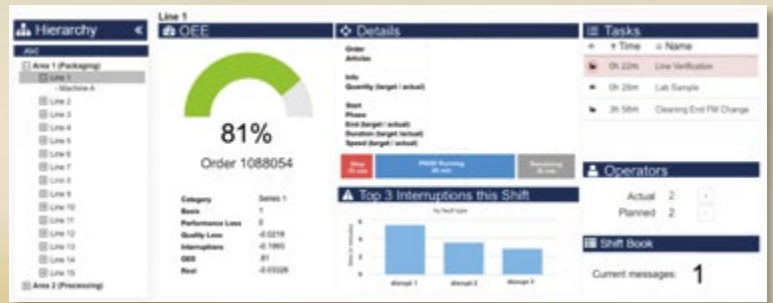
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# Our successive approach guarantees successful results and fast profits – Step by Step

## Services And Processes

Consulting

Strategy
Process
Requirements

Requirement/
Functional specifi-
cation and
Business case

Project management

Proof of concept

Implementation/Testing and Go life

Service, Support,
and Maintenance (365 x 24h)

Our experience shows that it is best to start with just one or two machine installations that are of the greatest business benefit. In a next step the connection of further production facilities will succeed.

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# Your Advantages And Benefits

## DIGITAL PROCESSING

- Real-time data recording
- ERP connectivity and data security
- Document management
- In-house information monitoring
- Communication between systems and personnel
- Event log

## EFFICIENCY

- Paperless
- Very fast data access
- Transparency across the whole company
- Usability and easy to use
- Self-optimization thanks to artificial intelligence (AI)

## COCKPIT/CONTROLLING

- Information transparency in real time
- Overview and analysis of line availability
- Traceability
- Batch reporting
- Continuous improvement

## EFFECTIVENESS IN PROCUREMENT

- Consistent digital quality management
- Material handling
- Employee assignments
- Maintenance work
- Sustainability/resource-saving

Preconfigured industry templates, configurable design, scalable to other sites and lines as well as systems, controls and sensors, state of the art technology

**AUTEXIS** IT AG

We understand production and operation processes in your industry and deliver the custom-fit solution to control, monitor, and integrate them.

## Why Autexis?

**WORKING WITH AUTEXIS IT YOU WILL BENEFIT FROM:**

- a strong and reliable Swiss company as a partner
- our broad-based technical know-how
- Automation and ERP experience from a single source
- a permanent partner thanks to secured succession planning
- Project security thanks to the loyalty of our highly qualified employees
- our industry knowledge and our proximity to your industry
- Internationality, thanks to the partnership with the Rotzinger Group

### OUR REFERENCES

# About Autexis

Talking about intelligent automation, IT- and mobile solutions, we know almost no limits. Neither geographical, nor in terms of the nature of the task definition or the branch of industry. The one thing in common in all our work: We are solely interested in the best solution to meet your requirements within the framework of the specifications.

To achieve this goal, we use our many years of experience, the gained know-how as well as the high level of competence of our employees. From small tasks to highly complex, intercon- nected solutions, professional control systems and integration into your IT systems by means of our software product «Digital Factory».

**AUTEXIS**

**AUTEXIS** CONTROL AG

**Automation solutions for production and industrial facilities.**
Established in 1982
25 employees

**AUTEXIS** IT AG

**Software company for the smart factory of the future.**
Established in 2015
15 employees

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