Alphagate

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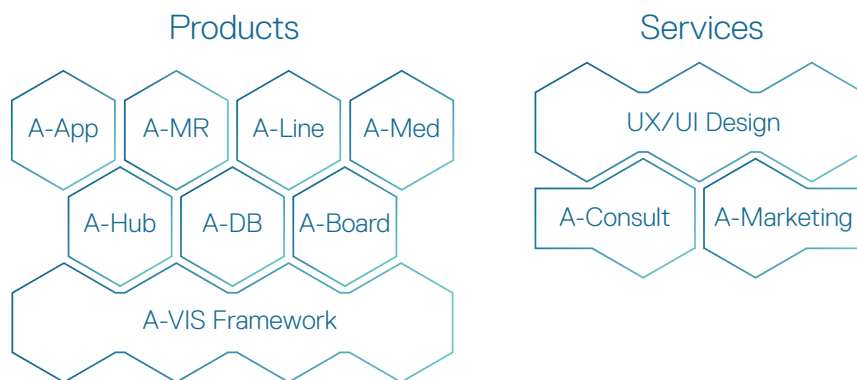Our claim is simple, intuitive and graphically appealing.

Our guiding principle is innovative and technologically sustainable in implementation.

Inspired by the familiarity of nature, Alphagate develops a unique UX/UI Design. With A-VIS this is poured into user- and process-oriented software.

Alphagate designs and implements complete operating concepts for machine builders and manufacturers of medical devices. The individually created UX/UI Design reflects the requirements of the process and the best possible guidance and support for the operator

of the device. Alphagate uses its SCADA software A-VIS to create a unique software framework based on the operating concept. A-VIS offers connectivity to all important PLCs and data sources. Alphagate offers several additional extensions and products that can

be used seamlessly with the Alphagate solution, such as A-MR (Mixed Reality), A-DB (Big Data) and many more.

Products

A-App | A-MR | A-Line | A-Med

A-Hub | A-DB | A-Board

A-VIS Framework

Services

UX/UI Design

A-Consult | A-Marketing

A-Board
Evaluation of machine data in an individual dashboard.

A-MR
Use of Mixed Reality for operation, maintenance and documentation.

A-Line
Optimal cooperation of machines from different manufacturers in one line.

A-App
Development of mobile applications.

A-Hub
A universal data logger for the efficient acquisition of machine data.

Human Ready.

UX/UI Design

When looking at the HMI at Alphagate, the focus is always on the needs of human beings. If humans feel comfortable with the machine, the machine operation is successful.

Building on a good UX/UI Design, we expand the aspects of PHORB, the basis for the development of our operating concepts.

A good dialogue with the machine

1. Reduction of everything: find out what is really important, forget the rest.
2. Use all the senses: expand the range of communication
3. Predicitve Information: data-driven intelligent communication on all available devices
4. Biophilic design: inclusion of nature through environmental features, light and natural forms.

Reducing everything

Use all senses

Biophilic design

Predictive information

Human Ready.
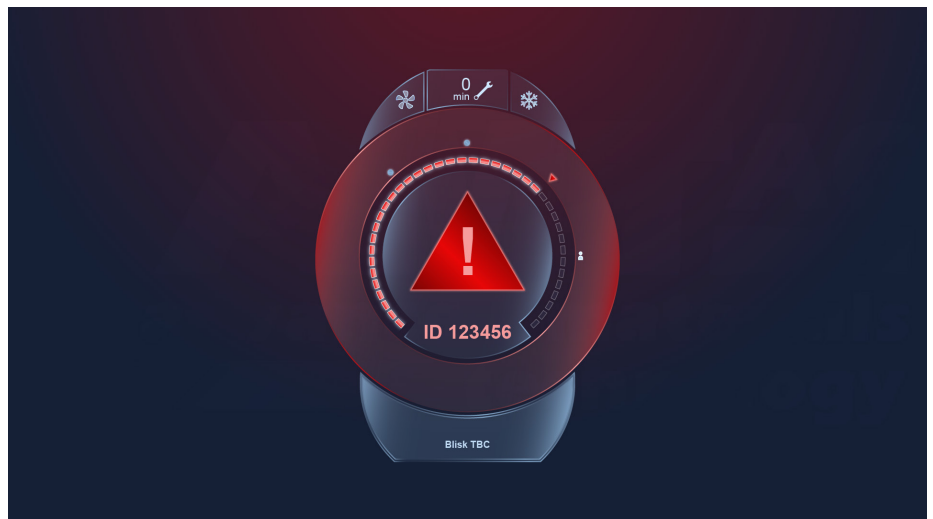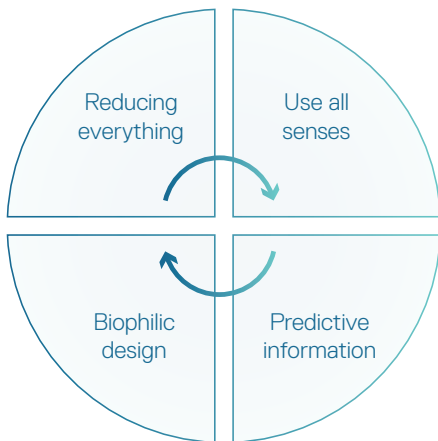
A-Vis

A-VIS is a visualization tool, created and continuously optimized for the creation of an HMI for mechanical engineering, plant engineering and medical technology. It is designed for communication between humans and machines.

A-VIS is an innovative tool for creating intelligent visualization and operating solutions that meet the highest demands. Developed by software and UX/UI experts for international use on production machines, systems, and devices in medical technology. A-VIS is implemented with pure Java and equipped with a consistent client-server architecture. The range of functions corresponds to that of a modern HMI or SCADA tool, which was also supplemented by requirements from usability and internationalization.

A-VIS currently maps the platforms Java AWT, Java Swing, Java Fx and HTML5. This means that the applications that have been configured with this development environment can run on all common platforms - from small single-board solutions to classic IPCs under Windows or Linux to smart devices. During development, special attention was paid to customer-specific adaptations. Of course, the development environment is delivered with the style guide and operating concept specially developed for the customer - the style guide is virtually integrated in the IDE.

Message Manager
Page/View Manager
Datalogger Manager
Unit Manager
Dataset/Recipe Manager
Text Manager
User Manager
Graphics Manager
Color Manager
Item Manager

A-Board

The A-Board offers the possibility to create easily and quickly individual evaluations without programming knowledge.

A-Board is an HTML5 product, that means it runs in any browser, regardless of the type of installation - cloud or on premise. The cloud solution enables access regardless of location. A-Board can also be integrated into an existing A-VIS visualization. Certain evaluations are helpful during operation.

Simply display complex content

A-Board follows a simple structure for displaying generated machine data, consisting of a few steps:
- Content: Selection of data from different data sources. Full access to the content from A-VIS is guaranteed as well as external data sources.
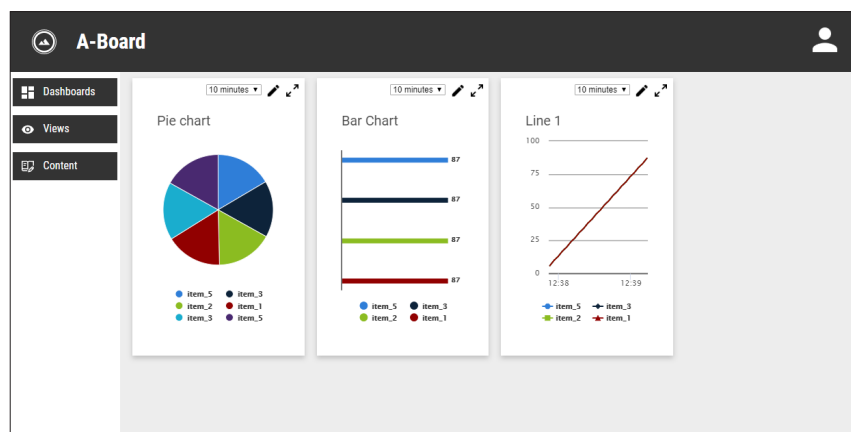
- Views: Definition of the way data is presented. Depending on the compilation and type of data, pie charts, bar charts and much more are available.
- Dashboards: Creation of individual dashboards for different requirements. Presentation of production

data for management, per machine or for detailed views.
With the help of the „Script" function, conditions and processes can be created with the existing data and displayed in the dashboard.

Human Ready.

A-App

A-APP describes the conception and development of applications for mobile devices, or devices with different hardware and software requirements.

Receive information where it is useful

A-App includes the display of relevant information on all mobile devices. In a co-creative process, we develop the requirements for a mobile device with the involvement of all stakeholders.

Focus on:
Flexible communication
Messages must be able to be received on all accessible devices without additional effort.
Fast reaction
The operator must be able to react quickly and easily to relevant and critical events.

Undisturbed operation
The technology aims to make work easier, so an application in combination with a mobile device must support the work defacto and free up resources.

A-DB

CrateDB is a distributed SQL database that is built on a NoSQL basis. This combines the familiarity of SQL with the scalability and data flexibility of NoSQL.

Customers often use CrateDB to store and query machine data. This is because CrateDB makes handling the speed, volume and, variety of machine and log data easy and economical. Customers have reported that CrateDB captures millions of data points per second while querying terabytes of data in real-time 20 times faster than their previous database and with 75% less database hardware.

Growing a database should be easy, just like CrateDB.
With the automatic redistribution of data and a shared-nothing architecture, you can easily scale.
Simply add new machines to create and expand a CrateDB cluster. You don't need to know how to redistribute data in the cluster because CrateDB does it for you.

Openness and flexibilityFühren
• CrateDB anywhere in your data center or in the cloud

• Connect to CrateDB from almost any language, SQL application or SQL BI tool
• Expand the CrateDB functionality by writing your plug-ins

• Provide CrateDB as a container on Docker, Kubernetes or other systems

Human Ready.

A-Line

This product was created from the needs of many customers. Machines from different manufacturers increasingly have to plan and put them into operation with their machines. With A-Line we create a connection between the machines and ensure that important dialogues can take place and enable the integration of extensions, e.g. the A-MR solution with data glasses that can be used across an entire production line.

Line responsibility
CrateDB's distributed SQL query engine has column field caches and a more modern query planner.

Integration
Even if something goes wrong in your data center, CrateDB continues to run. Automatic replication of data in your cluster ensures that errors do not interrupt data access.

Also, CrateDB clusters are self-healing.

Recognition
Analytical data is often loaded in batches with transaction locks and other overhead. In contrast, CrteDB eliminates locking overhead to allow massive write performance.

Flexibility
CrateDB can store incremental snapshots of your database in memory. Snapshots contain the status of the tables in a CrateDB cluster at the time the snapshot was taken and can be restored at any time in the cluster.

A-MR

This technology enables many things, including entering and immersing yourself in a virtual world. Move levers that are not really there and read information that is virtually floating in space. It is our task to use technology where it can work. At the core of the consideration is always the question of how our performance, for example UX/UI Design, software and MR can optimally support human beings.

Regardless of the type of MR technology used, it is always integrated into the existing process, into the existing system. The data exchange ensures the planned effect of the technology and enables the dialogue between man/MR/machine. The A-MR solution is based on A-VIS and can,therefore, rely on its full functionality and data.

Documentation
A-MR enables the recording of learning and service-relevant content in video, image and audio. Smart use of content in all areas

Training
Train and support employees with our individual A-MR solution. Use of wearables depending on their purpose and usefulness.

Support
Access to collected data using smart glasses, smartwatch, phone and other wearables. Cooperative work, leading through service processes

Integration
A Mixed Reality solution is only as good as its integration into the business processes. The integration into our platform A-VIS or other systems is guaranteed.

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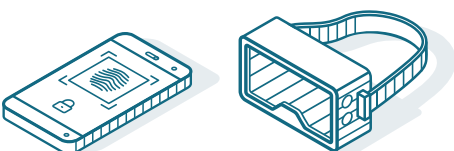
A-Hub

A-Hub is a smart data logger that can be installed on any hardware and records the valuable data and information of your machine. Easy to configure, just in the background.

As a provider of visualization systems, we speak the language of all common control systems. Therefore data from any machine can be recorded. Whether for new machines or retrofitted to generate valuable information from valuable data.

A-Hub also impresses with the interfaces for vertical integration. Data transfer to the MES level is supported as well as industry-specific interfaces such as SECS / GEM (200mm and 300m) or PackML.

- Inexpensive, commercially available hardware can be used
- Interface to all common control systems
- Easy to use
- Safe investment

Human Ready.