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THE IMPORTANCE OF IOT TECHNOLOGIES

WE DEVELOP FUTURE TECHNOLOGY

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We develop Technology that carries Businesses to the Future

Explaining the IoT solutions they offer with canias4.0 technologies, IAS General Manager İlker Er says, "We produce with our experienced engineering team focused on developing technologies that will connect businesses to the present and the future with all our strength."

IAS General Manager İlker Er gave advice to companies on ERP choices and explained the importance of IoT technologies. Mentioning the IoT solutions they offer with canias4.0 technologies and listing their advantages, Er emphasized that systems that can work fully integrated with each other are very important for companies and added: „Canias4.0 solutions integrate all production management systems, especially ERP, and the digital transformation journey of existing and potential customers. It is very important to position it with the aim of being a technology supplier throughout the world."

Today, companies have a hard time on deciding when it comes to ERP systems. What should they pay attention to?

In order for companies to choose the most suitable ERP system for them, they must first analyze what they need. Questions such as „What do we expect from ERP software?, Where and at what scale will our company be in 10 years from now?" What are our goals? What are the problems in our current business processes? What do we need?' Afterwards, they should do a detailed research for the most suitable ERP software for them. In addition to standard solutions, they should prefer software that can be designed specifically for the company's needs, at low cost and quickly, that is flexible, customizable, and capable of meeting all current and future needs. In addition, they should analyze the expertise level, international success of the consultants of the technology company they will be dealing with and whether they comply with international standards. ERP software is not like a product you buy and start using, a device you plug in and run. ERP, and indeed all digital transformation projects, should be seen as long-term collaborations. While technology is developing rapidly, it is necessary to be open to change and to work continuously in order to keep up with it. We offer many innovative products such as caniasERP, IoT, big data, canias IQ, iasDB, TROIA Development Platform to our customers under canias4.0 Technologies. In addition to the freedom of movement we offer our customers with our products, we also provide training and adaptation support with our experienced consultants and IAS Business Academy.

Use the possibilities of our IoT solution and expand your competitive advantage and future-proof your company.

How do you evaluate the importance of AI, IoT, IIoT functions in ERP systems?

Production Management System is a multi-component integrated system that provides productivity increase in enterprises. It is based on the principle of transferring continuous data to a central unit with the help of digital data collection terminals of production machines. The system performs many different functions with a single data collection network. Automatic Data Collection, Live Monitoring, OEE Reports, Posture Analysis Reports, Scrap Fire Analysis Reports, Production Reports, Scheduling functions are the basic functions of the system. It should also contain many optional functions such as energy analysis, barcode labeling, Lot tracking, traceability, kanban supports, automatic material demand, data collecti-

on from peripheral equipment and machines, andon panel applications, user field operations. With two-way communication with ERP, production numbers are taken from ERP on a job basis and the information collected in the system is transferred back as production, scrap quantities, traceability data, production parameter measurements and quality values. Communication structure and information may change depending on business requirements and ERP setup.

collected data is processed correctly?

Related parameters such as production type, production amount, type, frequency, unit time, pressure, temperature, rotation speed of production machines, quality measurement results related to the process and statistical process control applications, reasons for downtime, downtimes, intervention stops, intervention times, work Changes, job change times, workers. All types of companies need data, but especially manufacturing companies must have these systems.

What kind of services do you offer to your customers with canias4.0? What is the advantage of canias4.0?

The canias 4.0 IoT solution offers its customers a platform that will enable them to collect data in digital transformation processes, make sense of data and generate

In-house canias4.0 hardware solutions for office and production environments

The system should perform consistency analyzes on the data both in the data collection phase and in the report production phase. Various warning and information tools should be created for consistency problems. The system should automatically detect many problems such as signal errors, operator errors, inconsistencies in product descriptions and generate warnings.

What types of companies can particularly benefit from the use of IoT devices? How can companies ensure that the

ker, technician, master identities and competencies, interventions and all similar information should be collected in a detailed, simple and user-friendly manner. Production quantities and downtimes should be collected automatically, independent of the operator. The canias 4.0 IoT Solution instantly follows the situation in business centers according to customizable parameters on an operational basis and carries many parameters such as downtime and fault management directly to the ERP layer independently of the operators. All types of companies need data, but especially manufacturing companies must have these systems.

meaningful insights from the collected data. It is positioned to automate all ERP modules related to production management systems with its integrated structure in the reporting stages and makes it an extension of caniasERP directly in the business centers in the production area. The biggest challenge experienced in the data collection phase from automation systems stands out as the common communication language of devices with different communication protocols resulting from machinery and automation line inves-

tments made at different times and technological differences. Our canias4.0 IoT Gateway software is capable of direct communication with the most common communication protocols in the market, offering two-way connectivity between ERP servers and control units, sensors and smart devices. For this reason, it is a communication technology that we can call protocol independent. IoT Gateway monitors, analyzes and visualizes data such as production data, resource consumption, environmental values in real time. Monitored data can directly trigger caniasERP functions and write to ERP tables when events based on predefined rules occur. It does not need any third party integration in this process. In the data collection phase, if the automation units on the machines are closed to data dissemination or when the automation infrastructure is insufficient, instant data is collected from business centers with IoT BOX IO and Touch IO devices, which are completely developed with canias4.0 technology to meet the most common customer needs.

Can you give information about IoT BOX IO and Touch IO devices?

With IoT Box IO, you can connect your sensors, relays, data sources directly to the box, read or set data from your devices, thanks to various inputs and ports. IoT Box IO is a touchscreen member of the canias4.0 IoT Box family. Like IoT Box Touch, it is a small computer with low cost and low power consumption, Linux-based operating system, can run canias4.0 client and other necessary applications such as web browser, PDF viewer, office applications. Like the IoT Box IO, it has an IO module that enables other devices to communicate using digital and analog signals. On the other hand, IoT Box Touch IO and IoT Box IO add a wide variety of digital and analog communication options on top of industry standard network communication protocols (such as OPC, OPC / UA, MT Connect, MQTT, Siemens S7, MODBUS TCP ...) with the onboard IO module. With IoT Box Touch IO, it is possible to have all the functions required for data communication, ERP integration and operation panel in a single, compact but powerful device.

What is the vision of IAS on Industry 4.0? What awaits canias4.0 in the future?

Among the many reasons to implement industrial IoT standards, several drivers stand out: efficiency, cost reduction, risk management, and improved value streams. As competition increases in business, organizations are increasingly demanding IoT solutions to create change in their business with data analysis and process optimization. Operations management in manufacturing-based workplaces is being transformed more and more every day by disruptive technologies such as (M2M) machine-to-machine communication, (EDGE) edge computing, blockchain, robots and (AI) artificial intelligence. All working life, especially production management systems, is in a change around the concept of Industry 4.0. Previously, in the stage that we can call the third stage of the industry, there was a multi-layered and integrated system that we can also call the automation pyramid. Sensors and PLCs at the bottom, SCADA layer on top, MES applications on top, and ERP systems on top. Complex and difficult integration processes between all these layers caused businesses to deal with different cost problems. Today, this system is at a new threshold, which is also called the automation column, integrated and where each layer is intertwined. It is very important that canias4.0 solutions integrate all production management systems, especially ERP, and position their current and potential customers with the aim of becoming a technology supplier throughout their digital transformation journey. I can say that we produce with all our strength with our experienced engineering team focused on developing technologies that will connect businesses to the present and the future.

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