R&D

Research, Development and Innovation

GET TO KNOW SISTRADE

Sistrade – Software Consulting, SA is an international company specialized in software development and consulting services for different activity sectors, namely industry and services. The main objective of SISTRADE is to offer the best information systems and tools to leverage the performance of all critical business processes of its customers.

The company offers a set of highly customizable solutions such as the Sistrade ERP (Enterprise Resource Planning), MES (Manufacturing Execution System), WMS (Warehouse Management System), allowing companies to optimize not only their internal management but also their connection with their partners through e-commerce and online collaboration.

Cutting Edge R&D

Innovation is one of the key drivers of the SISTRADE product line. As an innovative company, SISTRADE is always seeking to enhance its innovation capabilities to anticipate new technologies and the needs of its customers. As such, SISTRADE has an internal innovation group called the Sistrade Research Nucleus, dedicated to intensive research and development. On the other hand, SISTRADE has a set of highly skilled software engineers with extensive software development experience and focus both on time proven and recent technologies.

Open Innovation

In the modern world, innovation is seldom an activity to be carried behind closed walls. Knowledge, creativity, technology and – most important - bright ideas can appear anywhere in the world. Innovation is increasingly a product of cooperation, a consequence of putting different players with complimentary visions and backgrounds.

SISTRADE is always seeking for new partnerships to jointly plan and develop bold innovation projects and to go beyond the frontiers of knowledge and technology. In an open innovation world, we do not have a "one size-fits all" approach nor pre-conceived ideas: each project is a different endeavor. Flexibility is key: we can bring intensive advanced research capability, software development expertise, testing or management. We can also bring valuable data and valuable partners from our extensive customer network – if an end-user pilot is needed, we can bring it. We have a successful track of national and international projects and are always eager to listen your ideas – drop us a line!

SISTRADE is also certified in the standards NP 4457:2007 and ISO 9001:2015

W W W . S I S T R A D E . C O M

R&D Interest Areas

Industry 4.0

Augmented Reality

Operations Research

UX/HMI

Cybersecurity
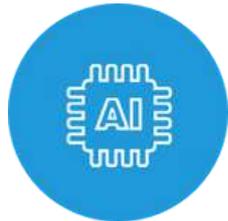
AI and ML

Ecoefficiency

Software Engineering

Multi-device

Big Data

I-IOT

Creative Sectors

R&D

Industry 4.0 / Smart Manufacturing

Industry 4.0 has been a hot topic in the recent years, and will continue to be as industries make their transition into this new paradigm. The concept "Industry 4.0", coined by an association of the German manufacturing industry, is similar to the American "Smart Manufacturing Concept": it envisions the global interaction of industries, their production lines and factories as a grid of interconnected cyber-physical systems. Cyber-physical systems should be capable of interacting with each other, with humans, and should be capable of changing the manufacturing process due to massive data collection and processing, intelligent reasoning and decision making, improved product and process awareness. The most significant consequences of this new paradigm would be the cost reduction, improved flexibility for on-demand production models and improved quality.

Sistrade has participated in many projects in the Industry 4.0 and has experience topics such as the Digital Twin, Digital Thread, Predictive Maintenance, Automated Warehousing and AGV control, ERP/MES, distributed manufacturing etc. In addition to this, Sistrade benefits from having a close relationship with its industry customers and deep experience in the provision of industry software solutions.
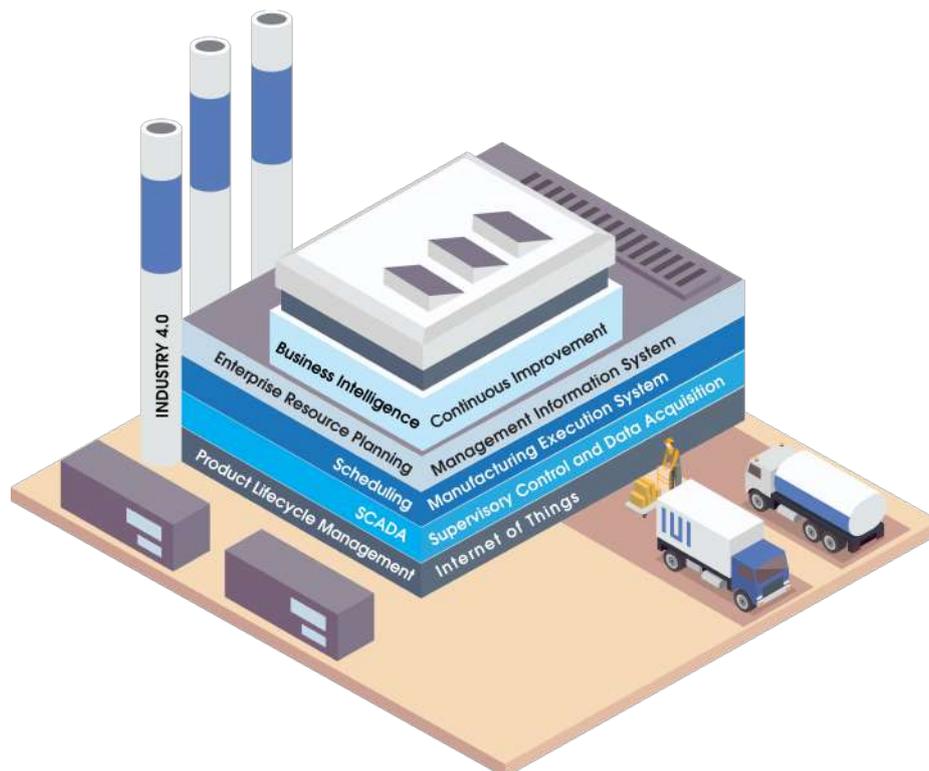
SISTRADE can bring a wealthy set of knowledge and experience to Industry 4.0 projects, as well as real use case data and end-user test scenarios and partners.

R&D

Augmented Reality

Augmented Reality is trending technology which allows to overlap the reality with digital visual artifacts in order to enrich the reality with additional visual information. Sistrade has in-house experience in developing Augmented Reality solutions for industrial application, both through specialized AR eyeglasses (Microsoft Hololens) and mobile devices.

Due to its growing importance and technological evolution, augmented reality present an opportunity for the development of new applications and new approaches in which SISTRADE is highly interested.

Operations Research

Operations Research is a knowledge area with an ever increasing area of application. The need of efficient planning and optimization is a transversal need to all business and industrial activities. Combinatorics, metaheuristics and Linear Programming are of fundamental importance and although much research has been made in these fields, there are still many customer needs which remain unsolved and there is much is open space left to research.

SISTRADE has great experience in the Operations Research area, namely in the network optimization, production scheduling optimization, and it is always keen to expand its knowledge and experience in these areas and explore the interconnection with other knowledge areas.

R&D

UX/HMI

User Experience is a fundamental research area when it comes to system design. The industry 4.0 and the technological evolution have been pushing the need for efficient interaction in user interfaces and industrial systems. Even more than that, the whole user experience goes beyond the simplistic concept of interface and interaction as a way of communicating with the users, of transmitting company values, improve their satisfaction and enhance company productivity. In a world where information quantity increases and there is a high competition for user attention and time (which often degenerates into entropy), excelling in the user experience is a must.

> **SISTRADE is deeply committed to the research of User Experience and Human-Machine interfaces both in the software engineering and industry approaches as a way of improving perceived value from the user perspective.**

Cybersecurity

As digitization progresses in all economical and societal areas and there is a big surge in interconnected devices, persons and organizations, there is a corresponding increase of the opportunity of attack by ill-intentioned actors. Combined with the sensitiveness, value and criticality of the information flows and the increased surface-of-attack, these conditions increase the risk of cyber-attacks on valuable personal and economic data. Industrial and business systems need to take cybersecurity as a priority. Responding to these societal and economic changes, the European Commission has been incentivizing the research in this area to allow the European Union to become digitally more secure, in order to avoid economical and societal losses.

As a software consulting company whose software is implemented in several industries and activity sectors globally, SISTRADE is profoundly interested in constantly pursuing applied research in conjunction with cybersecurity players and to foster technology transfer to improve the security of its products.

R&D

Artificial Intelligence / Machine Learning

The growing automation and digitization implies the corresponding analysis and decision of automated systems. As the data flows increase and their swift treatment goes beyond human capabilities, there is the need to allow machines perform automated reasoning tasks with ever increasing complexity (data classification, pattern recognition, learning, etc). Efficiency requirements foster its application to every field, especially in the industrial field, where machines now can perform complex operations, communicate and cooperate with each other and assist humans in the creation of value, allowing the people to perform more value-adding tasks.

Sistrade is currently developing their capabilities in the Artificial Intelligence and Machine Learning field and has given maximum relevance to current and potential projects and collaborations in this area in all fields of application.

Ecoefficiency

Environment and efficiency are closely related in the economy of the future. A more environmentally friendly economy needs more efficient industries with minimal waste. The waste minimization itself brings economic and competitive benefits to the organization. Therefore, ecoefficiency is steadily becoming an important topic to high-level managers. In response to that, SISTRADE has already developed innovative software solutions to measure and optimize the efficiency of the production systems and has been researching several methodologies to improve economic performance of the industries. In this direction, SISTRADE considers that joint research and development work with external industrial and research partners is highly desirable, being totally open to cooperation initiatives and projects.

R&D

Software Engineering

SISTRADE, as a software consulting company, has a long experience on software development. This experience is reflected in the qualification of its human resources, the acceptance of its product line and the excellence of its software implementations. SISTRADE has experience both in time-proven and solid technologies (ex: SQL databases, .NET technologies) as well as modern cutting edge technologies and framework (React, Node.JS, Angular) and team collaboration (GIT, Agile). Solid emphasis in hands-on experience in business environments complements the technical expertise with contextual knowledge, making the software development team productive and effective.

SISTRADE is a solid and reliable software engineering partner for every project, offering bespoke solutions for each project, with advanced requirement elicitation, system architecture and design, development, integration, testing and software lifecycle management capabilities. The openness to learn new technologies and to work effectively with other partners is also a plus that makes SISTRADE the right option for R&D projects.

I-IOT

The Industry 4.0 paradigm implies massive amounts of data flowing bottom-up, with the data being produced at the equipment level and flowing up to the higher levels of the organization. The production and communication of data at the equipment level needs an array of sensors and networked devices. I-IOT is fundamental for the comprehensive digitization of processes, and as such, it is a field of high relevance for SISTRADE, and highly desirable for potential projects.

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Big Data

Data is the core and cornerstone of Industry 4.0. The massive data gathered by I-IOT infrastructures need effective transmission, cleaning, treatment, marshalling and storage. Being so, Big Data is a knowledge area highly regarded by SISTRADE, which has participated in several projects in this field. SISTRADE is currently developing its internal capabilities and looks forward to collaborate in ambitious projects in this field.

We are always looking for challenging and interesting collaborations that can bring something new to the society and push the frontiers of knowledge.

Creative Sectors

SISTRADE also participates in R&D activities outside its traditional industrial and business sectors. Great examples are two projects where SISTRADE participates in the creative sectors: the development of a social platform to streamline the creation of scientific video contents and the creation of a collaborative platform to enhance the value of the paper book with digital contents.

R&D

Innovate with us

No problem is too difficult and no project is too out of scope for us. We listen your ideas. We are creative. We believe that open innovation, where several partners with complimentary competences work together to promote ideas, foster technology transfer, and bring together different experiences and innovative approaches is the key to overcome the natural limitations that every partner faces individually. SISTRADE has a solid track of successful projects nationally and internationally, being a reliable and experienced partner. SISTRADE is a recognized member of industrial cluster organizations and has a history of successful mutually beneficial cooperation with companies, research institutions and universities.

We look forward to innovate with you. Let's work together!

Sistrade Software

Solutions

Commercial Management & Estimating

Estimating
Customer order
Shipment
Invoicing
CRM

Stocks & Purchases Management

MRP
Purchases
Stocks management
Suppliers management

Production Management

Scheduling
Data collection
Industrial costing
Job order management

Administrative & Financial

Accounting
Treasury
Fixed assets
Human resources

Other features

Mobile Warehouse
Equipment Maintenance
Quality Control
Ecomanager
Energy Management
RDI Management

Business Intelligence
Dashboards
Report Generator
Web2Print
Balanced Scorecard

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