

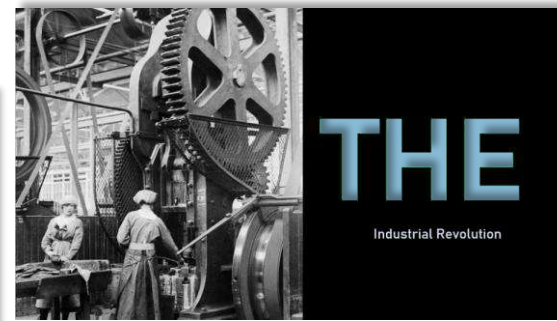
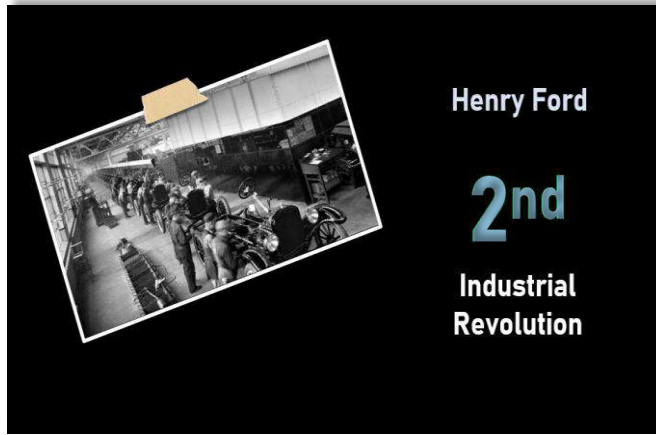


of
**PRODUCTS
PROCESSES
SERVICES**



Systematic
DESIGN

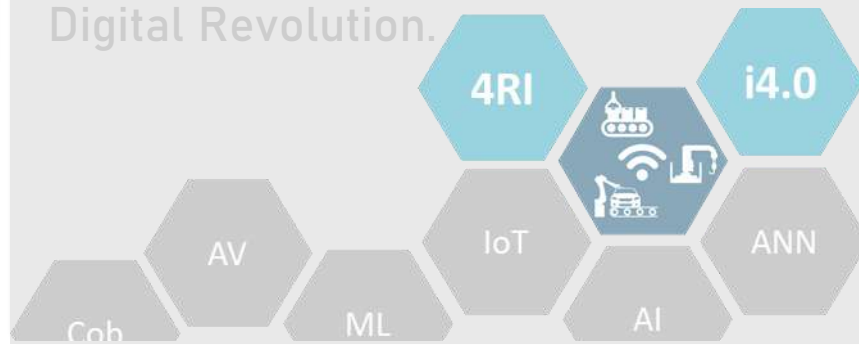
Company presentation



CUARTARI

Stands for ...
Fourth Industrial revolution

we deal with helping organizations change the way we live and work implementing the artifacts invented in the recent Digital Revolution.



In short: we speed up the arrival of **industry X**

Your industry is shifting dramatically



Our senior Team / Creative Executives



Core team in charge

A trustful team of creative and capable senior engineers with which no business or technical aspect is left aside.



Pedro Cepeda

Two years Scaling Up 20+ global techs, co-created Scale Up Partner and is actually Adecco advanced BPO Disruptive Solutions Scouter & Head of Senior Corporate Accounts.

Expert. 30+years experience as CEO in Automotive, Retail, Pharma, Foodservice and Logistics.

Industrial Engineer. MIT, Duke CE and IESE MBA. Lean Six Sigma & Design Thinking

CHINA AND KOREA TOOLMAKERS NEGOCIATION CHINA& KOREA - SCOUTING (SEARCH-AUDIT-VALIDATION) - TOOL DESIGN AND QUOTATION - PROGRESSIVE/TRANSFER/TANDEM TOOLS' BUY OFFS



Ricardo Lozano

One years Scaling Up global unicorns. Has been engineering companies' CEO leveraging a huge network of integrators, partners and advisors covering all science disciplines.

40+ years experience as CEO in Automotive and Engineering. Product systematic design and development.

Industrial Engineer. Expert in Advanced Factories, Artificial Vision, Twin Factories setup and Processes.

AUTOMOTIVE SAFETY - SUPPLIERS DEVELOPMENT - AUTO METAL PARTS DESIGN - INDUSTRIAL PROCESSES - AUTOMOTIVE ENGINEERING - METAL PARTS SPECIFICATIONS



Toolshop Engineering

30+ years experience as head of engineering expert in precision transfer and progressive tools



Tools' studies

30+ years experience as tooling studies



Toolshop Manager

20+ years experience as toolshop manager



RM Ingeniería - Technical

RM Ingeniería offers its experience and resources in part design, tooling and manufacturing:

- Processes design in CATIA
- Process simulation
- Process design, checking & optimization.
- Automation design & building
- Material optimization
- Quality & cosmetic defects checking. Parts changes proposal.
- Design review, process & simulation.
- Technical consultancy

TECYL - DEVELOPIA - SICA PROINT (GRUPO INDIKO) - DISEÑO DE TROQUELES Y MATRICES

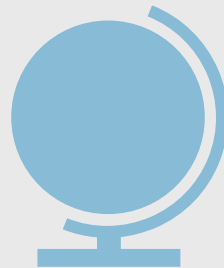
We help navigate the 4RI turbulences



At **Cuartari** we leverage our 100+ years of TOP C-Suite level experience to transit all types of transformation processes: from end to end Product Design Thinking, through Project Management to complete Senior Sales Outsourcing for technological products and services.



ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION

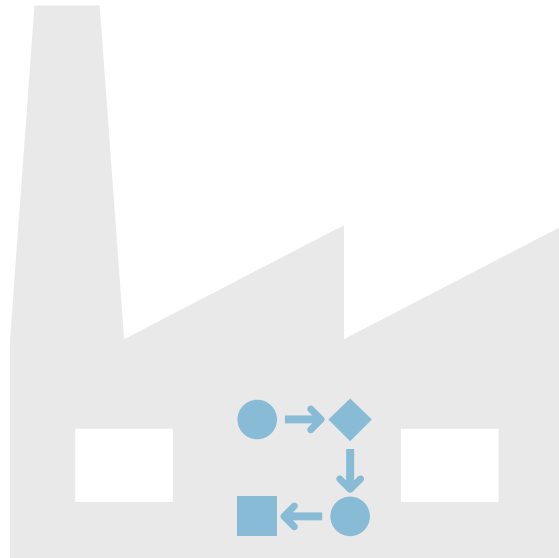


LOW COST COUNTRY SOURCING
TOOLING AND MACHINERY



PROJECT MANAGEMENT
SALES OUTSOURCING

INDUSTRIAL PLANT OPTIMIZATION



FACTORIES
INDUSTRIAL
ORGANIZATION
APPLYING LEAN SIX
SIGMA

INDUSTRIAL OPTIMIZATION

A ROADMAP TO PLANT SETUP

CUARTARI

Stage 0 - short-term, LOW PENDING FRUITS

- a. Bottle neck identification and reengineering
- b. Application of the 5Ss to exploit the bottle neck
- c. Pareto to streamline manufacturing strategy

Stage I – Processes definition & optimization

- a. Quality mobile data gathering SaaS
- b. Self inspection 5Ss
- c. responsible self control and plant teams training

Stage II : Value Stream Mapping

- a. What is value stream mapping
- b. How to map the value stream in the factory
- c. The benefits of value stream mapping for the factory

Stage III: Cost analysis

- a. The importance of cost analysis in the factory
- b. How to perform cost analysis in the factory
- c. The benefits of cost analysis for the factory

Stage IV – Standardization & systematization

- a. Quality management - what is quality management
- b. Standardization-Nomenclature-Coding and Beacons
- c. Product Master with Talking Code - Operations Coding
- d. Standardization of containment units

Stage V : Visual management

- a. What is visual management
- b. How to implement visual management in the factory
- c. The benefits of visual management for the factory

Stage VI: ERP (MRP II, Planning and MES) and systems plan

- a. Development of AS IS and TO BE at the systems level
- b. Tool Selection
- c. Implementation plan and execution control

INDUSTRIAL OPTIMIZATION



example of end to end... INDUSTRIAL ORGANIZATION



Help management to absorb growth by training the management team



Comprehensive plan for the organization of production, digitization of the factory and automation of processes to absorb the sustained growth of the company, reducing stress and associated costs.



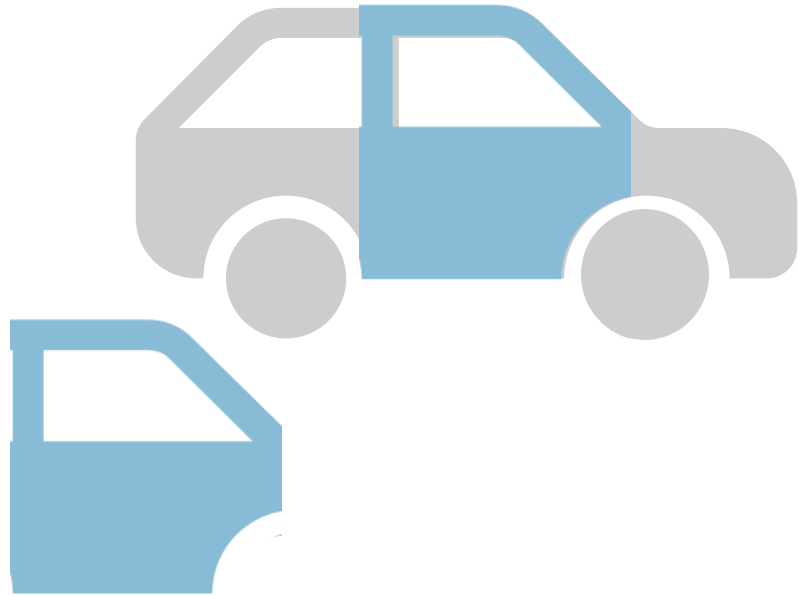
Transform aeronautics from a craft workshop to a reference industry



Accompany the ambitious business project with support for the design of new products and services, the establishment of a medium and long-term industrial plan, digitization and automation of industrial processes, and launch of the platform for the pilot academy.

Product AMFE:
systems advanced design

CUARTARI



ADVANCED
PRODUCT
SIMULTANEOUS
ENGINEERING
APPLYING DESIGN
THINKING

An engineering transformation Journey



Industry transformation: Steering wheel to Airbags

1

Saved Steering Wheels mature tier1 through full R&D capabilities including product development, heavy testing, strategic JV's, and customer orders, performed in 3 years.



Green sand aluminum die casting

2

Innovative green sand casting weldable alloy technology setup and product development to succeed in OEM platforms nominations throughout Europe.



CSP assembly line design and construction in URAT - CHINA

3

The assembly lines were 100% manufactured in China. The fine tuning and key turn delivery was made in China within a record 4 months lead time.

Comprehensive LINES & VISION supplier selection

4

All project phases as consulting company including fast change robot arms system and magnetic vision and picking technology. Spot and nuts resistance welding cells technology selection and PM.



ONE STOP SHOPPING ENGINEERING

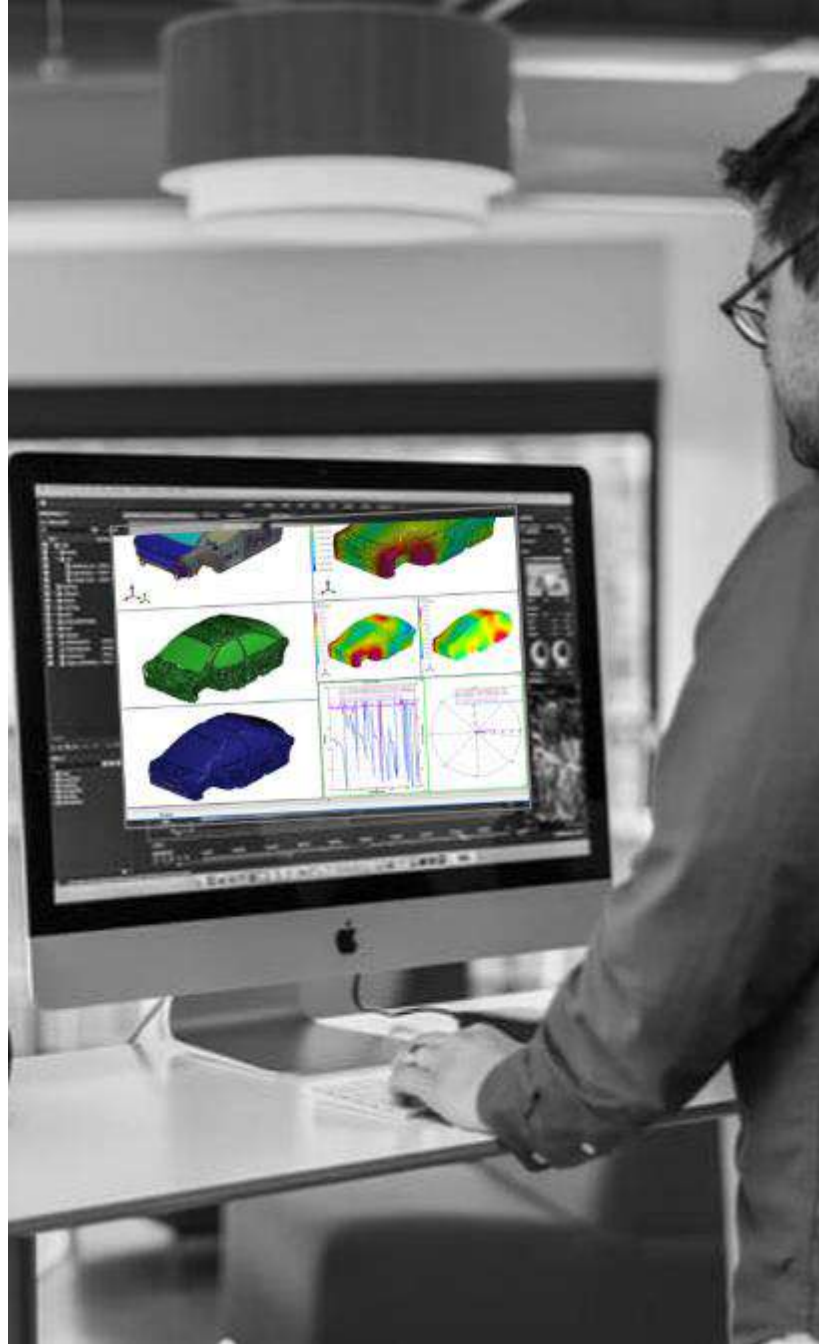
ALL TECHNOLOGIES ALL STAGES

35+ years automotive success as Tier1 developing cutting edge technologies (e.g. Airbag systems, innovative casting, EGR systems).

Cuartari is savvy to apply all relevant technologies during all the different Design Thinking process stages:



ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



CUARTARI

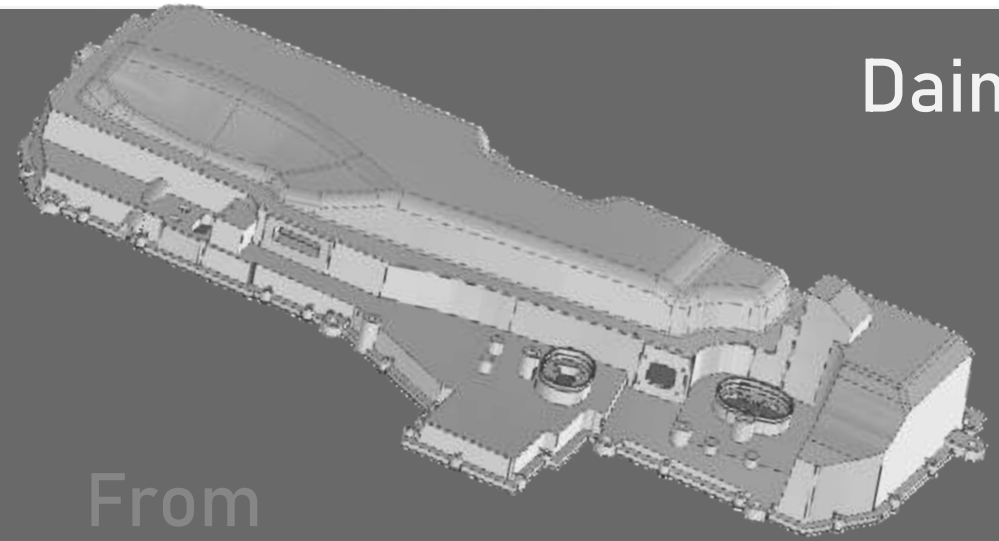
Multi-technology *In-house mastery:*

1. **Electromagnetic compatibility.**
2. **Crash** (*Madymo & Pamcrash*).
3. **Structural Modeling & analysis.**
 - *Linear and nonlinear.*
 - *Composite materials.*
 - *Modal, vibratory & acoustic.*
 - *FEM & CFD.*
 - *Dynamics and kinematics.*
4. **Thermo-Mechanical & coupled.**
5. **Materials** (*joints, coatings, composite...*).

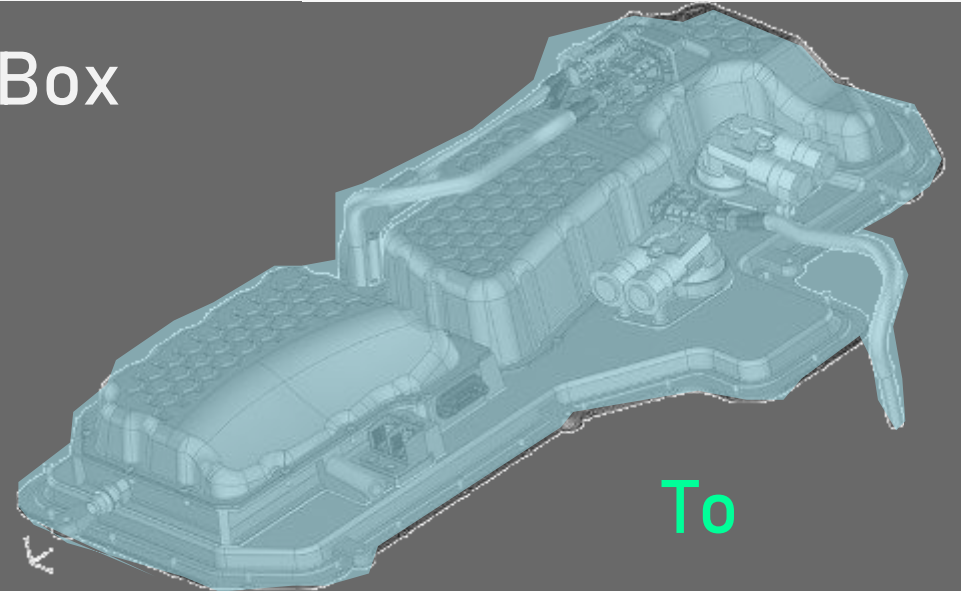
Design Thinking *Process:*

1. **Understand** *sub-system.*
 - a. *Function & target performance.*
 - b. *Specifications.*
 - c. *Ideation 3D.*
2. **Explore.**
 - a. *System design.*
 - b. *Calculations.*
 - c. *Detail design 2D.*
 - d. *Prototyping.*
 - e. *Testing*
3. **Implement.**
 1. *Industrialization.*
 2. *Serial production.*

Daimler OneBox



From



To

Understand the sub_system and divide its functions



As opposite to “onefitsall” traditional approach (casting umbrella solution in general), our technology bias free approach is to split the engineering problem into homogeneous functions and try to split system specifications as well.

Select the most capable technology per function



This technology tournament is supported by wide TEWER+PCH experience using all of them for 30+years and by expert technology partners that are invited to the advanced engineering effort in an early stage.

Integrate function optimalms in a game changing sub_system



The sub_system requires integral solutions to meet all compatibility OEM specifications and TEWER fixing technology multi material mastery and interfaces calculation for mechanical strength, heat dissipation and tightness are key.



Understand sub_system & divide functions

We understood the assembly process, all the components special measures and characteristics and went to an out of the box design based in cost savings

Cost reduction goal achieved

900 €/unit

230 €/unit

Dramatic size reduction

1200 X700 x1200

600 X600 x900

And AFTER ...

- ✓ SALES EXPLOSION WORLDWIDE - X200
- ✓ LEAN MANUFACTURING - +50%
- ✓ EU BPO FOR STUDIES & TESTS- -80%
- ✓ TACKT TIME REDUCTION- 5 days to 8' LT -90%
- ✓ MRP II AND PLANNING - -6 months
- ✓ LOW COST COUNTRIES SOURCING - SLA 48h
- ✓ SC & LOGISTICS REENGINEERING-

WE ARE INDUSTRIAL...



SERIAL
BUSINESS
DEVELOPPERS



ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION

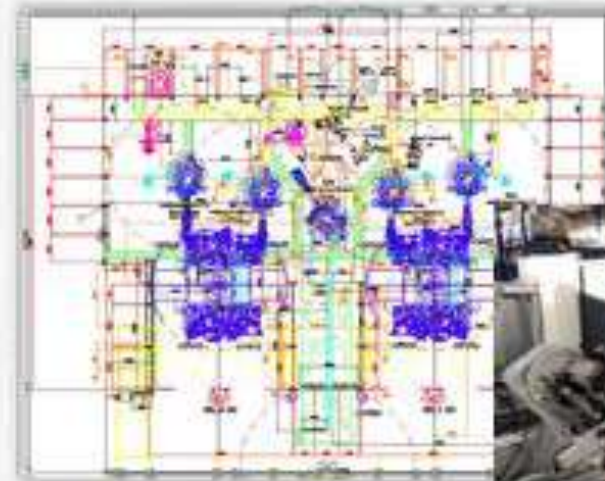


PROJECT MANAGEMENT
SALES OUTSOURCING

G.Engineering best production equipment engineering firm

Product & Project Management Activities

- *Breakdown of Processes into Macro-Groups*
- *Macro-Stages Definition / Production Tack Time*
- *Line Layout and Tolerance Chain Analysis*
- *Defining type of Equipment, Quantity*
- *Reference and Blocking Points*
- *Control Plan Drafting*
- *Dimensional Adjustment*
- *Product & Process FMEA*
- *Budget and Gantt Monitoring*
- *Relationships with Customers & Suppliers*



GE is a company that supplies turnkey systems not only in the automotive industry but also with a focus on special machines, AGVs customized for customer needs, even complex production lines for assembly. We provide customers with innovative solutions through our know how and outstanding Customer Service, product and process expertise, responsiveness, fast execution competitive solution and support.

- Best solutions from engineering to production with a focus on quality and respect for deliveries with our internal tryout for everything we make. Check lines, machinery and first parts produced directly in our workshops.
- One stop solution for all your engineering and manufacturing needs to Leverage the IT as an engine of growth for mechanical industries

Differentiator :

G.Engineering carries out analysis of existing projects and processes on a regular basis in order to assess potential risks, as well as to optimize the use of time, cost and resources. The same type of analysis is conducted when new BIW & Powertrain products are being developed and engineered. Technical Support at all Stages of Design Engineering Projects Macro-Feasibility Studies / Project Breakdown for Assembly Feasibility and Tolerance Study Purposes / Analysis of Standard Stages





ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

JG AUTOMOTIVE

Supply in the manufacture of metal components

OUTSTANDING TECHNOLOGIES:

Forging, Casting, Machining, Stamping, Laser Cutting, Welding, Raw Material, Microforging, Microfusion, Fasteners, High Pressure Bottles, Hydrogen Bottles for Hydrogens, Tooling, Precision Turning and Special Parts, Plastics with Inserts and Profiles, SW and DW tubes, rod shapes, springs, E-mobility, precision gears, bearings, plastic injection parts/moulds for the automotive industry and returnable packaging for metal parts.



Manufacture, development and supply of metallic and mechanical components for the automotive and industrial sectors. Thanks to mastery of metal part production technologies under drawing, we have diversified the industrial sectors of action and optimized our work processes. In 2002, together with 18 international partners, we created Global Alliance, it is a large group that has 230 cooperating engineers, manufacturers in Brazil, Germany, China, India, Italy, Japan, Korea and the USA, among others, managing a joint turnover of 1,720 M€. Dozens of companies from the automotive, energy, railway, agricultural, lifting, etc. They are already among our clients. In addition, we continue to grow thanks to the trust of our clients and the incorporation of new ones. Our products are presented with their corresponding quality certificates (IATF / TS / ISO / CE / PPAP). In short, Technology and high competitiveness in products according to drawings.

A seamless project management driving a second to none experience and results:

- 1 - **Our engineering:** Team specialized in project engineering, cost reduction and supply chain management.
- 2 - **Quality in manufacturing processes:** our manufacturing processes meet the optimal quality requirements at the request of the client.
- 3 - **Logistics:** JGA shortens the distance in comprehensive local and international logistics services with the aim of saving costs.





ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

DLyte (GPA Innova) Transforming metal finishing through innovation and sustainability

Provide a cost-effective, sustainable, and high-quality metal polishing solution that reduces waste and increases efficiency through its innovative electrolysis and dynamic light control technology.

DLyte has helped an aerospace manufacturer reduce waste and improve surface quality while saving up to 70% on polishing costs, and has enabled a medical device manufacturer to achieve a 95% reduction in surface roughness and a 50% reduction in lead time.

Can be used to polish a variety of automotive components, from engine parts to exterior body panels, valves, gears and all kinds of metal cutting and stamping tools.



DLyte stands for "Dynamic Light Control Electrolysis," which is an innovative metal polishing technology that utilizes electrolysis and a patented dynamic light control system to remove surface material from metal parts without the use of abrasives, reducing environmental impact and increasing efficiency.

Vision :

Revolutionize the metal finishing industry by providing a more efficient, sustainable, and cost-effective alternative to traditional polishing methods. By leveraging cutting-edge technology and innovative solutions, DLyte aims to improve productivity, reduce waste, and enhance the overall quality of metal finishing processes for businesses across a variety of industries.

Differentiator :

Cost effectiveness and ability to provide high-quality finishes with increased efficiency and minimal waste compared to traditional polishing methods. DLyte's technology eliminates the need for expensive abrasives and harsh chemicals, reducing operating costs and environmental impact. Additionally, DLyte's unique process produces consistent and uniform finish, ensuring high-quality results every time.





ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

LASIT

Unleashing Precision, Powering Progress in Metal Marking and Traceability!

Lasit's laser marking and traceability solutions find wide-ranging applications across industries such as automotive, aerospace, medical devices, electronics, tooling, and metal fabrication. Our technology enables precise identification, serialization, branding, and traceability of components, ensuring compliance, quality control, and enhanced product integrity.

Choose Lasit for unmatched expertise, precision, and customization. With robust technology, reliable support, and a commitment to innovation, Lasit delivers tailored laser marking solutions for your specific needs. Trust in our experience and sustainability focus to drive your business forward.



Unrivaled Precision: We pride ourselves on delivering laser marking solutions that offer unmatched precision and accuracy. Our advanced technology ensures intricate markings with exceptional clarity, enabling precise identification and traceability of metal parts.

Customization Expertise: We understand that each industry and customer has unique requirements. Our team of experts works closely with you to tailor our solutions to your specific needs, whether it's complex barcodes, logos, or alphanumeric codes. We go the extra mile to ensure our technology aligns perfectly with your business objectives.

Seamless Integration: Our laser marking systems seamlessly integrate into your existing production lines, ensuring minimal disruption and maximizing efficiency. Whether you need standalone solutions or fully automated systems, our flexible integration options optimize productivity and streamline your workflow.

Reliability and Support: We engineer our laser marking systems to be robust, durable, and capable of withstanding the demands of industrial environments. Additionally, our comprehensive service and support network ensures you receive timely maintenance, training, and technical assistance whenever needed, guaranteeing uninterrupted operations.

Technological Innovation: At Lasit, we are dedicated to staying at the forefront of technological advancements. We continuously invest in research and development to bring you cutting-edge laser marking solutions, enabling you to benefit from the latest advancements in the field.

Sustainable Solutions: We prioritize environmental responsibility and sustainability in our product development. Our laser marking systems are designed to minimize waste and energy consumption, contributing to eco-friendly manufacturing practices.



ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

Visiomática

Optimal solutions for quality control and/or traceability



Our products:

- *Artificial vision.*
- *3D systems*
- *Automatismos*
- *traceability control*
- *Robot guidance and manipulation.*

Our verticals:

- *Pharmaceutical sector.*
 - *Container and packaging sector*
 - *metallurgical sector*
 - *Plastic and glass sector*
 - *Automotive industry*
 - *And many others*
-

At Visiomática, our main dedication is to incorporate control systems into your production processes in order to ensure the quality of your products. We are an artificial vision and automation engineering that offers optimal solutions for QUALITY CONTROL and/or TRACEABILITY in any phase of the production process and in any industrial sector. Our main dedication is to incorporate control systems into your production processes in order to ensure the quality of your products.

A seamless project management driving a second to none experience and results:

- 1 - *Analysis of the application:* our Engineers visit the client's facilities to analyze their needs, learn about their product and collect samples if necessary.
- 2 - *Preliminary technical and economic proposal to provide an optimal solution:* the experts carry out a study with the data collected and prepare a technical and economic report of the application proposal.
- 3 - *Demonstration of the solution to the client:* we carry out tests on the production line to be able to verify, correct and add data for the correct functioning of the application.
- 4 - *Formal offer, installation and start-up:* with the client's agreement, we send an offer to formalize the employment relationship. The Visiomatic's staff will go to the client's facilities to install the application online and proceed to its correct start-up, carrying out as many tests and modifications as are pertinent until it works correctly.
- 5 - *Training and after sales service.*





ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

LinCode

Revolutionizing the future with AI

Committed to leveraging the latest AI technologies to drive innovation and transform the way businesses operate.

Many successful automotive case studies: e.g. developing a machine learning solution for an automotive manufacturer that could accurately detect and classify defects in painted surfaces

Hardware agnostic, meaning they can be deployed on a variety of low cost devices, from glasses to commercial phone cameras, and are designed to be resilient to challenging lighting conditions and negative plant conditions.

LINCODE



LinCode is a company that focuses on developing and implementing artificial vision and deep learning technologies, which are utilized across a wide range of industries to provide innovative solutions for diverse business needs.

Our vision :

LinCode's vision is to leverage the power of artificial intelligence and deep learning technologies to help businesses and organizations across a variety of industries improve their processes, increase efficiency, and unlock new opportunities for growth and innovation.

Differentiator :

LinCode's key differentiators compared to other AI solutions providers include its ability to achieve high levels of accuracy with reduced numbers of training images, as well as its commitment to transparency and flexibility, with users empowered to customize and configure its technology for different use cases and types of defects easily, without having to rely on a black box approach.

disruptive technologies' observatory

CUARTARI



WE EXELL IN **BRIDGING**
THE STARTUP
ECOSYSTEM WITH
THE CORPORATES AND
SME'S REALITY



industry

services

automotive
train&agro

f&b
farma

aeronautics
& others

finTech
insurTech

Systems IT
cyber

propTech

hardware
equipment
integrators

JG AUTOMOTIVE
Your partner in metal solutions

automation

Engineering LASIT LASER MARKING INNOVATION DESINCO DLyte

IoT

nexMACHINA THE COMING TECHNOLOGY TwIndustry

energy efficiency & predictive

GESINNE CESINEL Grupo Álava MR

image

VisiOMATICA IRIS

eurofirms
People first

AEDAS HOMES

inoveoffice

software
SaaS
technologies

LINCODE

KITOV.ai

enabley
training

JUMIO

OpenLegacy

nemesysco
voice analysis technologies

cloudframe

The HOUSEMONK

SafetyCulture
hse

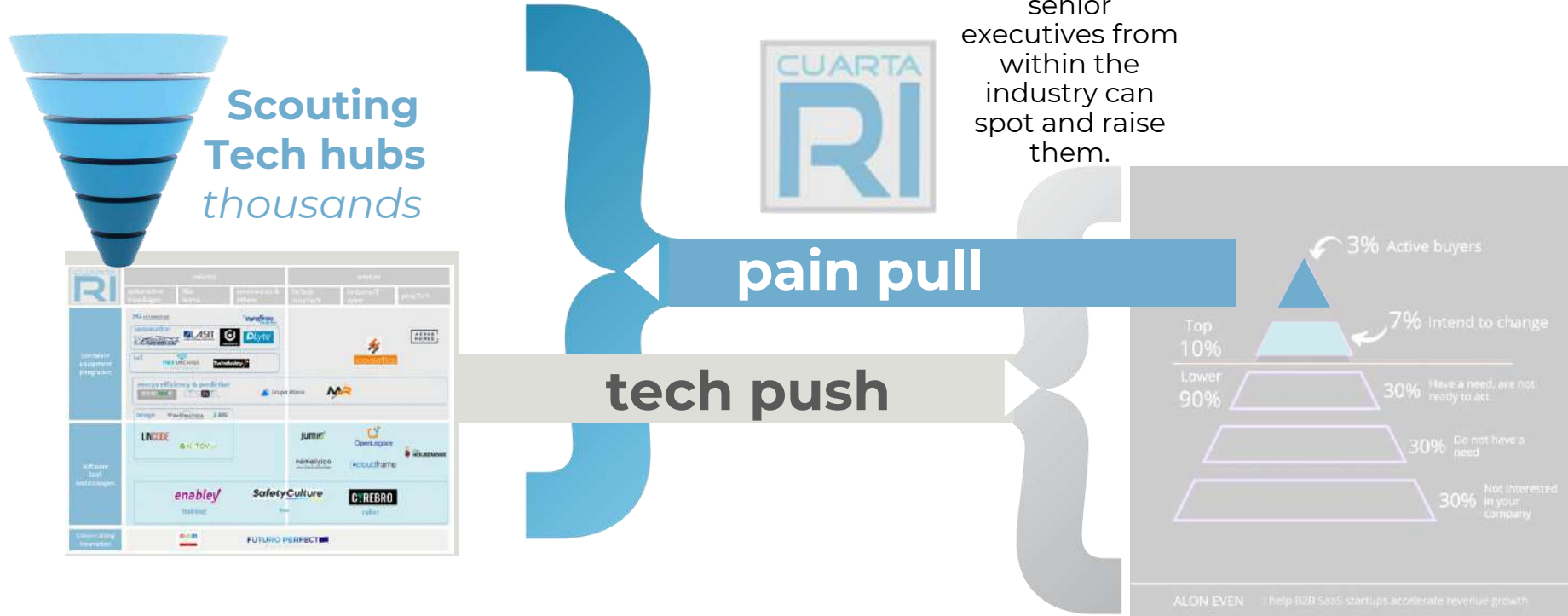
CYREBRO
cyber

Cross-cutting
innovation

CLARASE

FUTURO PERFECT
Beyond Innovation

Complementary approaches to achieve success



- **Start with quick wins:** the problems are not standard and they can be obvious or hidden and complex. Only experienced senior executives from within the industry can spot and raise them.

- **Latent needs for the future:** educating the majority of unaware clients (those that actually think they do not need you) and even those don't have a problem, is a long term strategy that drives sustainable growth and profitable business.



Pain pull: highest success rate
Engaging in strategic discovery meetings with key accounts' decision makers



Tech push: market entry
Decisively addressing targets after technology use cases study and market prognosis



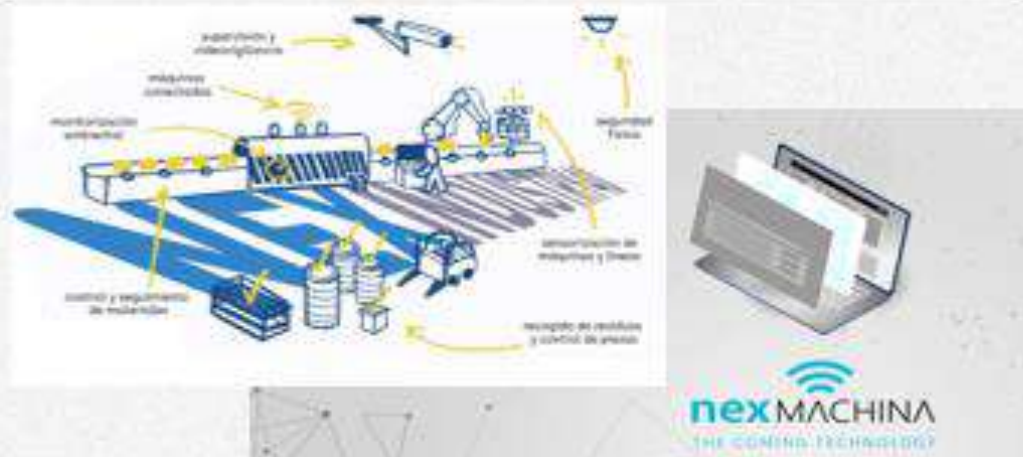
ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

nexMACHINA

IoT & digital transformation through wireless technologies



Our products:

- **Gateway NexIoT:** Multicommunication IoT Gateway NB-IoT/LTE Cat M1/EGPRS/LoRaWAN with connection to iQmeric cloud platform and other third-party platforms.
- **IoT iQmeric platform:** digitation, collection, monitoring, alerts and data graphic reports.
- **Nextbuilding:** Our solution for a 100% connected building. Valid for all types of buildings.
- **Nexindustry 4.0:** Our solution for a connected industry. Valid for all types of industries: (metallurgical, food, chemical, automobile, textile, energy...).
- **Nexvillage:** Our solution for a 100% connected and intelligent municipality.

We are a global company specialized in digitization through IoT (sensors, wireless networks and connected objects). Our strengths and our know-how are based on the design of comprehensive solutions, always focused on the needs of the client, mainly companies from all sectors in search of digitization, process improvement and cost savings.

What does Nexmachina do? NEXMACHINA is a global company specialized in digitization through IoT (sensors, wireless networks and connected objects). Our strengths and our know-how are based on the design of comprehensive solutions, always focused on the needs of the client, mainly companies from all sectors in search of digitization, process improvement and cost savings.

Why Nexmachina? we promote wireless technologies for the improvement of communications and the development of new solutions beneficial to all. In recent years, the company has deepened its commitment to connectivity issues, placing special emphasis on more sustainable and accessible IoT solutions for all types of companies and entities.

Nexmachina's Clients: we offer the market products and solutions that are competitive in price, performance and adaptable to the different needs of customers with a focus mainly on industrial B2B, B2G and B2C. What does Nexmachina solve or simplify for those customers? Connected, maintenance-free, low-cost and accurate solutions.





ENGINEERING & TECHNOLOGY
AUTOMATION & OPTIMIZATION



PROJECT MANAGEMENT
SALES OUTSOURCING

Twindustry

The future of automation: Virtual Commissioning



What can you do in Twin Suite

- *Layout simulation and material flow*
- *Integrated interfaces for Virtual Commissioning*
- *Artificial Intelligence Training*
- *Synthetic data generation*
- *operator training*

Tool to develop Digital Twins Based on unity graphics game engine. It incorporates a realistic 3D environment, Libraries and behavior models with great flexibility thanks to its implementation in C# and its easy SW & HW connectivity.

Twin Suite Benefits

Flexibility: wide range of integration possibilities. For VC, Digital Shadow, Artificial Intelligence, Logistics Systems, Additive Processes and more.

Workflow: easy creation of a custom workflow based on application and purpose.

Analysis options: simulated cycle times, production records, triggered alarms, stress scenarios...

Open Source: using TwIn Suite means more performance, fast development, new integrations.

Validation: perfect for validating cells and automated systems. Safety zones, collisions and operators can be simulated.

Connecting training with business results

enabley



PROJECT MANAGEMENT
SALES OUTSOURCING

Cheaper — Reduce training costs by using the different types of training in Enabley.

Anywhere anytime — The ultimate solution for deskless workforce. Mobile training everywhere and from every device.

Lower Risk — Better — Identify learning gaps and make decisions quickly with the help of automatic reports. Standardize knowledge and update your team with measurable content.

Enabley is a cloud platform that is designed to help organizations meet their training needs. The fusion of the formats LMS, LXP, Video Conferences and Tools of Audit makes us unique in the market. Global leaders such as CocaCola, Telefonica, Unilever, Bristol Myers Deloitte or European Central Bank.

Pain: Nowadays compliance and market constraints are facing all organizations with challenge to provide increasing content of certified training to its employees with scarce resources. On top, traditional LMS usage has overwhelmed learners that do not progress neither do they retain important skills.

Differentiator : Making both tasks (instructor and learner) as lean as it possibly can be (a full administrator training lasts only 2,5 hours), and allowing mid management to lead his team training by easily create courses or streams and monitor learners performance and advance, Enabley has disrupted the corporate training. Also in workplace contextual training grants messages stick and matter.

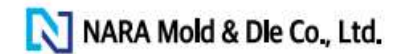
Some key customers by industry



Automotive



150+ Toolshops in China, India & South Korea



Automation



CUARTARI

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