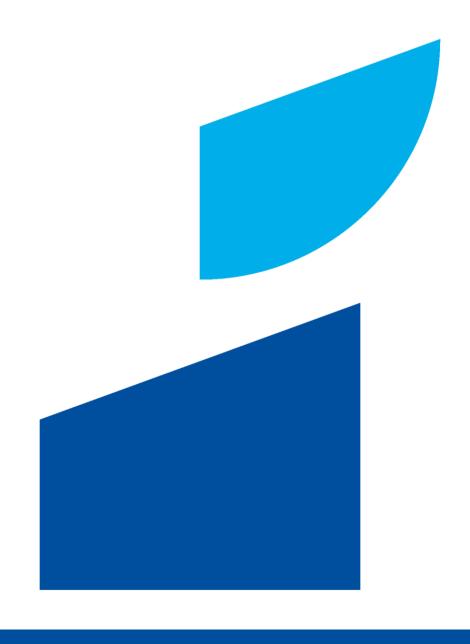


Company Presentation

Ingenics Consulting Hungary Budapest, 2025-04-29



Agenda

ingenics

- 1. About Us
- 2. Our Company and Service Portfolio
- 3. Special Characteristics and Achievements
- 4. Methods and Approaches





Who We Are and What We Stand For



Ingenics Consulting

is your international business consultancy for transformation and digitalization in the fields of production and logistics.

100 %

independent and owner-managed

> 650

employees worldwide

45 years

as a cross-industry partner for small & medium-sized enterprises & large corporations

Our Purpose since 1979

Building tomorrow's companies:

PEOPLE. PASSION. PERFORMANCE.

Delivering sustainable success through our passion for performance.

Our Focus:

Strategy and implementation



Consulting

Strategy | Processes | Organization

Planning

Concepts | Sustainability | Implementation support

Digital transformation

Strategy | Technology | Implementation

Academy

Qualification | Career models | Coaching

What Drives Us



Vision b



Innovative concepts, valuecreating solutions:

Together with our clients, we make an environmentally and socially sustainable future a reality.

Mission

> Planning

Effective strategies.
Cross-industry expertise.

> Implementing

Efficient solutions. Precise execution.

> Optimizing and Qualifying

Individual. Integrative.

Always with an eye on added value.

Purpose \(\)

Building tomorrow`s companies:

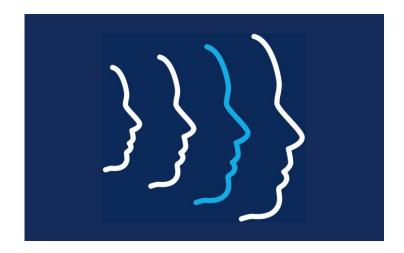
Delivering sustainable success through our passion for performance.

DNA of Ingenics Consulting



PEOPLE. PASSION. PERFORMANCE.

The distincitve Ingenics Consulting DNA for more than 40 years now.



People

In everything we do, we put people at the center. This applies to our clients as well as our employees.



Passion

We do not see change as an obstacle. Rather, we think it is an opportunity to make our clients stronger for the future.

Our passion: digitalization and transformation through courage and creativity!



Performance

With our combined strengths in strategy and implementation, we are rated highly by our clients and always thinking about how to add value.

Ingenics Culture



The culture core is the unalterable and worldwide equal cultural basis which represents success and identity of Ingenics.



Values - "How"

Performance.

Commitment.

Openess.

Respect.



Active.

We anticipate market and technology trends and are therefore always one step ahead for our customers.



Competent.

We operate with expertise and practical experience in a variety of fields.



Innovative.

We develop new solutions within our core competences to gain added value for our customers.



Cooperative.

We work effectively with customers and collegues.



2

Our Company and Service Portfolio

Ingenics Group – Service Portfolio





- Strategy Consulting
- Process & organizational consulting
- Planning & Realization
- Digital transformation
- Ingenics ACADEMY
- Innovation LAB





- Software Development
- Embedded Systems



- Personnel Services
- Recruitment
- Employee Leasing and Contracting for Planning & Realization

Ingenics Consulting at a Glance



Organization

23

♣ > 650

locations employees around the globe

100% owner-managed,

no outside shareholders, and manufacturer-independent

ø 13.2 years

> 45

of professional experience

collaborations and partnerships

Achievements

470

> 10.000

active clients

successfully completed projects worldwide



Service Portfolio – Ingenics Consulting



INGENICS CONSULTING



Strategy Consulting

- Strategy development
- Functional strategy production & logistics (production networks)
- Mission development/transformation consulting
- Performance management/cost reduction
- Business model development

Process & Organizational Consulting

- Business process optimization
- Organizational development & transformation
- Quality/supplier management
- Lean management
- Product cost optimization
- Maintenance & automation
- Supply chain management
- Restructuring/efficiency programs
- Change management
- Business process management

Planning & Realization

- Factory planning
- Logistics planning
- Production/manufacturing planning
- Industrial engineering
- Assembly planning
- Body shop planning
- Conveyor and storage technology planning
- Simulation
- Project management

Digital Transformation



- Road map digitalization
- IoT concepts & implementation planning
- Selection & implementation of IT solutions
- IT project management

Ingenics ACADEMY

- Leadership & coaching
- Development of learning paths & training



Innovation LAB

- Prototypes & software development
- IoT solutions
- Data science

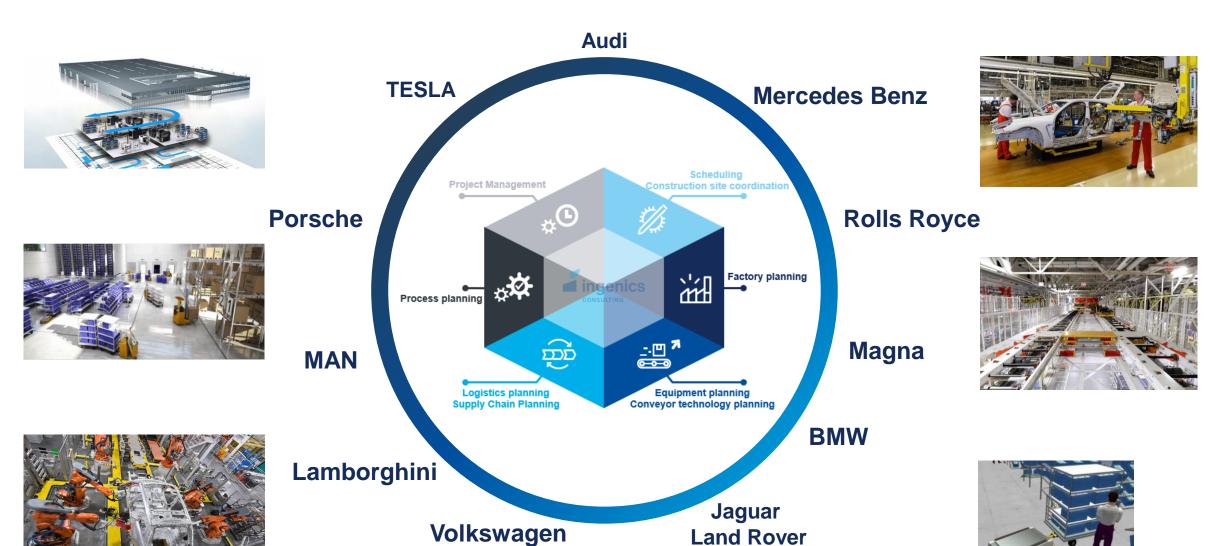


- Artificial intelligence
- Digital cockpit solutions

INNOVATION

Ingenics – Automotive-Customers





AUTOMOTIVE | Expertise





Site Development

Strategic Alignment of Greenfield and Brownfield Locations

Analysis and Optimization of Factory Structures

Concept, Detailed Planning, Tendering

Coordination and Realization Support



Supplier Management

Supply Chain Design and Optimization

Supplier Quality Improvement

Supplier Task Force and Trouble Shooting

Audit Support

Assurance of quality and delivery reliability



Engineering Consulting

Equipment engineering and design

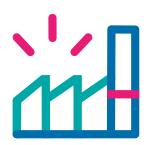
Design of Assembly Systems

Logistics and Warehouse

Design of Body in White Systems

Installation and Commissioning

Ramp-Up Management



Production Systems

Cost Reduction

Lean Production

Target Images for Smart Production

Continuous Improvement Process

Target Costing

OEE optimization



Strategic Development

High Performance Organization

Business Processes

Change Management

Lean Management

Innovation Management

Business Models

Development of target pictures



Digital Development

Strategic baselines, organizations and visions

Modules of the digital transformation

Internet of Things

Artificial Intelligence

Data Science and Management

Manufacturing process and equipment design



Process and Equipment













Process and Equipment

Awarding

Manufacturing

Packaging / Transport

Installation

Commissioning

Ramp-Up

- Creation of plant concepts
- Derivation of specifications
- Preparation of a technical tender (specification sheet)
- Emergency Concepts

- Technical examination of the tenders
- Offer and price comparison
- Award recommendation
- Accompaniment of the construction phase with K-release
- Coordination of production and plant construction
- Preparation and coordination of the preliminary acceptance
- Procurement of transport documents
- Tracking of the plant shipment
- Receipt of the system at the installation site
- Coordination of the plant construction
- Date tracking and progress control
- Interface management with other trades
- Commissioning and Defect tracking
- Functional and availability tests
- Handover of the plant ready for operation to the operator
- Focus on maturity level
- Quality and volume optimization
- OEE increase
- Improvement and optimization of industrialization













Deliverables

Specification book created

Tender documents for purchasing

Preliminary acceptance issued with acceptance protocol

Plant transported to the installation site

Plant set up and basic function established

Final acceptance issued with acceptance protocol

Line target achieved

Logistics process and equipment design



Logistics













Logistics Structure

Material flow and processes

Warehouse structure

Warehousing

Supermarket

Installation

Commissioning

Ramp-Up

- Definition of logistics strategy and delivery principles
- Quantity Structure defined and released (incl. packaging data defined)
- Components are classified

- Processes and functions
- Warehouse/ Logistics equipment
- Layout and areas
- Flows: Material, Information, Volume

- Area division:
 - Function-oriented
 - Area-oriented
 - High/Low-Runner
 - Mixed form
 - Explosives/ hazardous area design

- Warehouse occupancy design
- Functional assignment
- Container typing
- Warehouse parameterization:

- Route design
- Separation processes
- Empties process
- Consumable's definition (quantity) and processes
- Commissioning and Defect tracking
- Functional and availability tests
- Handover of the plant ready for operation to the operator
- Ensuring line supply (volume, frequencies, time)
- Stabilization of processes













Deliverables

Quantity structure

Specification and Tender

Warehouse design

Plan for every part

System set up and basic function established

Final acceptance issued with acceptance protocol

Line target achieved

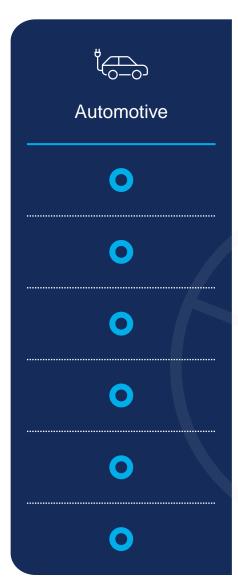
Ingenics Consulting – Company Presentation for STELLANTIS Hungary

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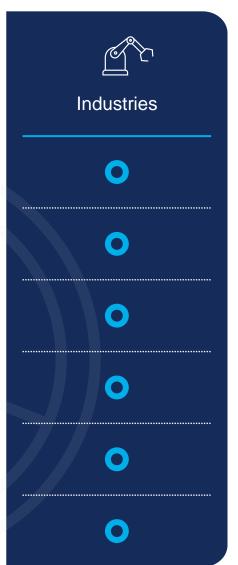
Ingenics Consulting – Industry and Technical Expertise



Strategy Consulting	Operations StrategyZero Emission Company
Management Consulting	 Performance Management Supply Chain Management Quality & Supplier Management Operational Excellence
Institute	Project ManagementAcademyCapability Management
Digital Solutions	Digital SolutionsBusiness Process Management
Production Solutions and Optimization	Production Technology & AutomationManufacturing Excellence
Factory and Logistics Design	Factory Design & SimulationLogistics









3

Special Characteristics and Achievements

References



























Heraeus

AIRBUS

Miele





ALSTOM

AESCULAP





































































































4 References | OEM [Extract]





Audi AG

Germany, Mexico, Belgium, China

Scope: Logistics, Material Flow, Assembly process and equipment, Quality & Supplier Management



Tesla Motors Germany

Scope: Construction Management, Logistics and Material Flow, Body-in-White Lead Planning

BMW AG

Germany, USA, China, Hungary, UK

Scope: Logistics, Material Flow, Assembly process and equipment, Quality & Supplier Management



Volkswagen AG

Germany, Poland, USA, Czech Republic, China

Scope: Logistics, Material Flow, Assembly process and equipment, Quality & Supplier Management



Mercedes Cars
Germany, USA, China

Scope: Logistics, Material Flow, Assembly process and equipment, Quality & Supplier Management



Volvo Car Corporation Sweden, USA, China

Scope: Logistics and Material Flow planning, Load Carrier global specification



Porsche

Germany

Scope: Plant-Structures, Material Flow planning, Assembly process and equipment,



NIO Cars

China

Scope: Master concepts and future model plant layouts

4 References | Small Series







Services: Development of greenfield and brownfield production scenarios



Audi AG – Quattro GmbH
Heilbronn, Germany
Services: Process Planning assembly
R8 Spyder



Porsche AG

Stuttgart-Zuffenhausen, Germany

Scope: Assembly Design and Planning for Taycan, Body in White PM



Rolls Royce

Goodwood, United Kingdom

Services: Conceptual Layout Planning, Detailed Assembly Planning, Material Flow Planning



Mercedes Cars - AMG
Sindelfingen, Germany

Services: Assembly planning and digital process planning for Mercedes-AMG GT Model



Rivian Automotive, Inc.

Normal, USA

Scope: Concept Check and
Benchmarking for new model plant Greenfield



Hethel, United Kingdom

Scope: Conception Plant-Structure and Layout & Benchmark



Bugatti Automobiles

Molsheim, France
Scope: Logistics & Material Flow,
Assembly efficiency increase



References for general planning projects - OEM references





Audi AG

San Josè Chiapa, Mexico

Scope: Greenfield Q5; Integration Q5 MHEV/PHEV/SB; Assembly, Logistics



US EV Manufacturer - Battery Plant Berlin/Brandenburg, Germany Scope: Construction Management, Intra Logistics, Body-in-White Lead



Audi Brussels Brussels, Belgium

Scope: Integration E-Tron; Assembly



BMW AG

Dadong, China

Scope: Integration PHEV, Assembly, Logistics



Audi AG / NEV Company

Changchun, China

Scope: Greenfield eQ6, eQ6 SB, E6 Assembly, HV-Battery



JLR

Nitra, Slovakia

Scope: Plant Structure Concept, Logistics: Body in White, Assembly



Planning

4 References | Battery





LG Chem

Wroclaw, Poland

Scope: Supplier development battery production



Battery Manufacturer (Norway) Site Canada

Scope: Master Plan, Layouting, Manufacturing Design



Accumotive

Kamenz, Germany

Scope: Task Force Ramp-Up
Management for battery assembly lines



Battery Manufacturer (Japan)

Trstená, Slovakia

Scope: Supplier development battery production



Northvolt Ett

Skellefteå, Sweden

Scope: Project Management, Interface OEM to Supplier



BMW AG

Spartanburg, USA

Scope: Concept Logistics for Battery Assembly



Tesla Motors – Battery Plant Berlin/Brandenburg, Germany

Scope: Construction Management, CE-Conformity



S-Volt
Heusweiler, Germany
Scope: Concept for Battery Module
Intralogistics and Material flow



Ingenics in the top 10 of German management consultancies



Top 20 German business consulting companies Sorted by revenue (ranked)							
2024	2023		2023	2022	2023	2022	
1	1	Roland Berger Holding GmbH & Co. KGaA, Munich	1,000.0	870.0	3,400	3,000	
2	2	Simon-Kucher & Partners Strategy & Marketing Consultants GmbH, Bonn	540.5	534.9	2,017	1,953	
3	5	Horváth AG, Stuttgart 1)	306.0	270.0	1,222	1,056	
4	4	Porsche Consulting GmbH, Stuttgart	304.6	271.0	930	840	
5	6	d-fine GmbH, Frankfurt am Main	266.2	221.6	1,572	1,215	
6	8	zeb.rolfes.schierenbeck.associates GmbH, Münster	223.7	200.2	975	906	
7	7	Detecon International GmbH, Cologne	211.3	214.4	1,215	1,217	
8	11	4flow SE, Berlin 2)	130.1	110.5	1,088	805	
9	12	H&Z Group, Munich	127.0	99.7	637	592	
10	14	Ingenics AG, Ulm	86.1	78.3	635	613	
11	16	Cassini Consulting AG, Düsseldorf	81.9	73.8	431	412	
12	15	Miebach Consulting Group, Frankfurt am Main	78.0	75.0	460	440	
13	17	Berylls Group GmbH, Munich 3)	72.0	62.0	232	157	
14	17	Unity AG, Büren	71.6	62.0	380	380	
15	20	Horn & Company Group GmbH, Düsseldorf 4)	71.2	41.9	235	123	
16	19	Staufen.AG, Köngen	59.0	51.0	280	280	
17		quattron holding GmbH, Bamberg	44.9	40.7	230	207	
18		ROI-EFESO Management Consulting AG, Munich	39.0	37.8	149	138	
19		Struktur Management Partner GmbH, Cologne	37.3	28.0	99	89	
20		Iskander Business Partner GmbH, Ismaning	29.8	29.4	59	41	





4

Methods and Approaches

An Eye on the Big Picture ...



HOLISTIC

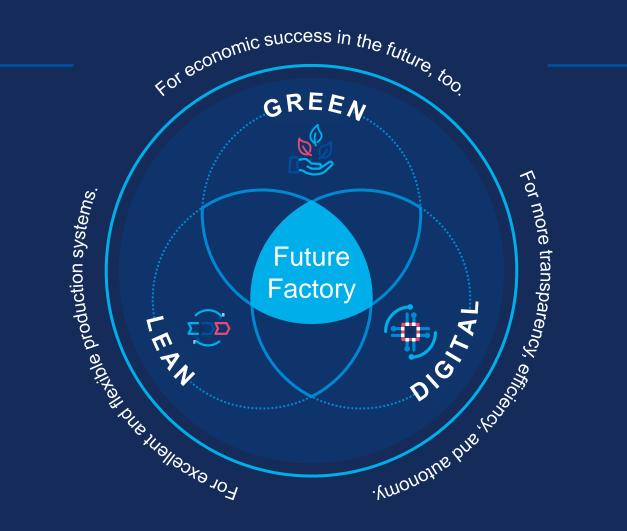
BUSINESS TRANSFORMATION



Holistic business transformation aims to make a company stronger overall and ensure that all aspects of business operations are compatible with each other and help the company achieve its goals. For it, measures must often be thoroughly analyzed, planned, and implemented so lasting improvements can be made.

Continual Transformation: Lean – Green – Digital





LEAN | GREEN | DIGITAL Continual Transformation

Transformation on only one level is no longer useful. Lean, Green, and Digital need to be brought into balance as the core components of a holistic and continual transformation.





Our Services for Excellent and Flexible Production Systems

Principles of lean management

Define values based on client's perspective

Identify value stream

2 Implement "flow" principle

3 >

Introduce "pull" principle

4

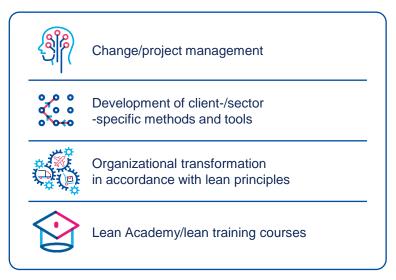
Strive for perfection

5

Lean-related services







Envision, empower, and implement – that's the lean management principle we strive for to create excellent and flexible production systems.







Our services for economic success in the future

Zero Emission Company Green Supply Chain Green Product Green Factory

Includes all logistical activities from the supplier to the customer.

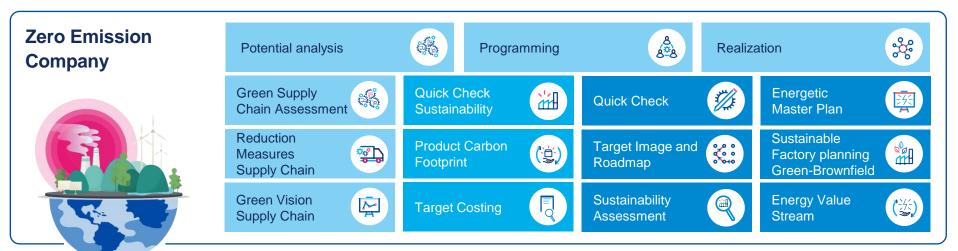
Includes product development, manufacturing processes and material purchasing at product level.

Includes the sustainable design of the factory and production structure.

Includes the holistic organization & management of various standards and norms.

Sustainability

management systems





Our consulting portfolio seamlessly integrates ESG aspects and enables you to take future-oriented measures for a holistic transformation.







Our Service for More Transparency, Efficiency, and Autonomy

Principles of the Smart Factory

Establishing Efficient Processes

1

Create Transparency 2

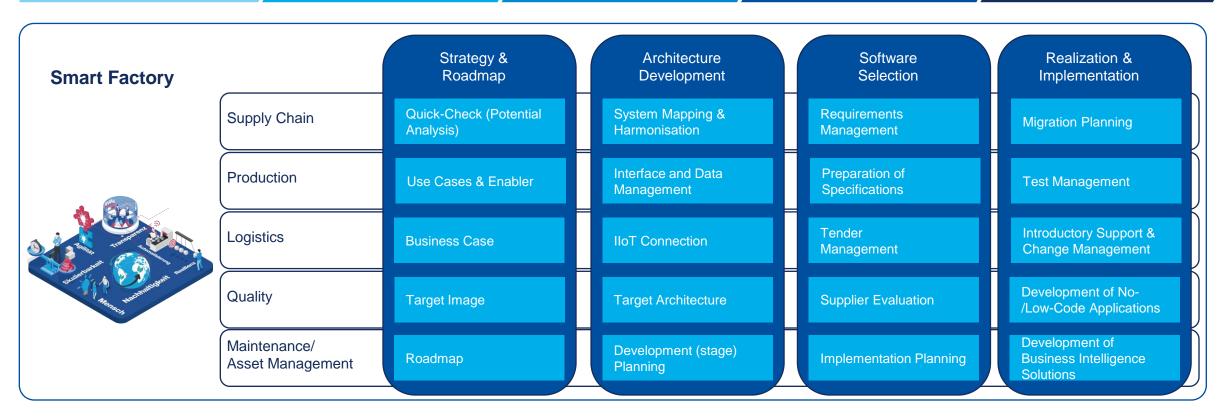
Create Responsiveness 3

Simulate and Predict

4

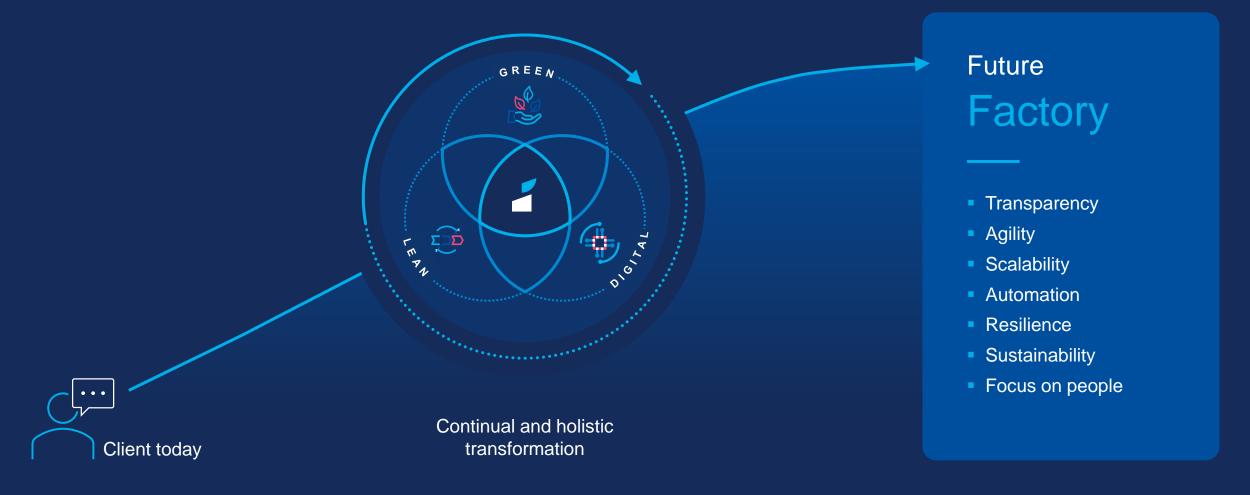
Aim for Autonomous Systems

5



LEAN – GREEN – DIGITAL – The Path to the Future Factory





We use the services we provide for lean, green, and digital to aid the transformation to the factory of the future. The steps recommended in this process are tailored to our clients individually and precisely.

Future Factory – The Future of the Intelligent Factory





Future Factory



The future belongs to the Smart Factory

Seven theories – seven conditions for the dynamic "Future Factory"

Transparency

Data is the fuel of the Future Factory

The Future Factory sets new standards when it comes to end-to-end transparency. All information is provided in real time across the entire value chain.

Agility

The Future Factory reinvents itself every day

Modular process organization and adjustable infrastructure are the answers to dynamic market conditions and modern work concepts. The Future Factory makes it possible to implement new technologies in a flexible manner and realize individual client requirements.

Scalability

Standardization creates individuality

The Future Factory is scalable. An efficient adjustment process, one that can respond individually to volatile supply and demand, is made possible by the standardized modular structure.

Automation

Everything requiring automation will be automated

The Future Factory's combination of intelligent technologies and autonomous systems boosts productivity and efficiency, enabling fault-free production and relieving employees of routine activities.

Resilience

There are no crises with the Future Factory

Resilient factories are able to anticipate constant changes in their environment and swiftly and independently take countermeasures. In the Future Factory, change is always seen as an opportunity for growth and development.

Sustainability

Positive value only comes from from green factories

The Future Factory focuses on sustainnability by combining resource-saving and ultraefficient value-adding processes. The positive impact affects the entire factory life cycle and is the only option for economic production in the future. The Future Factory constantly learns from nature. **People** are decision-makers and designers in a collaborative and respectful work environment

People are at the core of the Future Factory. Monitoring complex digital systems and adapting to new technologies can only be achieved with qualified specialists. The Future Factory offers attractive and respectful work environments and empowers employees to achieve their full creative and strategic potential in highly complex assignments.

Our USP: Consulting and Implementation



Expertise from a single source



Target vision and transformation

We develop goals and strategies for process and organizational optimization.

Efficient processes
Sustainable organization
Agility | Transparency | Quality
Coaching and employee training



Top-down and bottom-up

We consider all strategic impacts.

Ambitious and realistic approaches
Interaction on all levels
Top-down design + bottom-up implementation
= long-term success



Technical expertise and practical experience

We facilitate optimal implementation and ensure your success.

Operational know-how
Technological and specialist expertise
Holistic project management
Analysis skills

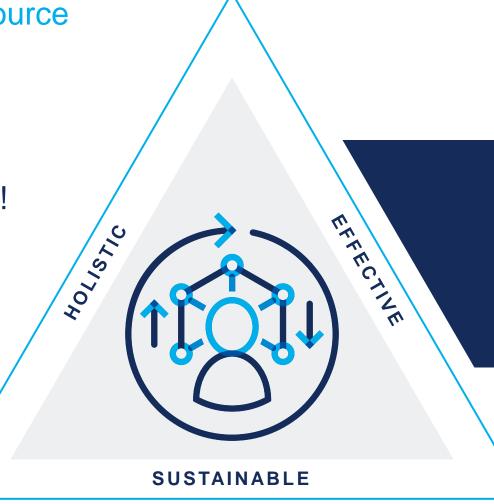
Our USP: Consulting and Implementation



Expertise from a single source

Together we will achieve your transformation goals!

We help you by using our consulting expertise, implementation skills, and many years of experience, as well as our ability to achieve holistic and individual project success.

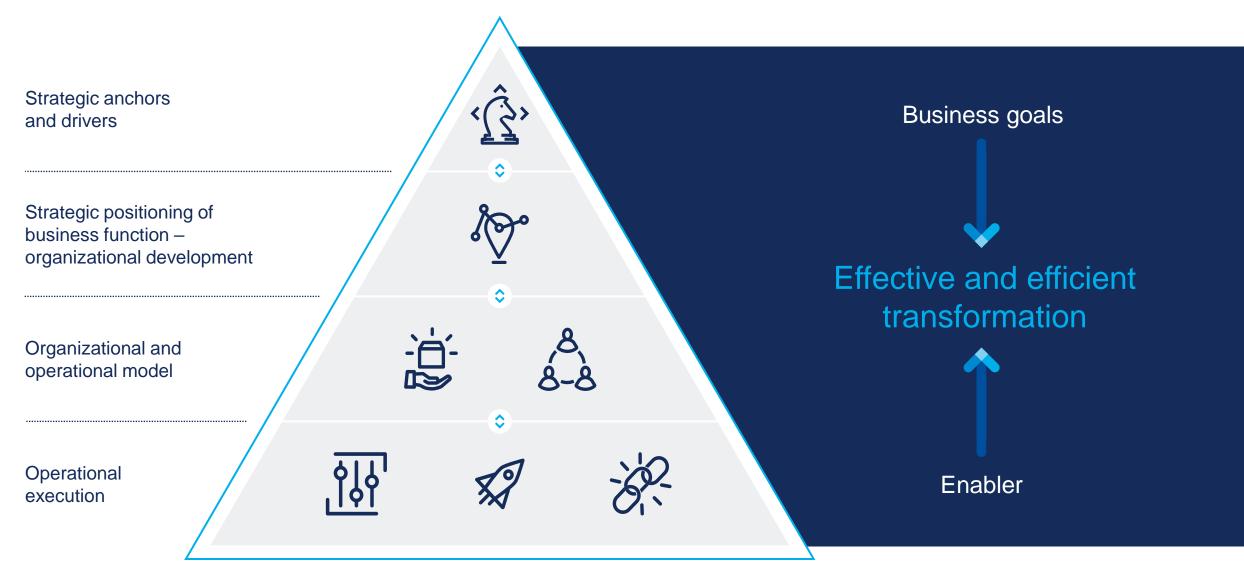


Ingenics Consulting

The transformation partner that helps you improve your competitiveness

Our Approach: From Strategy Development to Implementation Support







We are looking forward to see you in your factory





Contact

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