



ADMA

**MEET THE ADVANCED
MANUFACTURING
CHAMPIONS**

This document was prepared by Agoria (www.agoria.be) and OldContinent (www.oldcontinent.eu)

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PDF ISBN 978-92-9460-704-1 doi: [10.2826/959498](https://doi.org/10.2826/959498)

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The ADMA Pilot Consortium

Core team











Technology partners



















Communication experts





Outreach & learning network partners





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About this Inspiration Book

Why?

This very first edition of the ADMA Inspiration Book has been made to disseminate and further upscale to a wider audience the successful ADMA approach and related SME showcases.

What?

A book that introduces you to the methodology, the main learnings from the pilot project as well as to the performance and feedback of 15 European manufacturing SMEs

Target group

Whether you are an SME leader or employee, a local/regional/national or European policy maker, or an intermediary organisation, this document will guide and inspire you with respect to the manufacturing SME's journey towards Factories of the Future.

Other related documents & staying connected

If you want to read and learn more, following steps can be taken :

Visit the official [ADMA website](#)
(where also all Partner contacts can be found)

Visit the [ADMA Europe Youtube channel](#)

The creation of a European ADvanced MAnufacturing Support Centre

The European Commission in 2018 launched a project to **establish a European Advanced Manufacturing Support Centre** to help SMEs assess the possibility of adopting both advanced manufacturing solutions as well as social innovation strategies thereby transforming their organisation towards next-generation factories with more competitive, modern and sustainable production.

A first pilot action was conducted by the ADMA Consortium and involved more than a **100 small and medium sized enterprises** (SMEs) in **12 European countries**. Nearly **70 companies received**

active support. This inspiration book will guide you through the Centre's unique approach and showcases **15 successful ADMA-supported SMEs**.

The main objective of the European ADvanced MAnufacturing Support Centre (ADMA) is to **help European manufacturing SMEs assess the possibility of adopting advanced manufacturing solutions and social innovation strategies**. In doing so, they transform into next-generation factories with more competitive, modern and sustainable manufacturing methods.

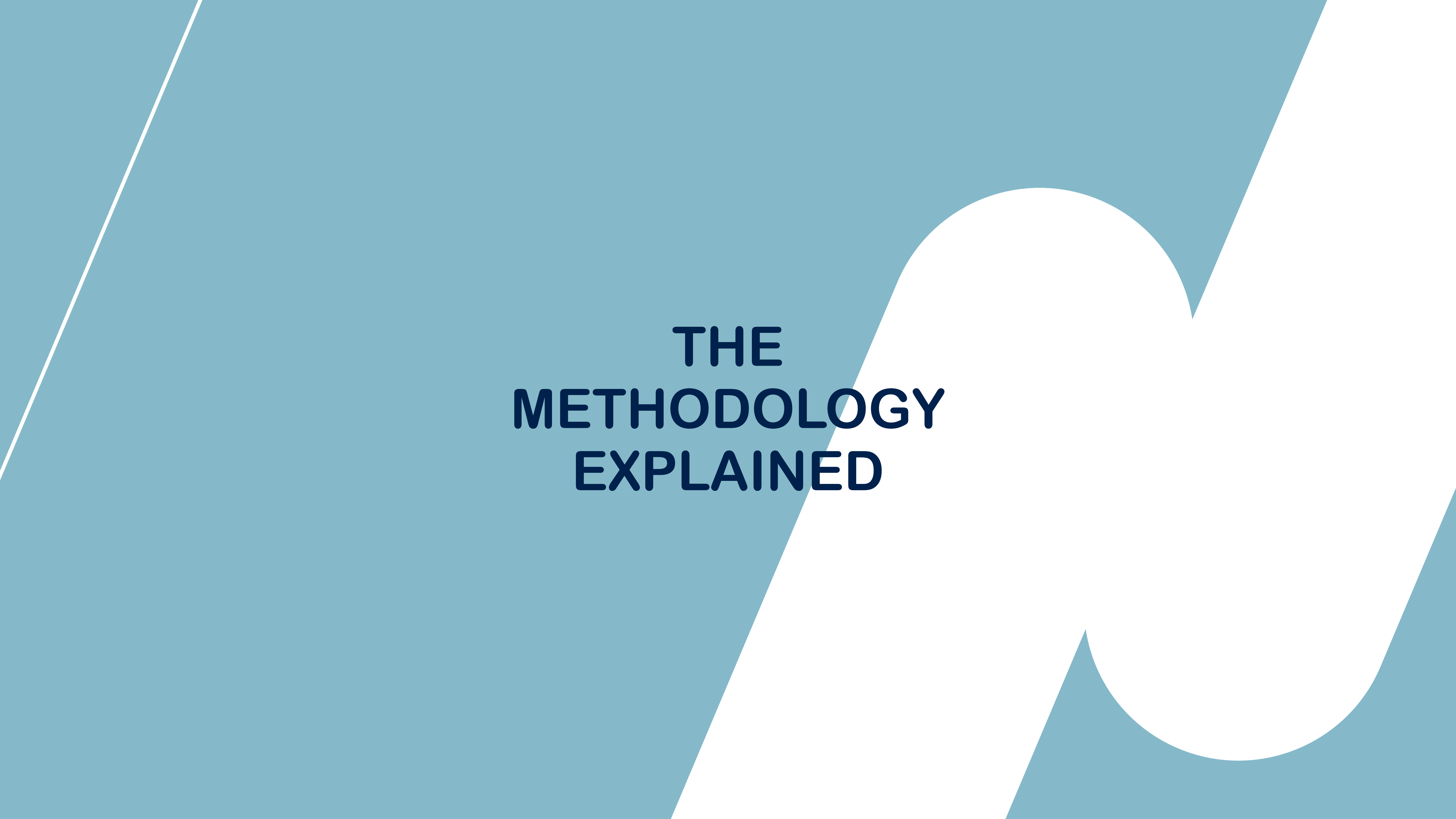
The creation of a European ADvanced MAnufacturing Support Centre

The ADMA approach has turned out to be a success. Over the past three years, more than **300 SME professionals** have performed the ADMA Scan, which is now available in **11 languages**. The project team reached out to **110 European manufacturing SMEs, employing nearly 10.000 people**.

No less than **69 companies** received a fully customised ADMA Transformation Plan, highlighting the priority areas for each company. Additionally, the Centre organised **20 learning network events, connecting more than 200 participants** and

giving them the chance to discuss themes like industrial servitisation, smart manufacturing, smart supply chains and digitisation.

The ADMA methodology turns out to be relevant for
1) all types of manufacturing activities, from limestone quarries to coffee makers and
2) various types of regional innovation ecosystems (*the methodology has been taken up by organisations located in nearly all EU countries*).

The background features a teal color with white geometric shapes. On the left, a thin white diagonal line runs from the top-left towards the center. On the right, a large, white, rounded shape resembling a stylized 'M' or a series of connected arches is positioned. The text is centered in the teal area, overlapping the white shapes.

THE METHODOLOGY EXPLAINED

The Methodology explained

The ADMA Initiative, performed on behalf of the Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) and the European Innovation Council and SMEs Executive Agency (EISMEA) strongly builds on a holistic approach.

Next to addressing technology oriented transformation areas

T1 Advanced Manufacturing Technologies

T2 Digital Factory

T4 End-To-End Customer Focussed Engineering

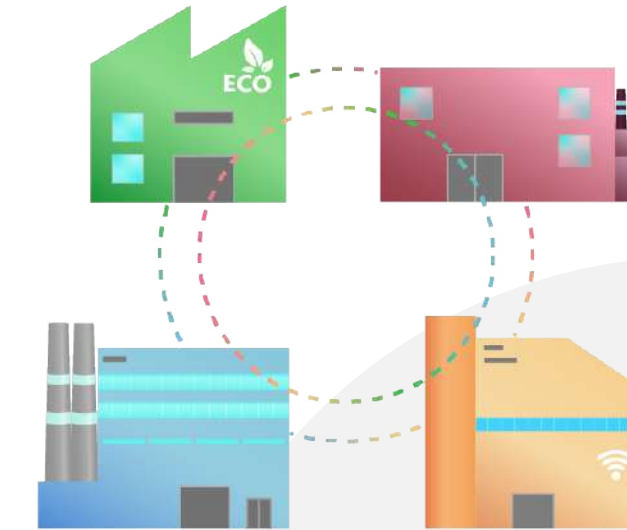
T6 Smart Manufacturing

it also explicitly includes non-technological transformations

T3 ECO Factory

T5 Human-Centred Organisation

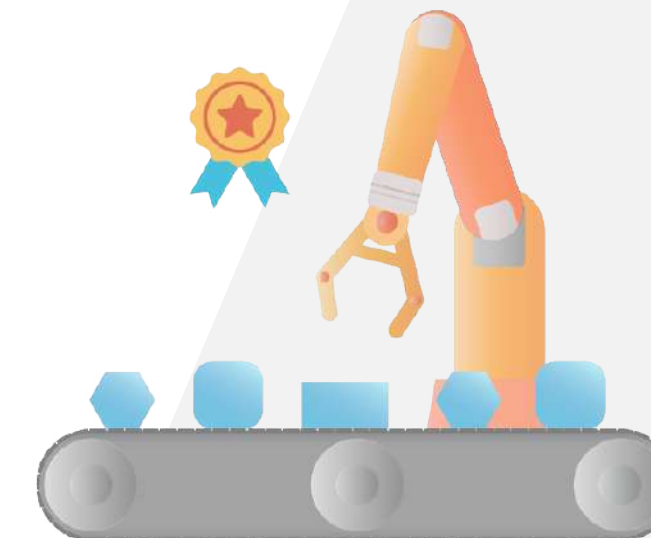
T7 Value Chain Oriented Open Factory



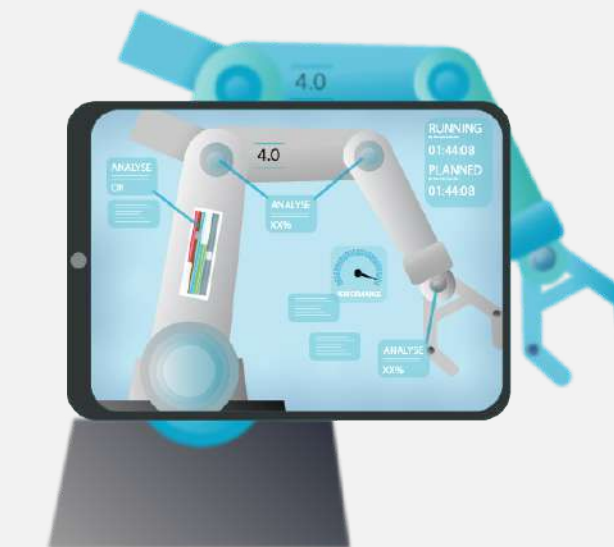
T7 Value Chain Oriented Open Factory



T4 End-To-End Customer Focussed Engineering



T1 Advanced Manufacturing Technologies



T2 Digital Factory



T6 Smart Manufacturing



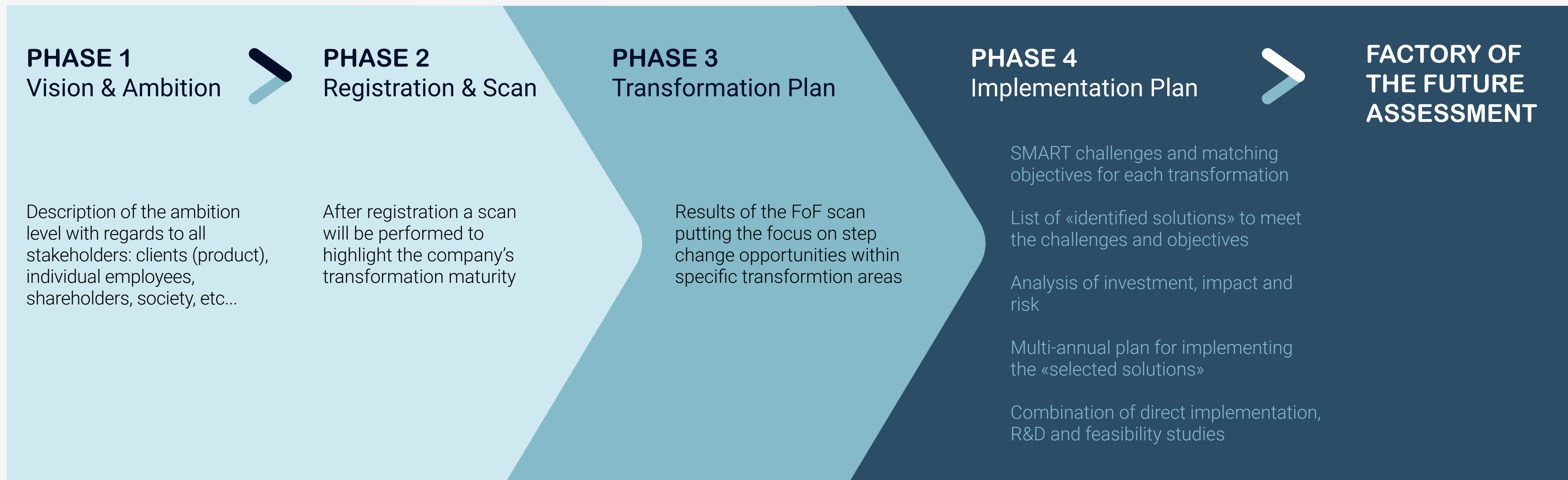
T3 ECO Factory



T5 Human-Centred Organisation

The Methodology explained

The ADMA consortium created a generic one-stop-shop approach, consisting of **4 distinct phases** :



The Methodology explained

PHASE 1

Vision & Ambition

During **Phase 1**, in order to capture the vision & ambition levels of the companies, the ADMA advisor will start spending time on **checking the innovative capabilities of the company**, the presence of an already Lean-oriented factory culture, their biggest challenges etc.

The SME will **receive information and assistance** on how to measure the progress of their company in their transformation process towards a factory of the future, as well as on how to **define Key Performance Indicators** to measure the success of the transformation process at company level.



The Methodology explained

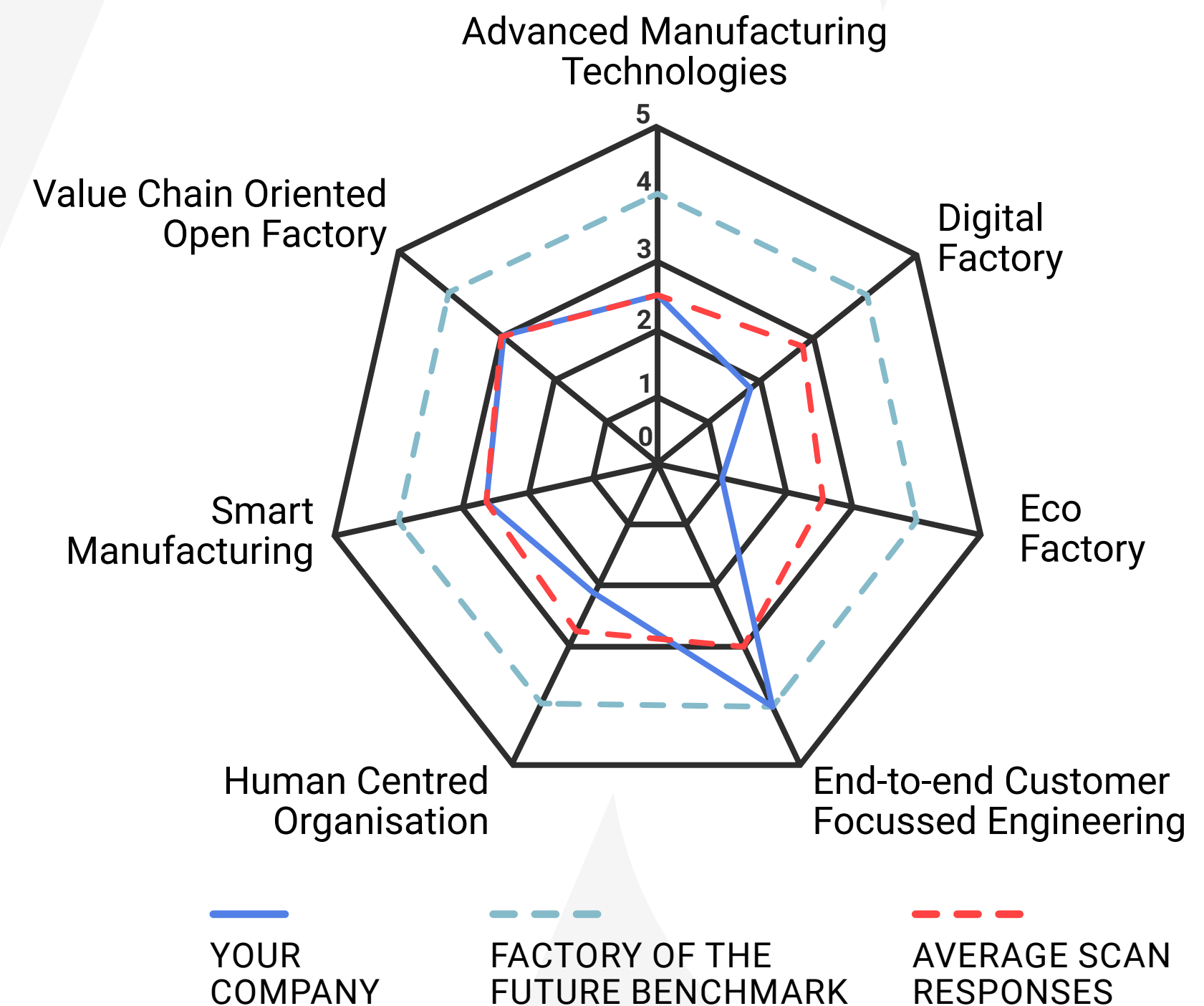
PHASE 2 Registration & Scan

Both a short and a long version of the company scan has been made available through an online self-assessment web tool, containing a registration module. After filling in the short scan (22 questions), an ADMA advisor takes contact with the company to check its ambition level with respect to the company's Factory of the Future journey. If the company wants to learn more about and actively engage with the holistic character and support possibilities of ADMA, the ADMA advisor invites the company to fill out the long version scan (51 questions).

An ADMA long version scan of an SME is typically filled out by 4 to 5 different people of the same company. The ADMA advisor collects all answers into a scan analysis file and prepares a feedback session.

Your individual Factory of the Future Maturity Summary *Long Scan*

Company	Sector	Size	Country	Average Maturity level
	Metals and Mineral products	Small	Belgium	2,5
First Name	Last Name	Job Title	Email Address	
Ward		Production Engineering & IT		



The Methodology explained

PHASE 3 Transformation Plan

By integrating all answers from the long version scan into one scan analysis file, interesting differences between colleagues can be exposed. Sometimes their answers align, sometimes they express different points of view. These differences need to be tackled before the company develops its plans for the future. A feedback session and (sometimes) a guided tour of the workplace can be very useful in this respect. During a face-to-face conversation, people hear each other's reasons for giving certain scores and adjust their own point of view. In this way, determining the transformation priorities of the SME becomes much easier.

This feedback session yields the necessary information for the ADMA advisor to prepare an ADMA Transformation Plan. Next to summarizing the feedback session discussion, the ADMA Transformation Plan will also define and identify the (type of) partner organisations and other appropriate organisations that can support the SME. This can be relevant competence centres/clusters/field labs that provide companies with the opportunity to perform tests and trials with advanced technologies and systems, as well as organisations that can advise on innovative organizational modes.

The Methodology explained

PHASE 4 Implementation Plan

Step 1 **ANALYSIS,** **vision and objectives**



On the basis of the [ADMA scan](#) analysis described in the transformation plan, the company will now start further refining the 'AS IS'-situation for well-defined ADMA transformation topics. Next, the ADMA coach will assist the SME in developing the implementation challenge description(s) more precisely, including the construction of specific, measurable objectives for each of the desired or necessary company breakthroughs.

Some examples of breakthrough objectives :

- Reduce throughput times in two years' time from 8 to 2 days.
- Increase customer delivery reliability from 78% to 90% by the end of next year
- Lower inventory levels by a factor of 4 in 18 months
- Increase the number of robot units per employee from 0,2 to 1 the coming 3 years
- Remove one management layer in 6 months' time
- Run the factory at least 20% on renewable energy by 2025

The Methodology explained

PHASE 4 Implementation Plan

Step 2 **SYNTHESIS** of potential solutions to meet objectives



The second phase is about closely working together with the team at the SME's premises, thereby applying idea-harvesting techniques in efficiently organized brainstorm sessions. The aim of these joint workshops always will be to make sure that the search for potential solutions is well-structured and as complete as possible.

The ADMA coach will provide SME-support in the search for relevant solution options, including a provision of the needed resources, input from tech or solution suppliers and if relevant a listing of organizations that can help the company develop its objectives. Ideally, for every identified solution also a realistic timeline for implementation is being created during this phase...

The Methodology explained

PHASE 4 Implementation Plan

Step 3 **EVALUATION** of identified solutions



This 3rd phase is all about applying a scoring mechanism to the list of identified solutions. Although this can be either done through a quick screening or through a detailed calculation, the mechanism should always be tuned to the specific needs of the company.

A non-limitative list of possible evaluation criteria for the different solutions identified can include :

Investment-related	Return/Impact-related (= <i>contribution to the objectives stated</i>)
Budget needed to implement Time to implement Specific training needed Amount of external support needed	Quality Cost reduction Process stability Operator efficiency Retention

The Methodology explained

PHASE 4 Implementation Plan

Step 4 **CONSOLIDATION of the ADMA implementation plan**



Together with the company, the ADMA coach will write down what exactly is going to be executed at what timeframe by the employees, tech suppliers and other potential partners involved. Part of this implementation plan should always clearly state on the basis of which criteria the follow up to the plan will be measured. *(When do we adjust, when is a re-evaluation needed, etc?)*

- It's always a team effort ! The company's employees and relevant experts have an important role to play, the ADMA coach is there to support
- Rule of thumb : the ADMA coach will spend a total of 10 to 20 days on Phase 1 till Phase 4, the company has to spend at least the same amount of days (can be different people of course)
- Think of all stakeholders inside the SME; everybody's point of view and expertise (e.g. on consequences of certain choices) should be valued
- The full support and understanding of top management is needed
- Strengthen the company with (external) experts

The background features a teal color with white geometric shapes. On the right side, there is a large, white, stylized shape resembling a 'W' or a series of connected arches. A thin white diagonal line runs from the top left towards the center.

KEY LEARNINGS

#1 ADVANCED MANUFACTURING TECHNOLOGIES SHOULD SUPPORT AN SME'S AMBITIONS, NOT THE OTHER WAY AROUND.

#2 Companies need proper support and guidance to be able to transform their manufacturing processes.

#3 A feedback session after an ADMA scan creates the right setting and engagement at a company. The subsequent ADMA implementation plan makes breakthrough transformations become real.

#4 The holistic and open character of the ADMA methodology has proven to be a key success factor.

#5 Support should always be tailored to the specific needs of an SME.

#6 Train-the-trainer sessions proved critical in preparing the ADMA advisors for their support role.

Key Learnings

#1 Advanced manufacturing technologies should support an SME's ambitions, not the other way around.

At the start of the ADMA pilot project, more than 140 Dutch, Belgian and Slovenian SME leaders were asked about their main challenges. Top of the list were:

- **Attracting and developing talent**, especially employees with the right skills and qualifications;
- **Changing the mindset of the company**: not all employees are eager to adopt a more automated, digital way of working, and making changes puts pressure on the day-to-day running of the business;
- **Entering the digital era**: providing real time information and creating a clear strategy to generate added value from digital data;
- **Creating new or extra value through sustainability** and resource efficiency.

The pilot project made clear that SMEs need support to understand their own strengths and weaknesses, to analyse their challenges and to find fitting solutions. The ADMA advisors provide new points of view to address the challenges that small enterprises face. With the help of the ADMA methodology, SMEs are able to tackle their various transformation areas, taking into account their own processes and business habits.

In this inspiration book, **15 cases** are presented to showcase relevant, practical examples and best practices.

#1 Advanced manufacturing technologies should support an SME's ambitions, not the other way around.

#2 COMPANIES NEED PROPER SUPPORT AND GUIDANCE TO BE ABLE TO TRANSFORM THEIR MANUFACTURING PROCESSES.

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Key Learnings

#2 Companies need proper support and guidance to be able to transform their manufacturing processes.

Managing and improving a manufacturing process is **inherently complex**. Various parameters can be changed to increase productivity: from production throughput time and delivery performance to production cost, quality and product variety. All these indicators interact and often conflict with each other. For example, if a product takes less time to make, the quality may be lower. And if a product is of better quality, the price is often higher.

	Lead time	Delivery	Cost	Quality	Variety
(Shorter) Lead time					
(Better) Delivery					
(Lower) Cost					
(Better) Quality					
(Higher) Variety					

Key Learnings

#2 Companies need proper support and guidance to be able to transform their manufacturing processes.

Because of this complexity, companies need proper support to be able to transform their manufacturing processes. Assistance is most often needed when it comes to:

- improving people skills through specific trainings;
- enhancing people involvement and transparent communication;
- increasing planning accuracy and delivery reliability;
- monitoring production quality in real time;
- integrating manufacturing processes digitally.



#1 Advanced manufacturing technologies should support an SME's ambitions, not the other way around.

#2 Companies need proper support and guidance to be able to transform their manufacturing processes.

#3 A FEEDBACK SESSION AFTER AN ADMA SCAN CREATES THE RIGHT SETTING AND ENGAGEMENT AT A COMPANY. THE SUBSEQUENT ADMA IMPLEMENTATION PLAN MAKES BREAKTHROUGH TRANSFORMATIONS BECOME REAL.

#4 The holistic and open character of the ADMA methodology has proven to be a key success factor.

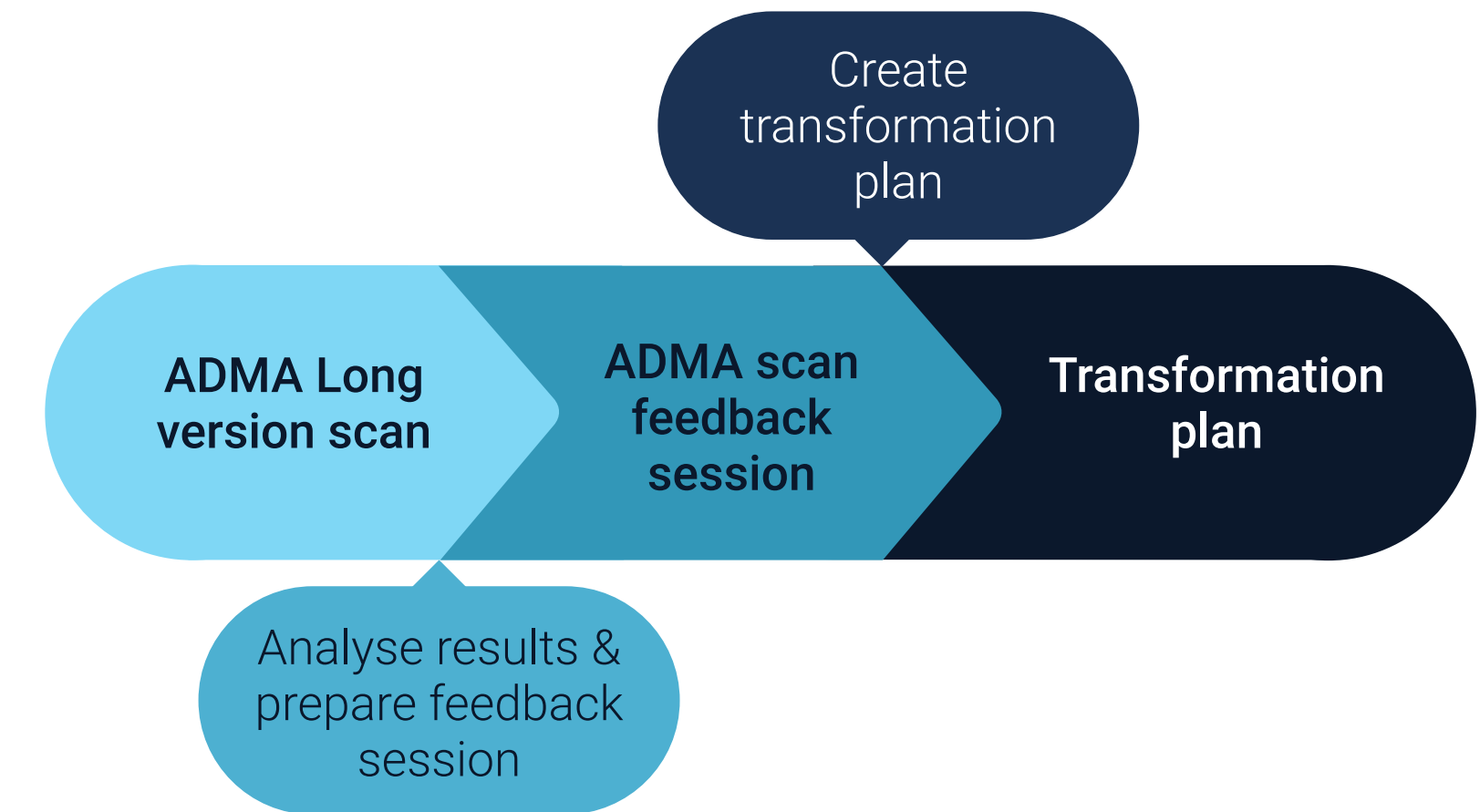
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Key Learnings

#3 A feedback session after an ADMA scan creates the right setting and engagement at a company. The subsequent ADMA implementation plan makes breakthrough transformations become real.

An ADMA long version scan of an SME is typically filled out by 4 to 5 different people of the same company. The ADMA advisor collects all answers into a scan analysis file and prepares a feedback session. This feedback session yields the necessary information to prepare an ADMA Transformation Plan.



Scan feedback session

By integrating all answers from the long version scan into one scan analysis file, **interesting differences between colleagues can be exposed**. Sometimes their answers align, sometimes they express different points of view. These differences need to be tackled before the company develops its plans for the future. A feedback session and (sometimes) a guided tour of the workplace can be very useful in this respect. During a face-to-face conversation, people hear each other's reasons for giving certain scores and adjust their own point of view. In this way, determining the transformation priorities of the SME becomes much easier.

Key Learnings

#3 A feedback session after an ADMA scan creates the right setting and engagement at a company. The subsequent ADMA implementation plan makes breakthrough transformations become real.

Implementation plan

Once the scan exercise, followed by the scan feedback session has yielded a viable Transformation Plan, it is time to take the ADMA approach one step further and to start making things real. How can the SME implement those transformations it needs to become a Factory of the Future? This is where the ADMA coaches come in. They will tailor their approach to the specific needs of the company and suggest 4 implementation plan phases:

- 1** Refine the 'as is' situation and **define specific, measurable objectives** for each desired transformation.
- 2** Organize **brainstorm sessions** and ask the whole team to search for potential solutions.
- 3** Apply a **scoring mechanism** to the list of identified solutions. This can be a quick screening or a detailed calculation, according to the needs of the company.
- 4** Write down exactly the **what, who and when**: what is going to be done, who is going to do it (employees, tech suppliers, other partners) and when will certain measures be taken.

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#4 THE HOLISTIC AND OPEN CHARACTER OF THE ADMA METHODOLOGY HAS PROVEN TO BE A KEY SUCCESS FACTOR.

#5 Support should always be tailored to the specific needs of an SME.

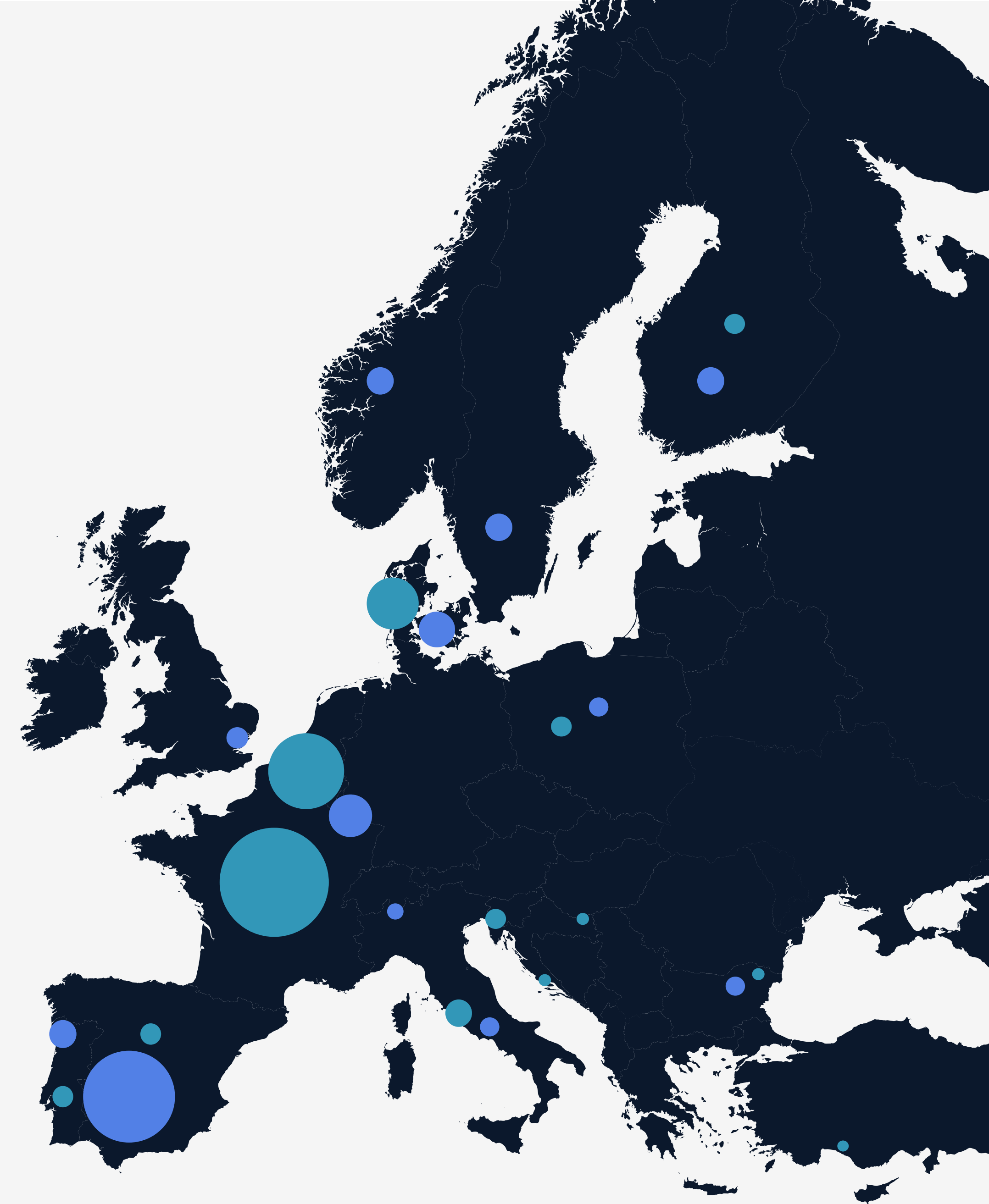
#6 Train-the-trainer sessions proved critical in preparing the ADMA advisors for their support role.

Key Learnings

#4 The holistic and open character of the ADMA methodology has proven to be a key success factor.

ADMA goes beyond renewing the technology-inspired aspects of a manufacturing system. SMEs need **to embrace different forms of innovation**: social, sustainable, business-oriented ... This may include a drastic change in the organisational culture of a company, for example by adopting new learning skills or new management processes. For a manufacturing SME, aiming for a human-centred organisation is often a real eye-opener.

Next to being holistic, the ADMA approach is also very open. Establishing an **open network** is crucial for SMEs to operate successfully at a European level. It offers them broader access to well-placed experts and a chance to rely on a harmonised methodology, covering a range of topics beyond the SME's own, often limited scope. As the ADMA methodology has proven relevant to all types of manufacturing SME's across Europe, it was taken up and deployed in various industrial ecosystems. ADMA now has the support of **129 supporting organisations, covering almost all European countries**.



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#2 Companies need proper support and guidance to be able to transform their manufacturing processes.

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#5 SUPPORT SHOULD ALWAYS BE TAILORED TO THE SPECIFIC NEEDS OF AN SME.

#6 Train-the-trainer sessions proved critical in preparing the ADMA advisors for their support role.

Key Learnings

#5 Support should always be tailored to the specific needs of an SME.



The needs of various SMEs can be quite different, but some aspects are mentioned more often than others. For example, most people communicate more easily in their own language. That is why we have translated the English ADMA scan in 10 other languages, from Dutch to Italian and Hungarian.

Other important topics are digital skills and organisational structure. Our first advice to SMEs who want to make changes is to take enough time to analyse their business processes and their context. We especially ask them to **keep an open mind** when it comes to the growth possibilities that modern tools and technologies can offer. This is often the first step towards change.

After an ADMA scan and a feedback session, companies can **define their own transformation** priorities. The ADMA advisors assist them in this. Most companies choose 'Digital factory', 'Advanced manufacturing technologies' and 'Human-centred organisation' as their top 3 transformation areas. Other promising areas are 'ECO factory' and 'Value chain oriented open factory'. Since these are less well known, it is up to the ADMA advisors to inspire companies, to show them best practices – like sharing platforms and pay-per-use contracts – and to explain the potential returns of such transformations.

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#5 Support should always be tailored to the specific needs of an SME.

#6 TRAIN-THE-TRAINER SESSIONS PROVED CRITICAL IN PREPARING THE ADMA ADVISORS FOR THEIR SUPPORT ROLE.

Key Learnings

#6 Train-the-trainer sessions proved critical in preparing the ADMA advisors for their support role.

Since the start of the ADMA project, **nearly 250 ADMA advisors have attended physical and virtual training events** to prepare them for their support role. Many of them have completed the full two-day training programme.

The SMEs in the project are pleased to be working with well-trained partners: the advisors are claimed to encourage discussions, stimulate people to think about their own viewpoints and help reach agreements between the participants in a feedback session.



**MEET THE ADVANCED
MANUFACTURING
CHAMPIONS**

Meet the Advanced Manufacturing champions

HOW DID WE SELECT THE COMPANIES ?

In September 2020, ADMA consortium partners and Supporting Organisations have been invited to contribute to the 'call for the EU ADMA Champions'. Each partner submitted an application for at least two (i.e. the best performing SME of its network with respect to the criteria listed below) companies, within at least one type of champions category.

The following 3 types of champions have been defined:

1. 'ADMA Methodology Frontrunners', European manufacturing SMEs that did an outstanding job applying the ADMA Methodology through the short- (Transformation Plan) and longer-duration (Implementation Plan) pilot action
2. 'ADMA Transformation Champions', European manufacturing SMEs that achieved a maturity level of 4 on at least one of the 7 ADMA Transformation areas
3. 'ADMA Factory of the Future Champions', European manufacturing SMEs that achieved a maturity level of 4 on all of the 7 ADMA Transformation areas

Meet the Advanced Manufacturing champions

HOW DID WE SELECT THE COMPANIES ?

In order to be labelled as ‘ADMA EU Champions’, companies had to fill in the long scan and provide information requested in a defined template. Such provision of information has been made in cooperation with the regional innovation intermediary (i.e. the consortium partner or the supporting organisation). This innovation intermediary has been held liable for the scan results and additional evidence requested and provided.

The assessment of these organisations (i.e. the filled in templates) then was sent to the steering committee of the ADMA-initiative for a final quality-check, a selection and in order to ensure that the final selection takes into account a good company size mix & geographical (sectoral) balances.

ADMA Methodology Frontrunners :

Company Name	Country	Activity	Sector	Size (people)
Cafes Cornella	Spain	Coffeemaker	Food	35
Couédic Madoré Equipement	France	Installations for slaughter and cutting process	Food	112
Gualini Lamiere SPA	Italy	Metal sheets cutting, blending & welding	Metal components	100
Polargos Sp.Z.o.o.	Poland	Metal fencing products	Construction	220
Thomas Regout International B.V.	Netherlands	Metal telescopic guiding systems	Metal components	200

Meet the Advanced Manufacturing champions

HOW DID WE SELECT THE COMPANIES ?

ADMA Transformation Champions :

Company Name	Country	Activity	Sector	Size (people)
Base Group Sp.Z.o.o.	Poland	Equipment & metal structures manufacturing	Construction	224
BM Silo	Denmark	Silos & transport equipment	Construction	35
Curana	Belgium	ODM bike part manufacturing	Metal components	26
Groupe Saint Hilaire	France	limeston quarry + transformation	Construction	62
MARSI Group d.o.o.	Slovenia	Plastic Injection Moulding & metal 3DP	Plastic components	21
MX3D	Netherlands	Robotic additive manufacturing technology	Metal components	18
Riviersasca	Italy	Producer of fiberglass-reinforced polyester laminates	Construction	30
Urola	Spain	Blow moulding	Plastic components	50

ADMA Factory of the Future Champions :

Company Name	Country	Activity	Sector	Size (people)
Provan	Belgium	Steel, aluminium and stainless-steel parts	Metal components	74
Sori	France	Manufacturer of tool storage trolleys	Metal components	43

ADMA METHODOLOGY
FRONTRUNNER

cafēs
Cornellă



CAFÈS CORNELLÀ USES
TECHNOLOGY TO CREATE
THE PERFECT CUP OF COFFEE

Coffee roasting factory Cafès Cornellà is a fine example of a 4.0 factory: all the machines are connected, they have a planning system with a low deviation (3%) and an intelligent roasting system. They constantly raise the bar for a satisfied end customer.

Cafès Cornellà produces roasted coffee, mainly in high quality coffee beans, for the professional hospitality market. Since the very beginning, in 1920, the family company has trusted in technology. In the fifties, they incorporated the second automatic packaging machine in Spain. In the eighties, they were pioneers in **automation processes**, computer deployment, and later in the development of enterprise resource planning (ERP), tablet control, applications, etc.

They want to achieve excellence in coffee cups on a constant basis, using technology to define the temperature of the water and the pressure. The requirements are fulfilled cup by cup. The company can count on the Integral Quality System (SIQ), which incorporates a quality system for the elaboration of coffee cups.



THE VALUE OF DATA

The company's strategy revolves around digitisation, servitization and collaboration. All the company's data is collected and a KPI visualization system allows them to control the whole production process. In the year 2017, Cafès Cornellà connected the first coffee machine to the **Internet of Things**, allowing them to collect different data. As part of the Decoding Coffee project, the M2M – Machine to Machine – was introduced: this allows to control the coffee machines and to inform and help the catering customers with relevant data for the adjustment of grinding, dosage, water quality, temperature, pressure ... At the same time, all that information (breakdowns, customers, water consumption, coffee, etc.) helps the company advance in different applications.

Lastly, Cafès Cornellà believes it is essential to have **technological and research partners** to promote innovation projects. For more than twenty years, they have been working with the University of Girona, and they have students to carry out their final degree work in Cafès Cornellà.

“The ADMA Transformation Plan helped us locate the available technologies and the means to finance their development”

Pere Cornellà,
owner and CEO Cafès Cornellà
Decoding coffee
cafescornella.coffee

A FEW QUESTIONS FOR CAFÈS CORNELLÀ



How would you describe the support received by ADMA advisors and coaches?

CEO Pere Cornellà: “Our experience has been highly positive and very adapted to our dimension. In the development of our digitisation strategy, having the support of experts in the field has been very useful. They have provided us with knowledge, methodology and contrast with other related sectors.”

Which of the services provided by the advisor was most useful?

“I would certainly like to highlight the fieldwork and how it has materialised in the Implementation Plan with the diagnosis and map of opportunities for the development of our future digitisation strategy along with the discovery of available technological resources. I would also like to highlight the guide to prioritising project opportunities and initiatives.”

What are the main positive and negative aspects of ADMA’s exploration?

“On the positive side it is worth noting the work we have carried out during the previous years, which indicates our position as a basis for the future development of the company’s digitalisation strategy. As for threats, it should be noted that development has not always been harmonious and sufficiently balanced: the system has gaps in structure and security that need to be addressed immediately.”

A FEW QUESTIONS FOR CAFÈS CORNELLÀ

Was the ADMA Transformation Plan valuable for your business objective?

“We give this Transformation Plan great value as an extensive guide to the evaluation and launch of successive digitisation projects, as a source of knowledge and to locate the available technologies and the means to finance their development.”

What are your plans for the future?

“Among other things, we want to achieve self-managed manufacturing and quality control systems that anticipate and quickly adapt to incidents, to optimise efficiency and maximise quality, both at the factory level and at the level of the final product. We are also planning a project based on blockchain technology to identify the entire value chain for a category of coffee. And we are considering another artificial intelligence project based on machine learning, with its own design of a sensor for the predictive maintenance of coffee machines.”



ADMA METHODOLOGY FRONTRUNNER



COUÉDIC MADORÉ

DES SOLUTIONS GLOBALES POUR
LES INDUSTRIELS DE LA VIANDE



COUÉDIC MADORÉ EQUIPMENT COMBINES TECHNICAL SKILLS WITH CRAFTSMANSHIP AND EXPERTISE

Couédic Madoré Equipment is specialised in the design, production and installation of durable equipment for agri-food industrial processes. Their ambition? To remain the market reference for customers and innovate to offer new solutions to customers and help them meet their challenges, whether it's about animal welfare, traceability, food safety or industrial performance.

The French Couédic Madoré Equipment is the go to company for highly customised products. What started out as a family-run group, is today the leader in the slaughter and cutting equipment sector, making it a reliable partner over the long-term. The company has developed its expertise over thirty years alongside professionals in the meat industry, through a pragmatic and collaborative approach.

The key values of this industrial company are based on each part's involvement in a joint undertaking to ensure concrete results. By skilfully **combining various technical skills with craftsmanship and expertise**, Couédic Madoré is able to offer global solutions both in France and abroad, in design, manufacturing installation and maintenance. Last but not least, the cost and productivity analysis associated with this approach leads to outstanding value for money for their customers.





COUÉDIC MADORÉ

DES SOLUTIONS GLOBALES POUR
LES INDUSTRIELS DE LA VIANDE

NEW PRACTICES

In their journey towards becoming a Factory of the Future, Couédic Madoré Equipment set up new practices to decompartmentalise services. They also allow each employee to **develop his or her talents** and form a team focused on continuous improvement (T5 – Human Centred Organisation).

Furthermore, they improved the customer information collection circuit (needs, machine problems...) to facilitate the proposal of service offers (T6 – End-to-end Customer Focussed Engineering). The customer experience is based on Total Cost of Ownership (TCO). The company set up a connected maintenance application to co-build the new value/ service proposition with their customer by **'design usage'**: to design the right solutions or services for your customers.



REMAINING CHALLENGES

Technologies, for example by integrating an IOT (Internet of Things) or web service skill. But they also have plans to bring together production and the design department in an industrial department in order to unite the teams and build a factory open to the **future generations of production technicians**.

“The ADMA methodology enabled us to take the time to reflect on what kind of company we would like to be in the future”

Serge Horellou
General Manager
Couédic Madoré specialist
in the meat industry
couedic-madore.fr





COUÉDIC MADORÉ

DES SOLUTIONS GLOBALES POUR
LES INDUSTRIELS DE LA VIANDE

A FEW QUESTIONS FOR COUÉDIC MADORÉ EQUIPMENT

Which aspects of your production are your biggest challenges in your journey towards Factory of the Future?

General Manager Serge Horellou: “Putting our employees at the heart of our organisation, and making the different teams talk to each other beyond the borders of their own departments. The second challenge is the creation of an Industry 4.0 way of tracking different materials and components.”

Which projects brought the highest shift in productivity?

“A big shift our company made was to start implementing **machine to machine communication**. We hardly use paper plans anymore. Instead 3D models are directly uploaded to the machines. Especially at the shop floor the effect was significant. Traceability is now done through software and by the machines themselves. Moreover, many mistakes earlier made have been eliminated.”





A FEW QUESTIONS FOR COUÉDIC MADORÉ EQUIPMENT

What were the main incentives and barriers to move on from the ADMA Transformation Plan into the implementation phase?

“Our management team participated actively in ADMA, but they all have a very busy agenda. In other words, the challenge for us is to find new resources in order to be able to delegate certain implementation tasks of the new projects. There were of course resources available, but new resources are still needed.”

Was the ADMA project support tailored to your specific needs?

“The ADMA approach enabled us to take the necessary time to evaluate the transformation maturity of our company. Moreover we were able to only select those solutions which our company could handle. The support of the ADMA advisors and coaches was really needed. It has enabled us to **create the right hierarchy** amongst high priority projects.”

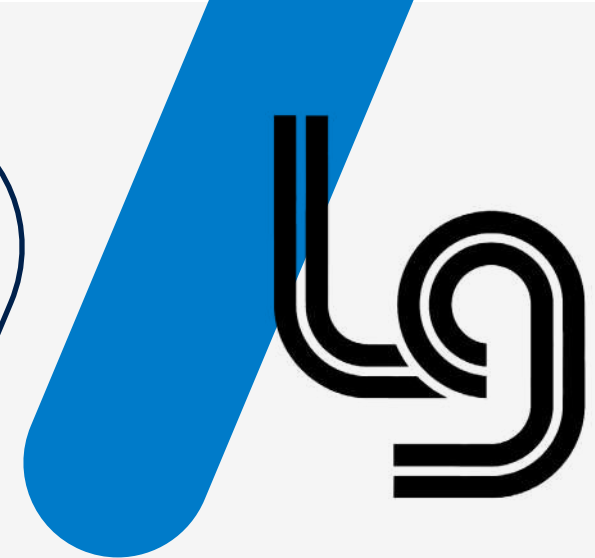
“Projects like ADMA are very motivating for an SME like ours. The methodology really enabled us to take the time to reflect, and to see where to focus our efforts upon. This has also helped us to reflect on what kind of company we would like to be in the future.”



**ADMA METHODOLOGY
FRONTRUNNER**



Gualini Lamiere

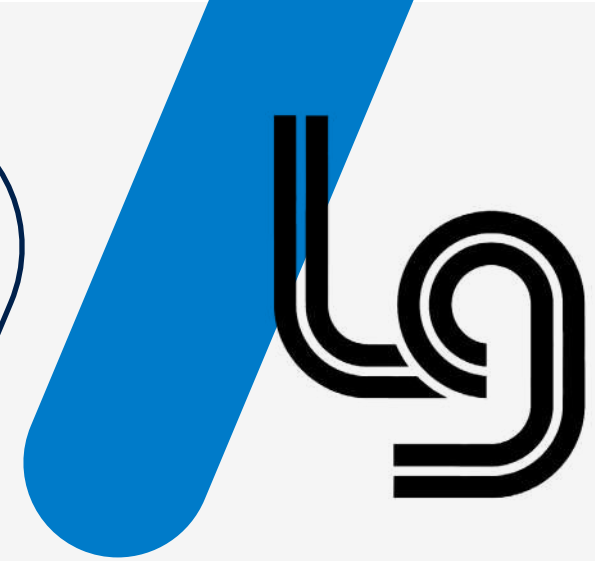


**GUALINI LAMIERE
INTERNATIONAL IS ON THE
RIGHT TRACK TO BECOMING
A DIGITAL FACTORY**

Where do we stand in our ambition to become a 'Factory of the Future'? Which steps are necessary to make our business future-proof? And where to look first to optimise production processes? For the Italian sheet metal expert Gualini Lamiere International, the ADMA scan brought an answer to these questions

Gualini Lamiere specialises in poles and metal structures for the wind energy sector. Based in Northern Italy, the company is a leader on the national scene for the design, construction and installation of wind turbine towers. Its 50.000 m² production site in Bergamo offers advanced technologies for cutting, bending, welding and machining sheet metal. The company employs about one hundred people, of whom many are highly skilled operators.





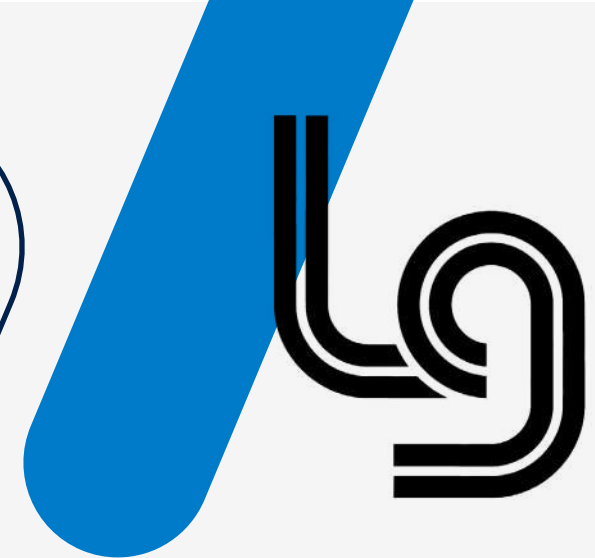
STRATEGIC PRIORITIES

Gualini Lamiere participates in innovation projects, both at the national and European level. The ADMA programme is one of those projects. The results of the ADMA scan were an important source of inspiration to the company. Several strategic priorities emerged from the survey, in which Gualini Lamiere plans to invest in the short term.

The need to become a **digital factory** (T2) via the digitisation of the production process is a first priority. Mostly because in some activities, such as welding, the quality of the work still depends greatly on the skills of individual operators. So does the efficiency of the production. To correct the influence of this human factor, innovative, operator focussed IT systems can be a solution.

Other priorities are the further implementation of **advanced manufacturing technologies** (T1) and of **smart manufacturing** (T6). As operators are often sensitive to technological innovations, it is important to convince them of the benefits these technologies may have for their job. And for the competitiveness of the company as a whole, since innovation helps to keep up with competitors.





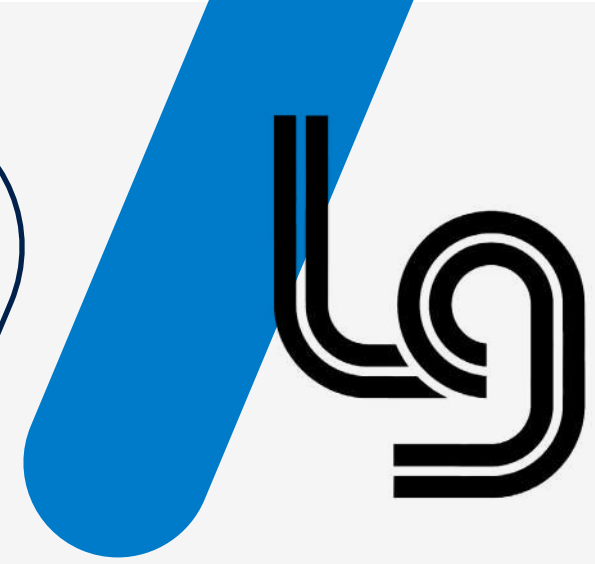
TIME AND COST SAVINGS

A current project at Gualini Lamiere examines the opportunities of **artificial intelligence** and **smart cameras** to track its sheet metal inventory. Today, the average amount of time to manage a sheet of metal is three hours. The project aims to arrive at less than one hour. Given that every month, thousand components are handled, this would represent significant time and cost savings.

“The scan gave us a clear view of the strengths and weaknesses of our company. From now on, we can focus on what really matters”

Marco Travella
Innovation Manager
Gualini Lamiere
International Spa
gualini.com





A FEW QUESTIONS FOR GUALINI LAMIERE INTERNATIONAL

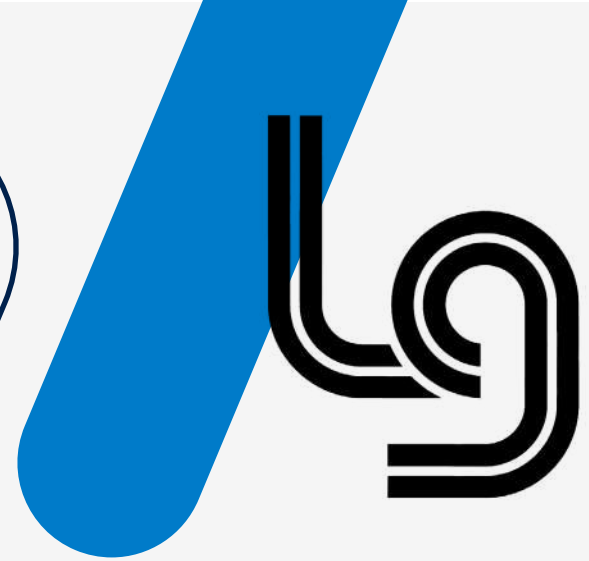


How would you describe the support received by ADMA advisors and coaches?

Innovation Manager Marco Travella: “We took part in a face-to-face meeting in which we combined the results of our self-assessment with the opinion of the ADMA coaches. Together, we discussed ideas and tried to look at our company in an objective manner. The coaches helped us get a clear view of the position we’re in. Now that we’re aware of where we stand in our ambition to become a Factory of the Future, we know where to act first to create impact.”

What valuable insights did the scan exercise give you?

“We were pleased to learn that Gualini Lamiere does well as a **human centred organisation** (T5). Our score in that domain was pretty good. On the other hand, the score for **smart manufacturing** (T6) was rather low. To improve this, we started to participate in a European project. Thanks to the scan and the following feedback session, we’ve become aware of our strengths and weaknesses as a company. From now on, we can focus on what really matters.”



A FEW QUESTIONS FOR GUALINI LAMIERE

Which priority breakthrough areas will you focus on? Which priority breakthrough areas will you focus on?

“Before, our company was not prepared to handle regional, national or European innovation projects. In my opinion, there is an important mismatch between the initiatives that policymakers take to help SMEs and what SMEs can actually manage. Most of the SME-owners I know, don’t know how to participate in these projects. They often also don’t see the **added value**.

Realising this is an eye-opener and a necessary first step to do something about it. We hired a professional to help us in this domain. We now participate in more than ten innovation projects, both on the national and European level.”

How are you going to resume cruising speed to a level that you were at before the coronavirus pandemic?

“Mind you that our production facilities are located in Bergamo, a region that suffered heavily during the first part of the corona pandemic. Our factory has had to **stop its activities** for over a month. At this time we are working on a lot of projects, most of them international. Our company is not yet on the same speed as before the crisis, but we’re getting closer.”



ADMA METHODOLOGY FRONTRUNNER



POLARGOS, WHERE CHANGE IS ROOTED IN THE COMPANY'S DNA

BOOST PRODUCTIVITY

For ADMA methodology frontrunner Polargos, continuous transformation is rooted in its DNA. Originally a manufacturer of office chairs and later garden accessories, the Polish company now produces fencing systems and automatic smart gates. The next step in its development: transforming into a 'Factory of the Future'.

Polargos distributes its products to chains of hardware stores in Poland, Germany, the Czech Republic and several other countries in Europe. Its fences can also be found across European borders, in Russia. Over the years Polargos has built a stable and significant market. To maintain this position, or even improve it, the company used the ADMA scan as a moment of reflection.

The scan pointed out the importance of applying **advanced manufacturing technologies** (T1) in the production processes. Polargos has already invested in these technologies and will continue to do so in the near future. Within the next two or three years, the company aims to boost productivity by maximising the efficiency of its current robotic systems.

As Polargos faces difficulties finding qualified personnel for certain aspects of the production process, e.g. skilled welders, automation can be a solution. On the other hand, handheld welding units will be improved to feed data to a central system in order to optimise the welding process. Also in line for an upgrade within the ADMA Transformation Plan: the company's laser cutting technologies.



INCREASE COMPETITIVENESS

The scan also showed that becoming a **digital factory** (T2) and an **eco factory** (T3) is the way to go for Polargos. This confirms the company's prior intuition that in the past, these aspects did not keep pace with the development of its production technologies. As a result, there is a lot of unlocked potential for Polargos in both domains.

Potential for cost savings, for instance, by better reporting and control of production processes through adapting digital strategies. Or by reducing energy consumption. As the cost of the final products partly depends on energy usage, investing in **renewable energy sources** could increase the company's competitiveness.

“Polargos wants to become an eco factory. Not only because it is widely considered to be the right thing to do. We're convinced it simply pays off”

Krzysztof Siepka
Production Manager
Polargos
polargos.pl



A FEW QUESTIONS FOR POLARGOS



What does ‘Factory of the Future’ mean to you?

Production Manager Krzysztof Siepka: “A Factory of the Future is based on advanced technologies, automated processes and an intensive use of knowledge and data. It continuously adapts to its business environment and changing customer preferences. This requires not only a great deal of flexibility, but also a shift in organisational mindset. A Factory of the Future manages to keep up with developments in its sector, drawing on new technologies and innovations. This way, it creates customer value, no matter how volatile the customer’s wishes.”

Will an ADMA Transformation Plan be valuable for Polargos’ objective to become a Factory of the Future?

“Our company’s ADMA scan took place just before the outbreak of the coronavirus pandemic. So unfortunately, our goals have changed significantly over the recent year. Our main goal is now to adapt our operations to the dynamically changing situation in Poland and on the foreign markets where we distribute our products. However, we expect that in the coming months, the company’s goals will be revised. The results of the scan will come in handy at that point.”

A FEW QUESTIONS FOR POLARGOS

Why does Polargos want to transform into a Factory of the Future?

“We have had this ambition for a long time, and the scan confirmed that this is the way forward for our company. When the pandemic has cooled down, we will take further steps to embrace advanced manufacturing technologies and make a digital and ecological shift in our processes. By the way, Polargos wants to be ‘eco’ not only because it is widely considered to be the right thing to do. We are convinced it simply pays off. The competitiveness of our company is strongly linked to ecological standards, for instance through the cost of energy.”

Would you recommend the ADMA scan to other SMEs?

“We would recommend ADMA to companies that want to get to know each other and want to grow as a business. The scan offers a welcome moment of reflection. After all, at the current pace of work it can be difficult to find time for a calm analysis. The ADMA scan runs very smoothly. There are no questions on detailed data, which shortens the time to complete the survey. In our experience, the more people within the company participate in the scan, the more complete the picture becomes.”





ADMA METHODOLOGY FRONTRUNNER

 **THOMAS REGOUT B.V.**
A REGOUT GROUP COMPANY



AT THOMAS REGOUT
INTERNATIONAL, PEOPLE AND
TECHNOLOGY WORK TOGETHER
OPTIMALLY

People are the most important key asset at Thomas Regout International. The Dutch company focuses on the development of competences and talents and encourages its 200 employees to take responsibility. It stimulates the innovative capacity of its employees in order to make the best use of new production technologies.

As part of the Regout Group, Thomas Regout International (TRI) develops and manufactures telescopic slides. They make millions of them a year for markets from the Netherlands to China and Brazil.

Their business model is based on four aspects: **customer specific products** that they supply **fast**, when needed in **small quantities** and with a **high quality**. In order to produce more flexibly on less floor space, they are always developing and implementing new innovations.

At the same time, TRI invests in people development and involves its employees in the business (T5 - Human Centred Organisation). Recently, a team of around ten young potentials started supporting the organisation with fresh ideas. The goal is to take the organisation's innovative capacity to the next level.





FASTER AND FASTER

One key focus area is **smart manufacturing** (T6). Several project teams are digitising the manufacturing process – from engineering to assembly. TRI's objective is: a one week delivery time for batch sizes of at least 100 pieces where the product is configured online by the customer.

By using a **product configurator**, the engineering process has already been shortened from three weeks to about four hours. Since the end of 2020, a new software application for shop floor planning in a dynamic manufacturing process is in use. This software makes it possible to take the next step in the development of a new manufacturing execution system.

SUSTAINABILITY

Partly because of shareholders pushing TRI toward sustainability, the company started connecting the **SDGs** (Sustainable Development Goals) to the seven ADMA transformation topics. Together they constitute the basis for their strategy and related future investments.

“Industry 4.0 is letting people work to their maximum capacity in order to add maximum value, with technology supporting them”

*Ruud Keulen, CEO
Thomas Regout International B.V. |
Telescopic slides
thomasregout-telescopicslides.com*





A FEW QUESTIONS FOR THOMAS REGOUT INTERNATIONAL

How would you describe the support received by ADMA advisors and coaches?

CEO Ruud Keulen: “Our ambition level is based on the four elements of our business model: customer specific products that we can deliver fast, when needed in small quantities and with a high quality. Nowadays it takes us four to six months to transform a customer request into a product. We want to reduce that time to 24 hours. In order to achieve that goal, we are robotising the development process: software applications will be in charge of the design, validation, verification etc. Steps that are now taken by an engineer. We want 80% of our customer specific orders to go through that robotised process.”

What does ‘Factory of the Future’ mean to you?

“It’s a combination of innovation, cooperation and craftsmanship. Our vision on Industry 4.0 is to let people work to their maximum capacity in order to add maximum value, with technology supporting them.”



THOMAS REGOUT B.V.

A REGOUT GROUP COMPANY

A FEW QUESTIONS FOR THOMAS REGOUT INTERNATIONAL

Which aspects of your production are the biggest challenges in your journey toward Factory of the Future?

“Transformation 2 – Digital Factory – is the biggest challenge for us. The reason why is based on the fact that this is an old company, dating back to 1834, and we have a lot of people who have worked here for twenty, thirty, even forty years. They have all this knowledge and the challenge is getting that knowledge out of their heads and into digital databases. Another challenge has to do with our organisation’s culture. Almost all of our employees see tools and equipment as the biggest assets, but data is taking over that role.”

Was the ADMA project support tailored to your specific needs?

“Yes, because we had been struggling with structuring our organisational model for some years. When we came in contact with ADMA and the seven transformation topics of the Factory of the Future model, it was like a puzzle coming together. The ADMA Transformation Plan has served as an important framework for our further innovation and breakthrough efforts. Throughout the project, the support of the ADMA advisors and coaches was really valuable.”



ADMA TRANSFORMATION CHAMPION

GROUP
base

More than welding



More than welding

BASE GROUP INTRODUCES CHANGE MANAGEMENT SYSTEM

Base Group is a Polish equipment and metal structures manufacturer that wanted to transform itself by cutting its manufacturing lead times in order to become more competitive in the marketplace. It therefore set up a change management system involving teams of employees and top management. Due to its success, it has been named an ADMA Transformation Champion for T5 (Human Centred Organisation). The ADMA approach helped guide Base Group in terms of how to assess its current performance against the requirements of a digitally matured business.

Base Group is a Polish company with over 200 employees that produces machinery and high quality welded constructions. In 2018, the Base Group implemented a **Quick Response Manufacturing** (QRM) philosophy. Back then, the company decided to compete with lead times in the market. While preparing the change, top management decided to identify change leaders and empower them to lead their respective business areas. All leaders were actively involved in reshaping company's business structure and processes.



**GROUP
base®**

More than welding

HUMAN CENTRED ORGANISATION

The company was named a Transformation Champion for T5 (Human Centred Organisation). In **team discussions**, all the teams in the company defined how they contribute to the realisation of the future vision and strategy set out by top management. It was key for individual employees to understand the interaction between different projects, departments, teams etc. Every month leaders monitored performance according to KPIs (Key Performance Indicators), of which the most important was MCT (Manufacturing Critical-path Time), which fell by 20% in the first six months of the QRM project. From 2017 to 2020, sales grew by 90% and net profit margins doubled.

Key elements in the success of the transformation included identifying employees' potential fears in relation to the changes and preparing communication to employees about why change was being implemented and its benefits.



GROUP
BASE

More than welding

HOLISTIC VIEW

The ADMA approach was effective in guiding Base Group in terms of how to assess its current performance against the **requirements of a digitally matured business**. It gave the company a holistic view of what is required to succeed in the digitalised world and identified gaps that needed to be addressed to help Base Group become world leaders within the field of the production of machines.

“We need better qualified people for every job position. The education system must be ahead of technological change and not behind it”

Jakub Kaszuba
Owner and CEO
Base Group
basemetal.eu



A FEW QUESTIONS FOR BASE GROUP



What does 'Factory of the Future' mean to you?

CEO Jakub Kaszuba: "A 'Factory of the Future' for me means digitalising the information flow and automated production processes using artificial intelligence. Factory of the Future is our vision. By implementing state-of-the-art production technology and organisation we will be able to compete with lowest possible MCT (Manufacturing Critical path Time) in our industry."

"Why implementing this change? Of course you need to stay close to people. You need to make sure they understand why we are doing this, what are the benefits, for the business, for themselves, and how - and this is the next step - they should implement the change and how they can succeed in that. This was very important. **'People empowerment'** as our approach in the business. We also set the budget for mistakes, and that's of course between parentheses. To make sure that people are not afraid to make the change and not afraid to make mistakes. What is extremely important for us is to make sure that, once there is a mistake, we openly discuss this and look for root causes."

"Lastly: open communication is key. In our business anybody can challenge the CEO's views. The CEO of Base Group is not afraid to discuss this and we want all the leaders to be ready for such discussions with anybody."



A FEW QUESTIONS FOR BASE GROUP

What valuable insights did the scan exercise give you about your company and its processes?

"It gave us a holistic view of what is required to succeed in the digitalised world. It identified gaps which, if we address them, will allow us to become world leaders within the field of the production of machines."

Please specify three breakthroughs you expect to realise (or already have realised) in key performance areas of your production.

"First of all: higher levels of people engagement and higher levels of job satisfaction. We want our people to be happy with the work that they perform. Secondly: achieving strategic targets - in our case: cutting lead times. And thirdly: higher sales, more business going forward."

Any final message for local/regional/national/European policy makers?

"We need better qualified people for every job position now and in the future. The education system must be ahead of technological change and not behind it."



ADMA TRANSFORMATION
CHAMPION





BM SILO GOES INCREASINGLY DIGITAL

BM SILO, a Danish producer of tailor-made modular silos, received the 2021 ADMA Transformation Champion Award for its outstanding work in T7 (Value Chain oriented Open Factory). The ADMA Transformation Plan helped BM SILO develop a new way of looking at future opportunities within the company as it seeks to make its whole production process digital and continue with its corporate social responsibility efforts.

BM SILO produces tailor-made modular silos for industrial, agricultural and horticultural purposes, which it has been exporting since 1972. The silos' 'kit form' packaging means that they are ideally suited for export, with around 80% of turnover coming from exports.

Key elements in its success are the use of **robots** and **just-in-time production**, which allows the company to be very flexible in terms of delivery times and product mixes. It began producing silos according to the 'Lean principle' and now all of its silos are produced by robots.





SEEING NEW THINGS

In terms of T7 (Value Chain oriented Open Factory), BM SILO is very much focussed on **partnership-driven innovation** and on involving external expertise. The company has already taken part in numerous R&D projects and is a member of the Danish Business Promotion Board.

In terms of its drive towards increasing digitalisation, back in 2014, BM SILO decided to train sales staff on how to conduct digital meetings with customers around the world via Skype. This has helped the company deal with the coronavirus crisis and has led to extra turnover growth.

The ADMA Transformation Plan has enabled the company to see new things that it had not seen before, which has led to BM SILO developing a new way of looking at future opportunities within the company.





CORPORATE SOCIAL RESPONSIBILITY

BM SILO pays close attention to looking after its small team of 35 employees and has won a couple of corporate social responsibility (CSR) awards. An example of its attention to CSR is that the company has taken on unemployed and unskilled employees.

Looking ahead, an important area for BM SILO is to move from a plan to implementation and here it is on the lookout for the right partners (e.g. suppliers of machines, IT) to work with. Its long term aim is to make its **whole process digital**, from the customer bringing in the order to the point where the silo is placed on the truck for export.

“SMEs all over Europe have a great potential to grow, but we need more support like this ADMA project, in order to innovate our workplaces”

Dorte Martinsen, CEO
BM Silo
bmsilo.com





A FEW QUESTIONS FOR BM SILO



Was the ADMA Transformation Plan valuable for your company's objective?

CEO Dorte Martinsen: "Very valuable. The tools that are given by ADMA have a very detailed orientation, and that has meant that we have been able to see things that we haven't seen before, and working with them in another level."

What does 'Factory of the Future' mean to you?

"Factory of the Future is a great goal to have but it's not the goal that we go for here every day. For many years **workplace innovation**, led by the people out here, is the key word for everything we do. We're very pleased that other (companies) see the way we do things as a good way of transforming a factory and we are glad that we are in the position of going for it, but it's not the thing that we are aiming for."

Which projects brought the highest shift in employee engagement?

"The project that brought us the highest shift in employee engagement was without doubt placing a robot on the working floor, and just leaving it there and letting the people be inspired to take on education and learning on how to produce with robots, both cobots and ordinary robots."


**BM
SILO**

A FEW QUESTIONS FOR BM SILO

How are you going to re-take cruising speed to a level before corona crisis?

"We actually trained our sales staff in making digital meetings with our customers around the world by **Skype**, back in 2014. The world wasn't ready for that in 2014, but over the corona crisis it made us very clear that that was the way we were going to meet our customer. And because of that, and the training over the years in the way of meeting customers, we have made the highest turnover ever in the old factory's lifetime. So the corona crisis made us go full speed, and we are heading the same way still."

Any final message for local/regional/national/European policy makers?

"SMEs all over Europe have a great potential to grow, but we need more support like this ADMA project, in order to move on and innovate our workplaces."



ADMA TRANSFORMATION
CHAMPION



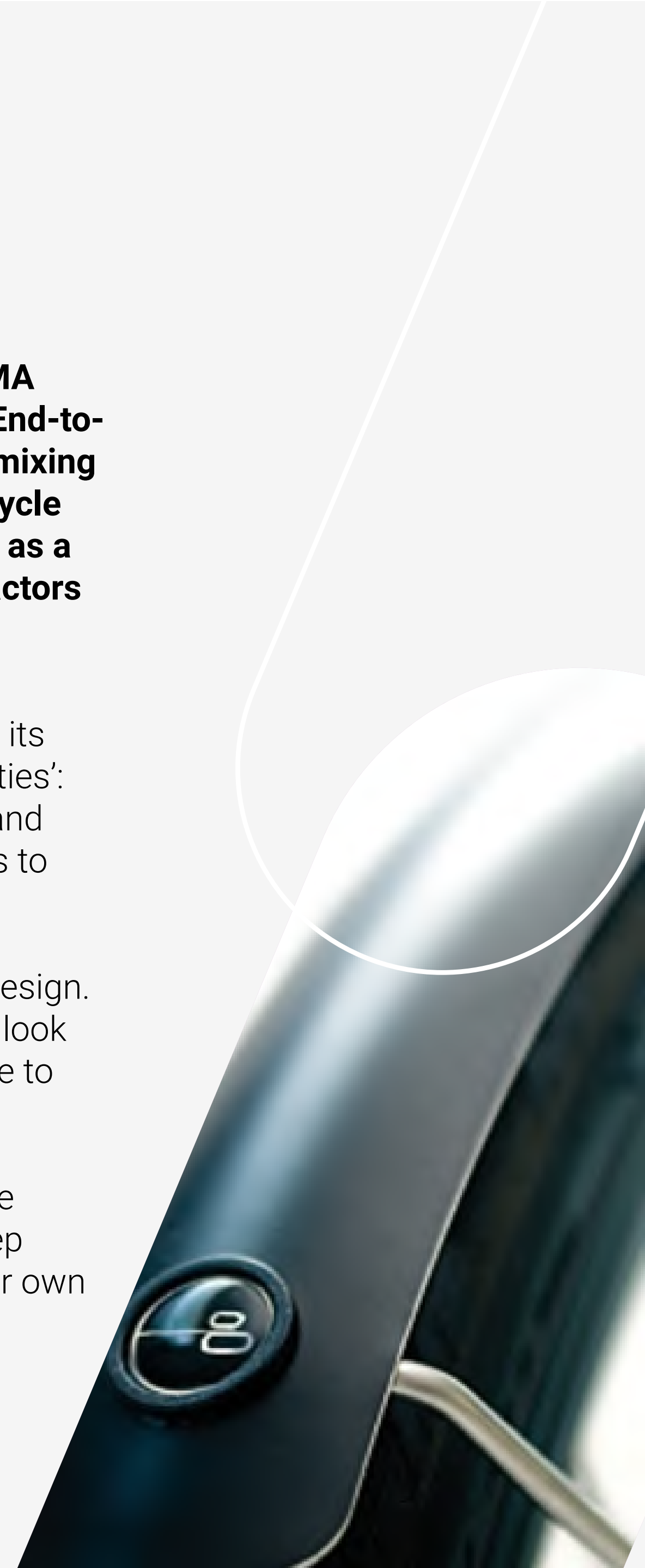


CURANA CYCLES INTO THE FUTURE

Curana, a Belgian supplier of bicycle accessories, received the 2021 ADMA Transformation Champion Award for their outstanding work within T4 – End-to-end Customer focussed Engineering. By solving everyday problems and mixing the solutions with trendy designs, they create innovative products for bicycle brands all over the world. The company has recently re-established itself as a manufacturing business, after ten years of working solely with subcontractors

Curana is always on the lookout for new opportunities in the cycling world. The company develops and manufactures products that stand out and are tailored to different lifestyles. Its unique selling point is **customisation**, in all its aspects. Some products are for instance ranged under five 'cosmetic identities': well-defined categories that reflect a certain lifestyle, with specific colours and graphics that appeal to different kinds of people. Day after day, Curana aims to create a one-of-a-kind look and feel.

The **technical composition** of Curana's products is just as unique as their design. Some metal mudguards combine the stiffness of metal with the integrated look of injection moulded plastic. Others are among the lightest fenders ever, due to the use of a unique high-tech sandwich composite material. Most products have, next to a specific choice of material and a nice looking design, integrated and solution driven features that have a large added value for the bike manufacturers. Curana has developed a strict IP strategy to keep ahead of their competitors, who mostly try to follow instead of creating their own novelties.





AMBITIOUS OUTLOOK

To re-establish itself as a manufacturing business, after ten years of focussing on product development, Curana moved to a new and larger location in 2011. The company subsequently spent a few chaotic years trying out different methods and manufacturing strategies. Today, the business is running smoothly and achieving outstanding results, with **2021 as its best year ever**.

For the next few years, Curana's **main ambitions** are to keep delivering on time – quite a challenge, since the demand for bicycles is at an all-time high – and to further strengthen the innovation processes and the relationships with customers. Although the company started as a Belgian supplier, 98 percent of its products are currently exported to European and Asian bicycle manufacturers.

“The hands-on approach of the ADMA coaches and advisors was a major benefit”

Dirk Vens,
owner and CEO
Curana
curana.com





A FEW QUESTIONS FOR CURANA

Curana is known for its innovative, customer-focused cycling products.
How did you become a trendsetter?

Dirk Vens: “We started in 1946 as a regular supplier of bicycle accessories. After two generations, we felt the need to become more creative. Instead of offering what the market asked for, we started **proactively solving problems** and offering our solutions to potential clients. We tried new techniques, used other materials ... After a while, our customers learned to expect more than just average products from us, and we became a trendsetter in our industry.

Our new image at first presented us with new challenges. Being creative without taking manufacturing constraints into account can be quite destructive. We decided to invest in state-of-the-art industrial machines that are still versatile enough to produce small series of a product: the so-called mass customisation. Our employees are people with an enquiring mind, who embrace new technologies and enjoy working in a company that reinvents itself on a regular basis. As a result, we manage to stay at the forefront of our industry and create unique, innovative products together.”

What valuable insights did you gain from the Factory of the Future Scan?

“Our transformation from a local supplier to a worldwide trendsetter started several years ago, so there were no major surprises. The most valuable result of the scan is that our **employees have become more involved in our strategy** and have learned more about our aims, so they can play a more important role on the road to perfection.”



A FEW QUESTIONS FOR CURANA

Which priority breakthrough areas did you select from your Transformation Plan, and what do you expect from them?

"To increase our productivity, we will focus on three specific areas: T2 - Digital Factory, T5 - Human-centred Organisation and T6 - Smart Manufacturing. Agoria is coaching us in becoming a more human-centred company, while Sirris helps us to develop an optimal manufacturing environment."

"Since we focus on customisation, rather than on large amounts of identical products, our manufacturing processes need to be as efficient as possible. A **first-time-right strategy** is crucial to our success: we cannot afford to waste our tools or capacity. Digital solutions like planning aids are certainly useful, but our main aim is to increase employee ownership on all levels of our organisation. We want people to feel involved and to shoulder real responsibilities, according to their skills and interests."

Were you satisfied with the support you received from the ADMA advisors and coaches?

"The hands-on approach of both advisors and coaches was a pleasant surprise. After all, the theory of advanced manufacturing is easy enough, but implementing it is much more difficult. The people from ADMA offered us the **expertise and hands-on support we needed** to take important steps forward."

"They analysed our specific situation and tailored their advice to our needs, instead of offering the typical copy-paste instructions we have often received from external advisors. Since we aim for customer-focused entrepreneurship, we need customer-focused advice, and that is exactly what we got."



ADMA TRANSFORMATION CHAMPION





GROUPE SAINT HILAIRE BOOSTS THE QUALITY OF ITS MINERAL PRODUCTS

Groupe Saint Hilaire, a French producer of mineral fillers, limestone and lime, not only provides calcium carbonate products but also technical advice and facilities to customers to develop their products. T2 (Digital Factory) enabled the company to develop and implement simulation tools (for calculating the best settings to optimise gas consumption and lime quality), which have led to a 20% increase in daily production.

Groupe Saint Hilaire is a family-owned business (with 30 employees) run by Pierre Marquet, the grandson of the founder of the company. The company's unique selling point is that it offers a **complete chain of integrated and controlled services** in the calcium carbonate production sector. Calcium carbonates range from aggregates to fine limestone. Their products are used for many purposes, including for the environment, industry, agriculture, animal feed or building and public works.

The company's technical team accompanies customers by listening to their technical needs and requirements and helping customers implement the products and optimise its processes. Groupe Saint Hilaire also offers its internal control laboratory so that customers can carry out their product analyses and tests.



FINANCIAL HEALTH

Groupe Saint Hilaire's customised approach is a key part of its strategy. Based on a **reactive and flexible** organisation, the company ensures that it can provide customers with rapid support and delivery of suitable offers in response to requests.

The company has recorded a strong financial performance in recent times, with sales up 14% compared to 2015 and Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) up 10% over the same period.

The robust financial health is a good springboard for future growth.



SIMULATION TOOLS

The basis of Groupe Saint Hilaire's transformation project was how to keep growing in the next ten years. The ADMA project enabled the company to construct a journey towards becoming a Factory of the Future. Workshop sessions were held with CETIM (the French technical centre for the mechanical industry) and pilot projects were set up on five pre-defined themes.

A key part of its transformation came under T2 (**Digital Factory**). Via T2, the company was able to develop and implement simulation tools, which are used to calculate the best settings to optimise gas consumption and lime quality. The implementation of these simulation tools has led to a 20% increase in daily production.

The company's long-term strategy is to maximise the potential of quarry resources (mineral fillers, limestone and lime) to develop **added value products** for the environment, industry, agriculture, animal feed or building and public works.

"The ADMA scan helped us realise that we needed to improve our internal and external communication"

Regis Pilloix, CEO
Groupe Saint Hilaire
saint-hilaire-industries.fr



FEW QUESTIONS FOR GROUPE SAINT HILAIRE



Which priority breakthrough areas did you select from the Transformation Plan?

CEO Regis Pilloix: “We have made a digital transformation through the company to manage the customer and the plant. At the moment, our strategy is to focus on reducing our **environmental impact**.”

What valuable insights did the scan exercise give you about your company and its processes?

“We realised that we needed to improve our internal and external communication, but also that we needed to launch and improve the digitalisation of our value chain. And the scan allowed us to see the impact on and need for involvement and support from our teams on the issues addressed.”

What breakthroughs do you expect to realise (or have you already realised) in key performance areas of your production?

“We have already started three projects, i.e. we have thought about defining the company’s vision for 2030. After that, we created a roadmap to achieve this vision with an action plan and we also set up a digital quality system with a Click & Drive tool that allows interactive access to all quality management information.”

Any final message for local/regional/national/European policy makers?

“I would like to emphasise the major public interest of our activity, which is the manufacture of a great many products necessary for the fundamentals of human life. Support is needed to improve the image of our activities so that everyone understands that our industry is necessary for everyone.”

ADMA TRANSFORMATION
CHAMPION

MARSi group

MARSi group

VISION IS KEY AT SMART
MANUFACTURING
COMPANY MARSI

MARSi, a high volume plastic injection moulding company and tool maker which also provides 3D metal printing services and manufactures moulding tools, has been further specialising in offering expertise, technical support and professional advice. The company is on a journey to transform itself into a digital factory and has used the ADMA Transformation Plan for that purpose.

MARSi, which was the first provider of 3D metal printing services in Slovenia, is an SME employing around twenty highly skilled people to manufacture injection moulding tools with conformal cooling channels. Most of the injection moulding machines are supported with **robot manipulators** for product manipulation or with **automatic packaging systems units** for plastic products.

In addition to the manufacturing, it offers expertise, technical support and professional advice. At the end of 2016, the company added a 3D metal printer to its facility. In 2017, it added a 3D metal print programme to its services, which made it the only provider of this kind of service in Slovenia and the western part of what used to be Yugoslavia.



3 PRIORITIES

The company began its ADMA Factory of the Future journey in 2019. It chose to priorities the following transformation areas: **T1 (Advanced Manufacturing Technologies), T2 (Digital Factory) and T3 (Smart Manufacturing).**

Under T2, it chose to focus first on digitally connecting older equipment as well as those machines that already allow connection to the manufacturing execution system (MES) via a connection module, which would allow people easy access to the most important information and allow information to be transferred to and from the machine. Its next focus will be to mark all plastic injection moulding tools with bar codes and register them in a central system for better tool tracking.

The ADMA process has allowed MARSi to gain an overall picture of the company, to compare itself with other companies in the plastic industry and to develop its thinking on specific topics regarding modern technologies and improvements in the company's processes.



NEW TECHNOLOGIES

In recent times, the company has introduced two new manufacturing technologies: smart mechatronic tools with sensor technology and EConformal™, a unique Slovenian **ecologically aware service brand**, developed to meet the highest demands of customers while developing and producing optimal high quality tool inserts with revolutionary three-dimensional conformal cooling systems. These have geometric freedom allowing MARSi to optimise heat dissipation.

“The most important measures towards becoming a Factory of the Future are creating a vision, continuous improvement of the business development direction and long-term cooperation with employees and business partners”

Mario Šinko
founder and CEO
MARSi group
marsi.at



A FEW QUESTIONS FOR MARSI



Which have been the key actions leading to the breakthrough in T6 (Smart Manufacturing)?

CEO Mario Šinko: “First you have to believe in yourself, make decisions, have goals and then persevere and work hard. I love doing what I do, and if you enjoy your work, success is largely guaranteed.”

“We have achieved development in the field of smart manufacturing through gradually and thoughtfully modernising processes and investing in new equipment. The first step should be to **develop a strategy** for your smart manufacturing vision. The most important measures are creating a vision, continuous improvement of business development direction and long-term cooperation with employees and business partners: that is the key and the result of our success.”

What valuable insights did the scan exercise give you about your company and its processes?

“The most important result from the scan is that we see the **overall picture** of our company, also regarding individual transformation areas. The scan has shown us which areas in the company – both technological and non-technological – need to be strengthened further, because it often happens that less attention is paid to certain areas and processes in the company.”

A FEW QUESTIONS FOR MARSI

How would you describe the support received by the ADMA advisors and coaches?

“The ADMA consultants presented very well the whole ADMA concept and scanning process. We were guided **step by step** through the entire scanning process and the individual transformation areas were discussed in detail. We also discussed specific topics with the consultants regarding modern technologies and improvements in the company’s processes.”

What does ‘Factory of the Future’ mean to you?

“Factory of the Future means for us the introduction of new knowledge and competences, the development and improvement of processes, technologies, and the implementation of new machines in the production environment. In this way, we provide real-time control of the material flow in production and quality control of the product in the production process, which consequently brings much greater flexibility of production. The factory of the future is a **continuous development process** of the company, that includes advanced technologies, processes, employees and customers.”



An aerial photograph of a courtyard with a paved floor and a blue metal frame structure. A large white graphic, resembling a stylized 'V' or a speech bubble, is overlaid on the image. Inside the white graphic, the text 'ADMA TRANSFORMATION CHAMPION' and 'MX3D' is displayed. The courtyard features a person standing near a brick wall, a bicycle, and some construction materials.

ADMA TRANSFORMATION
CHAMPION

MX3D

MX3D

MX3D AIMING TO ENABLE
CUSTOMERS TO DO THEIR
OWN 3D METAL PRINTING

MX3D is a Dutch large scale 3D metal printing company looking to transform itself into an organisation that both does the 3D printing and enables customers to do the 3D printing in-house. It has won a 2021 ADMA Transformation Champion Award for its outstanding work in T7 (Value Chain oriented Open Factory) and in T1 (Advanced Manufacturing Technologies). The ADMA approach has given the company guidance and advice on how to increase its transformation maturity level.

Using its technology to do industrial grade 3D metal printing, MX3D strives to make large scale 3D printing more **flexible, faster and more affordable**. Its achievements since 2014 include bringing large-scale robotic wire arc additive manufacturing (WAAM) and its market to life, 3D printing >20,000 kg metal objects and over 40 man years of experience.

These successes relate to T1 (Advanced Manufacturing Technologies). MX3D is developing and delivering modules using the digital connection of several technologies and 3D metal printing. It drives robot customisation and facilitates real time control and high-resolution data logging for customers.



MX3D

STRONG NETWORK & VALUE CHAIN

TRANSFORMATION MATURITY

In terms of T7 (Value Chain oriented Open Factory), its current value chain is based on a network of hardware and robot suppliers, material suppliers, universities and inspection/testing parties. The company does research in numerous innovation networks (such as INTEGRADDE) and its employees have a high level of knowledge in technical, software and R&D fields. It has 10 production/3D printing/robot cells in Amsterdam.

Through the ADMA approach, the company has gained insights into the transformation maturity of its factory and its manufacturing technology as well as guidance and advice on how to increase its maturity level. MX3D is now looking to transform itself into a **technology enabler** for several industries and clients (e.g. in the maritime, oil + gas, and construction sectors).

The company launched the first dedicated robotic WAAM software (MetalXL) enabling companies, engineers and designers to print end-to-end large-scale 3D metal objects in-house. This is all part of its transformation towards becoming a **platform provider** instead of delivering 3D production cells. MX3D's vision is for its business model to move from an 80%-20% ratio for 3D printing vs technology delivery to a 20%-80% ratio in five years' time. MX3D's new, fully-equipped and configurable robotic WAAM system (M1 Metal AM System) will accelerate our progress in achieving that.

“ ‘Factory’ comes from the Latin word facio, which means ‘I do’ or ‘I make’, and for us that’s really key: to start creating it, make it, and basically just do it”

René Backx, CCO MX3D Introducing the advantages of 3D metal printing to new high-impact industries
mx3d.com



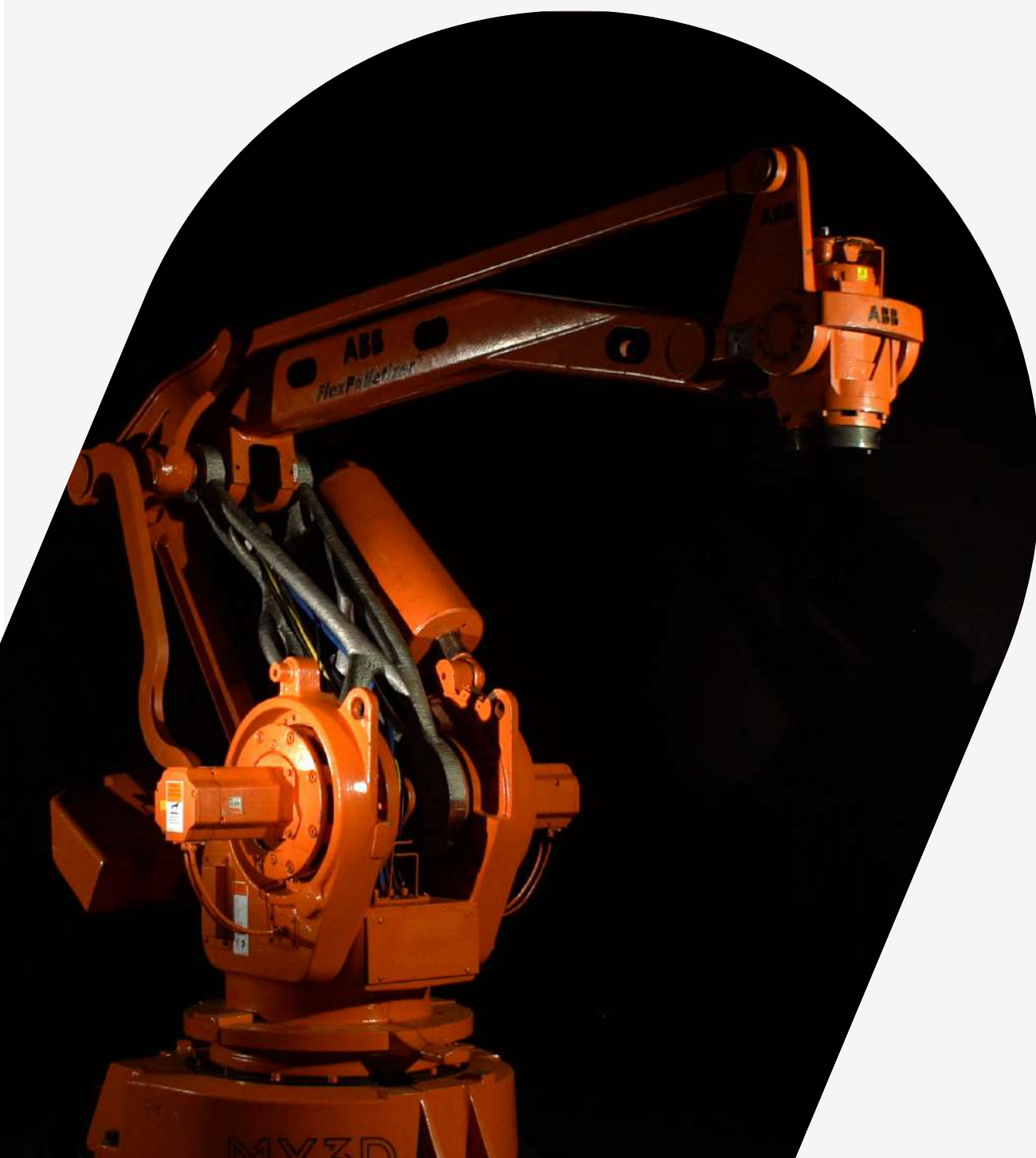
MX3D

A FEW QUESTIONS FOR MX3D

What actions do you implement to enable the company to make good progress?

CCO René Backx: “One way is that we initiate joint development with universities, companies delivering hardware and robots, material suppliers and inspection organisations. Take the MX3D **Robot Arm** project for example. It was optimized by the engineers of software company Altair and 3D printed by us. After a pause in the project due to the corona crisis, the robot arm is now successfully installed.”

“The goal of the joint project was to enable the manufacturing of customized replacement parts. This allows for a rapid and automated production of large-scale parts that normally requires extensive tooling and overseas production, causing long lead times and limited customization options. The 50% weight reduction of the robot arm showcases the power of optimization, while the combination of near-net-shape metal printing and conventional machining highlights the fast lead time and flexibility Wire Arc Additive Manufacturing can offer within the heavy industry.”



MX3D

A FEW QUESTIONS FOR MX3D

What breakthroughs in key performance areas do you still want to realise?

"We want to become more **system independent**. That can be on the type of the industrial robot, the type of power source, the manufacturing environment. We really want to make sure that our advanced manufacturing technology stays as flexible and independent as possible in order to be more relevant for that client and to be more impactful through the ability to connect to several different hardware clients. **Agility** is also key to us: as MX3D has already realised more than 20,000 kg of printed metals, the next goal would be to reach that same amount but then printed by our clients. To achieve that, we need to continue development and connect more customers, so more manufacturers start printing."

"'Factory' comes from the Latin word facio, which means 'I do' or 'I make', and for us that's really key. Key is to start creating it, make it, and basically just do it. Create it for yourself, to enable the technology; create it for your customers, to become more relevant and thereby creating a brighter future."

How would you describe the support received by the ADMA advisors and coaches?

"I particularly liked their assessment on the transformation maturity of our factory and the manufacturing technology that we have. It was interesting to see the **different dimensions of maturity**, to get acknowledgement for what we have already done and to be guided and get advice on how to increase that maturity level. It's also interesting to be benchmarked against other Advanced Manufacturing companies, basically be inspired by them and then take that knowledge and transfer it to our technology. ADMA is a nice platform and tool to help us achieve higher maturity levels."





ADMA TRANSFORMATION
CHAMPION

RIVIERASCA

RIVIERASCA

RIVIERASCA AIMING TO BE A 'ZERO WASTE' COMPANY

Rivierasca is an Italian producer of fibre glass reinforced polyester laminates that is aiming to transform itself into a 'zero waste' company by 2031. The company is already contributing to the circular economy by recycling its waste into products. That is why it has been named an ADMA Transformation Champion for T3 (ECO Factory). The ADMA approach helped the company in terms of keeping focussed and prioritising with regard to new business opportunities.

Rivierasca is an Italian SME that has been producing fibre glass reinforced polyester laminates since 1963. Its products are used for civil, industrial, sports and agricultural purposes. For example, the materials (e.g. glass fibres and polyester resins) are used in roofing.

Given that the company generates a lot of waste, it has decided to invest in research and investment activities to generate a **business opportunity** out of this **waste**. It has therefore developed a material, called Glebanite, which is made out of the industrial waste of its glass fibre reinforced plastic laminate lines. The company's research has shown that Glebanite has good mechanical and aesthetic properties and can have different creative and industrial uses.



RIVIERASCA

INDUSTRIAL USE

In 2017, Rivasca became a partner in the Horizon 2020 FiberEUSe project, which is boosting the new industrial use of Glebanite all over Europe, among others through the production of a table desk. This is why it has been named as an ADMA Transformation Champion in terms of T3 (ECO Factory).

The main goal is to be **sustainable**, to improve the company's footprint. Rivasca knows they are just a small factory, but they hope that what they are going to demonstrate could be spread all over the composite industry.

NEW POSSIBILITIES

ADMA has helped Rivasca in terms of keeping focussed and prioritising with regard to the huge numbers of possibilities for its new business. Another benefit was that ADMA is at a **European level** and it helps you to also think at a European level as this gives the company the opportunity to disseminate and exploit its technological solutions all over Europe.

“Circular economy, sustainability, etc.: a lot of company's are really interested in this. There is a big willingness to change things”

Giacomo Bonaiti
R&D Manager
Rivasca
rivasca.it



RIVIERASCA

A FEW QUESTIONS FOR RIVIERASCA



What breakthroughs do you expect to realise (or have you already realised) in key performance areas of your production?

R&D Manager Giacomo Bonaiti: “Lately, we are mainly focusing on bringing new products to the market. Because we have studied technologies for recycling, for reprocessing, we really want to **go on the market** now. In particular, we’re working on the production of a table desk. There is a company participating in the FiberEUse project and they are interested in selling this table – as office furniture – and we are working hard on the specifics of this table, the aesthetics, the technical performance and most of all the prices, because we are going to the market at the same price as comparable products.”

Which have been the key actions leading to the breakthrough in T3 (ECO Factory)?

“We’re working on a methodology to recycle composite material that does not exist today. This is something quite new for the composite industry, all over the world. In recent years we started also to understand that even though you have a technical solution, today you need to have value chains that are able to let you do your business. FiberEUse is a project on the circular economy and it is clear today, after three years working on this project, that circular economy means new value chains or different ones compared to the existing ones.”

RIVIERASCA

A FEW QUESTIONS FOR RIVIERASCA

How would you describe the support received by the ADMA advisors and coaches?

"It helped me a lot to focus on what we are doing. When you do R&D, you figure out some scenarios and you sometimes face a lot of solutions, but it is not easy to choose which one of these would be the best. ADMA helped me in terms of keeping **focussed** and prioritising with regard to these huge numbers of possibilities for our new business."

Any final message for local/regional/national/European policy makers?

"I think there is a big willingness to **change things**. In some cases we have to change our life because of Covid, that's for sure. But I feel there is a lot of interest in changing something referring to circular economy, sustainability, this kind of business.

A lot of companies are really interested in this. It really seems like a good moment. So, I would suggest to policy makers or our government to take this opportunity: carpe diem, as the Latinists used to say."



ADMA TRANSFORMATION
CHAMPION





UROLA SUPPLIES SMART PACKAGING SOLUTIONS

Spanish packaging manufacturer Urola received an ADMA Transformation Champion Award 2021 for its innovative work within T2 – Digital Factory. The company came up with an Internet of Things Platform service of their own, not only to connect the machines in their own factory, but also machines they installed at the customers premises. The system remotely monitors dozens of variables, from quality and availability of raw materials to rejected containers.

UROLA combines in a symbiotic way the activity of designing and providing advanced blowmoulding technology solutions and the development and production of containers using this technology, where the activities benefits from the other in a bidirectional way.

The company operates worldwide and has more than forty years of experience in creating **competitive integral solutions for plastic container manufacturing**. Flagship of Urola is the new SWT machine, short for Smart Wheel Tangential: a machine that creates containers of different shapes and sizes and is able to reach a manufacturing capacity of up to 48.000 containers per hour.



DIGITAL PERFORMANCE

Most of Urola's machines are connected to an IoT platform. Together, they send nearly 20.000 data transactions per second to the cloud environment for analysis, a number which grows every day. The platform monitors both process variables, like temperatures, and input & output variables, like raw materials and rejected containers.

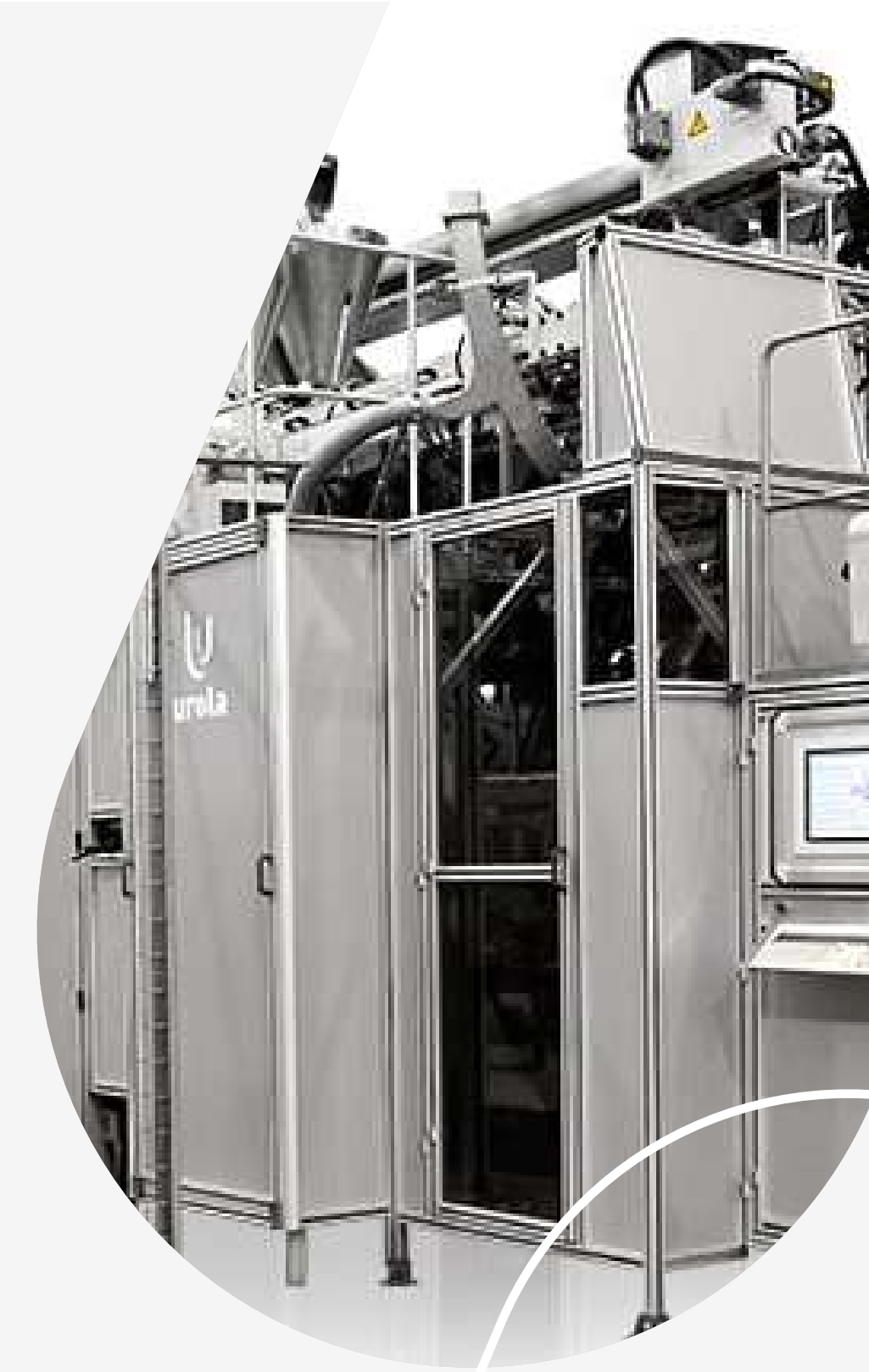
An in-depth analysis of the data allows Urola to **improve its performance** and **provide remote technical support** while guaranteeing full traceability at all times. The development of «digital twins» or virtual representations of machines and processes, is a new step forward, allowing the creation of a superior control layer which can e.g. predict the need for maintenance.

FUTURE CHALLENGES

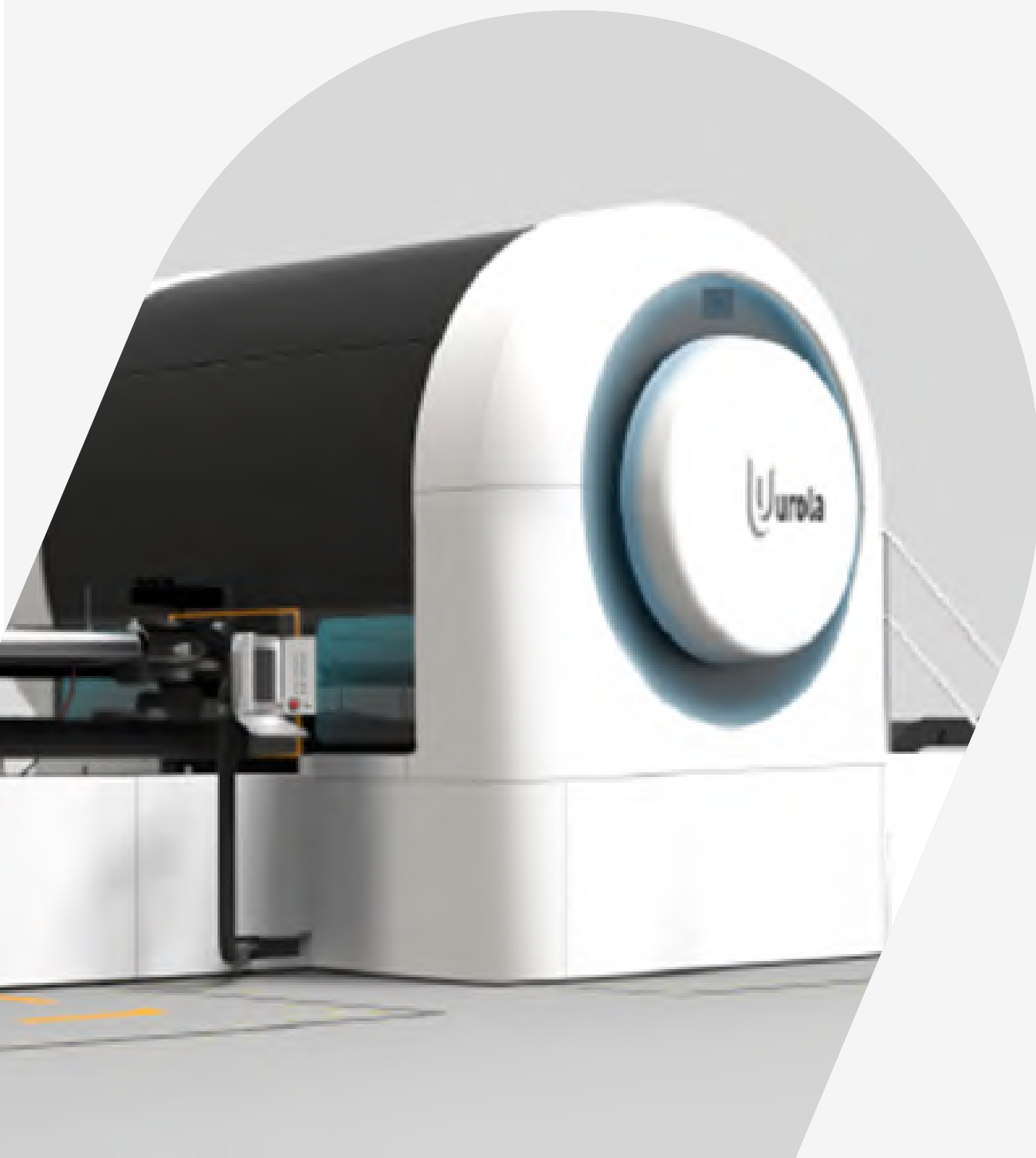
The current IoT system allows for very efficient manufacturing processes. To create **even more impact**, the cloud system could also collect relevant data about workshop activity, market demands, new quality standards etc. The development of digital twins offers additional opportunities for improvement, for example by allowing engineers to develop and test a new concept in the digital world before creating a real prototype.

“The ADMA tools allowed us to see things from a different perspective”

Jose Luis Fernandez
General manager
Urola
urola.com



A FEW QUESTIONS FOR UROLA



Which key actions led to your breakthrough in T2 – Digital Factory?

General manager Jose Luis Fernandez: “Back in 2009, we started using our ‘black boxes’ to collect data from all our machines in a cloud environment. Data suddenly started pouring in from all over the world. At the time, this data collection offered relatively few and small benefits, but it changed the mindset of many people in our company. From that moment on, we strove to become a real digital factory.”

Are you satisfied with the support you received from the ADMA advisors and coaches?

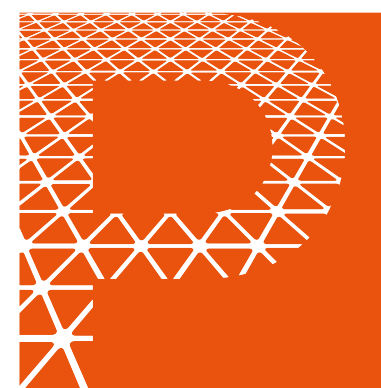
“The ADMA people made us see the benefits of a Transformation Plan, like sharing knowledge, benchmarking with other European SMEs and gaining easy access to various experts. They encouraged us to participate in the process to boost our digital transformation. The assessment brought us new insights and identified key transformation areas.”

“The tools the ADMA coaches used allowed us to see things from a different perspective. That was perhaps their most valuable contribution. We hope the next step will be adding tools like data mining and artificial intelligence. As a Factory of the Future, we now collect astonishing amounts of data. It would help to have practical tools to determine quickly which information is important.”

Do you have any advice for other companies? Or for policy makers?

“Transforming one manufacturing company into a Factory of the Future costs a lot of money. But as more companies transform and learn from each other, the **different steps become easier and cheaper** and whole industries are able to move with the times. So don’t hesitate to spend time and money to help small companies move into the future.”

ADMA FACTORY OF
THE FUTURE CHAMPION



PROVAN
Tailor made metal solutions



PROVAN
Tailor made metal solutions

PROVAN: ONE-STOP SHOP FOR METALWORK

Provan, a family-owned metal components supplier based in Belgium, has one simple goal: zero inventory. That means: ever smaller series and a lot of production changes during the day. As a 'one-stop shop' partner, Provan applies Quick Response Manufacturing and Early Supplier Involvement and has become a specialist by integrating vertically and guaranteeing a positive TCO (Total Cost of Ownership) impact in the long run.

Provan is an innovative subcontractor in metalwork that offers **total solutions** in steel, stainless steel and aluminium for welded structures, laser and sheet-metal work, profile machining and assembly. They work for companies in different growth markets who want to outsource their production, such as machine construction and the medical sector.

Through the development and evolution of Quick Response Manufacturing (QRM) (T6 – Smart Manufacturing) as well as Early Supplier Involvement (ESI) (T4 – End-to-end Customer Focussed Engineering) Provan has improved its productivity with 25% and increased its added value per FTE with 20% in the last five years. By talking about TCO at the right level (C-level) the success rate of 'offer to order' has exceeded 75%.





PROVAN
Tailor made metal solutions

DIGITALISATION AS DRIVING FORCE

WHAT'S NEXT?

Provan's first steps toward becoming a Factory of the Future stemmed mainly from the implementation of a QRM methodology. The idea is to keep idle time - the time lost between two process steps - to a minimum. Digitalisation was the driving force behind QRM. In this case: the implementation of a fully **customised planning software**.

By linking office cells to the production department, every production department has become a planning hub on their own. Every machine operator decides independently what will be produced next. A smart ICT system supports the employees to take the right decisions. The results? Provan is able to process 3000 orders a month. Work-in-progress inventory levels decreased by a factor nine and assembly throughput times moved down from four weeks to no more than three days. Last but not least: employee involvement is extremely high.

Provan will continue to invest in their employees' digital skills. Furthermore, they are looking into robot process automation for the financial department. The company is also set on taking ecological and sustainability initiatives. Via the decrease of its electricity consumption, Provan already doubled its added value per consumed MWh of electricity over the past five years.

"Thanks to Factory of the Future we were able to profile ourselves as an innovative partner in a difficult market"

Ben Proesmans,
owner and CEO
Provan
provan.be





PROVAN
Tailor made metal solutions

A FEW QUESTIONS FOR PROVAN

Your company makes continuous efforts to innovate, improve and optimise all aspects of business, product and production. Which projects brought the highest shift in productivity?

CEO Ben Proesmans: “The first would be the introduction of QRM, which enabled us to reduce the lead time of the production from a product from fifteen sets on four weeks to three days. We also rolled out a new commercial strategy: **less is more**. We spend more time on less customers and we become ‘trusted advisors’ by creating partnerships. Finally, by digitising our processes, we were able to simplify them and we created an interconnected factory where information has become available in real-time to the lowest level of decision making, the shop floor.”

Your employee engagement increased as well. How did that come about?

“Thanks to our QRM organisation, our organisation is built on **maximum involvement and ownership** from the bottom to the top. What also helps, is our continuous investing in state-of-the art machinery. We notice that interesting and complex projects in growth sectors attract good technical operators. And we focus on human capital: we organise cross-training and teambuildings, invest in people development ...”



PROVAN
Tailor made metal solutions

A FEW QUESTIONS FOR PROVAN

What does Factory of the Future mean to you?

"It is an important award for everyone who works here. Our operators are proud to be part of this team. Thanks to Factory of the Future we were able to profile ourselves as an innovative partner in a difficult market and it has opened doors to **new partners**. We also see this award as an added value in our retention management and in the war for talent.

Finding the right people is a real challenge. By presenting ourselves as a 'future-proof employer' and taking initiatives in this direction, we try to attract the best profiles with top-notch digital skills."

How has the corona crisis effected your business?

"Because our key partners are active in stable growth sectors, the corona year was a good year for us. After the corona crisis, we will have to reach cruising speed again in order to achieve our growth ambitions. We will continue to focus on the seven domains of Factory of the Future in order to make the difference as an **innovative subcontractor** by profiling ourselves as a 'total solution provider' to new partners."



**ADMA FACTORY OF
THE FUTURE CHAMPION**





SORI BOOSTING COMPETITIVENESS AND CREATING JOBS

Sori, a French manufacturer of tool storage trolleys, is a worthy 'Factory of the Future' as it has successfully invested heavily in both automation/robotisation and in its employees to increase its competitiveness whilst creating jobs.

Sori is a French manufacturer of tool storage trolleys employing over forty highly skilled employees. In recent years, the company has invested heavily (around 3.5 million euros over three years) in automation/robotisation and in its employees.

The company has managed to stay **cost competitive** in a highly competitive market. It has successfully reduced the time it needs to weld one box from 7 minutes to less than 2 minutes and reduced the time it needs to assemble a full cabinet from 25 minutes to 7 minutes. At the same time, it has been able to increase the number of its employees from 38 to 43. Furthermore, it has made sure that all the necessary information people need during the development and production of cabinets is accessible in real time for every employee.





HUMAN CENTRED NEW DEAL

In addition, for years, the company has been implementing a strategy of **full involvement and usage of the (engineering) talent of every single factory employee**. They call it their 'Human Centred' New Deal. The process has been facilitated by the ADMA approach through CETIM (the French technical centre for the mechanical industry), which offered a number of training sessions via its training academy.

The financial figures also tell the story. The company's turnover has grown by 50% in the last three years and, by comparison with 2012, they now **sell their products 20% cheaper** whilst increasing their gross margin.

Currently, Sori can operate its production process 24 hours and 7 days per week without any employees working at night or at the weekend whilst it has integrated **robot welding** and its robotic cells are integrated with a cutting and bending process.

"The first foreign training course for our operators went very well and it created a snowball effect among the other employees"

Hervé Valliet, CEO
SORI - Spécialiste du
rangement d'outillage
sori.fr





A FEW QUESTIONS FOR SORI



Which projects brought about the highest shift in productivity?

CEO Hervé Valliet: “My first objective was to regain **international competitiveness** and regain the markets that we had lost twenty years ago, which had gone to Asian countries. We had to improve the working conditions and also work on the environmental improvement of the company.”

“We completely overhauled the company’s workshop by investing in **robotic cells** at various levels. This has enabled us to redo the whole industrial organisation of the company and to regain this competitiveness. Particularly on the folding and wrapping stations, where many operations are carried out in masked time and all the delicate operations are done by robots and machines. The operators do the complementary operations, as well as the assembly operations, which are much easier for them.”

“All of this has been made possible by the improvement of **industrial computing**. That means that all this robotisation is controlled virtually on computer stations. We also worked a lot on agility and production changeover time on these different workstations. The longest production changeover time in the company today is 15 minutes.”

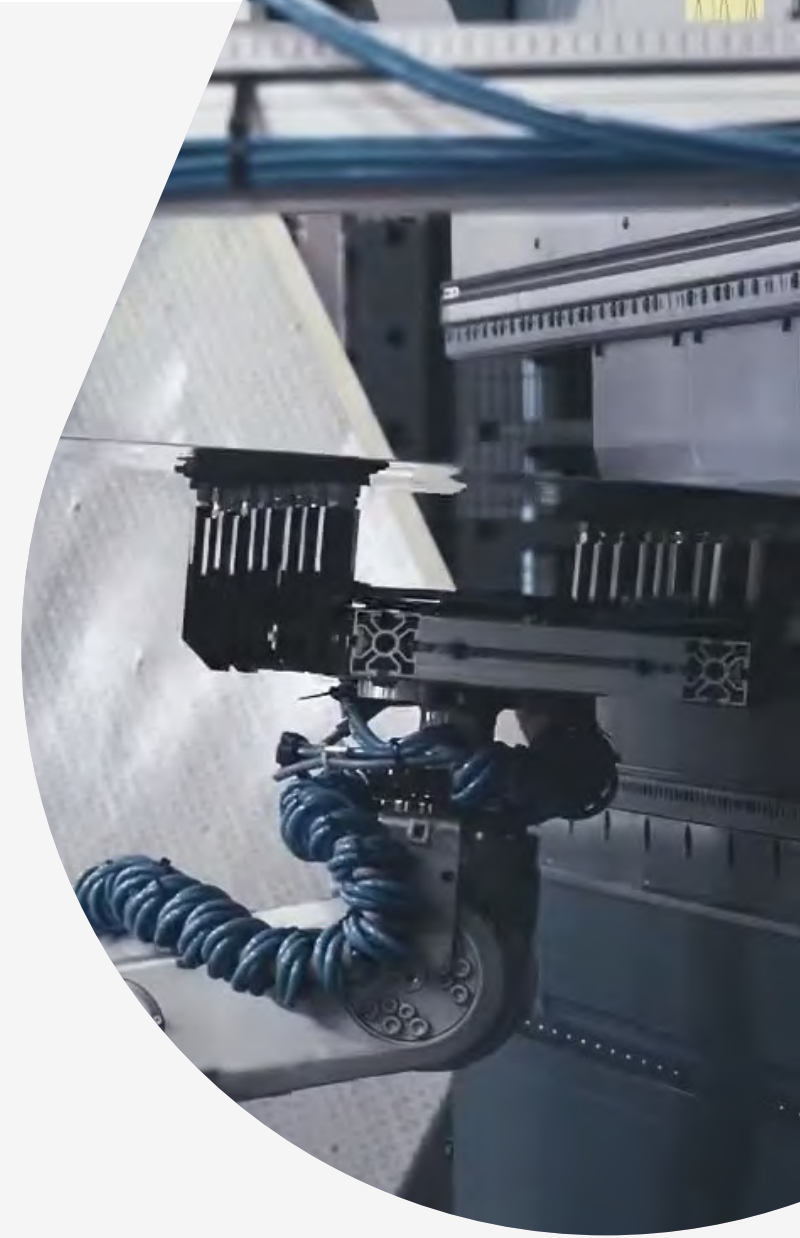


A FEW QUESTIONS FOR SORI

Which projects brought about the highest shift in employee engagement?

“All these new working tools have completely revolutionised the working methods in the company. The operators asked themselves: ‘What is my future role in the company?’. I assured them that they did not need to worry, no one would be fired, everyone would be guided. So the first difficulty was to have a first group in training. This training took place outside France, in Belgium, so it was a bit difficult to convince them, but we worked a lot with the manufacturer of the machine and the tools, who also gave us training on the software.”

“We got great feedback on the training. Moreover, as far as the trainees were concerned, we started from a very low level, but on the other hand, the **progress** made in five days was phenomenal. Since this first training course went very well, it created a snowball effect among the other employees, who followed the same process for the different robot cells.”





ADMA