

Final report on WP2 Business Cases Inventory

Implementation Period: November 2023 – May 2024 (M1–M7)

Authoring partner: Dataninja

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Introduction

The Work Package 2 (WP2) "Business Cases Inventory" aimed to identify, analyse, and document relevant business practices and experiences related to the use of digital data within Small and Medium Enterprises (SMEs) and Vocational Education and Training (VET) contexts across Europe.

The main goal of WP2 was to establish a solid knowledge base that would inform subsequent project activities and provide evidence-based insights into how SMEs are adopting data-informed approaches, what competencies are required, and which challenges and opportunities emerge in the process.

The resulting deliverables — a Business Case Inventory Report, a presentation of selected best practices, and an interactive survey diagram — collectively represent a structured overview of the research findings, designed to support both analysis and dissemination.

Methodology

WP2 was implemented between **November 2023 and May 2024 (M1–M7)** under the coordination of Dataninja, the Work Package leader. Each project partner made essential contributions to ensure comprehensive and comparable research outcomes across multiple countries.

2.1 Research Framework and Data collection

Dataninja established a common research framework, including shared quality criteria, data collection templates, and methodological guidelines. This ensured alignment and coherence across partners' contributions, enabling consistent comparative analysis. The framework was collaboratively refined through online meetings and feedback sessions with all consortium partners.





Each partner conducted desk research in their own country and in at least one additional country outside the consortium, combining qualitative and quantitative approaches.

2.2 Dissemination and Stakeholder Engagement

Eurotraining, as dissemination expert, defined and implemented an outreach strategy to ensure wide participation in the questionnaire and visibility of the WP2 activities. The dissemination plan maximized engagement with relevant stakeholders, contributing to the diversity and representativeness of the responses.

2.3 Data Integration and Reporting

Dataninja harmonized all contributions and findings, integrating qualitative insights from focus groups, survey responses, and desk research results. The consolidated analysis was structured into the **Business Case Inventory Report**, which summarizes trends, patterns, and lessons learned from the research.

How to Use the Output

The WP2 outputs are intended as **exploratory and practical tools** for understanding and analysing the current landscape of data use and digital transformation within SMEs and VET systems.

3.1 Business Case Inventory Report

This document presents the main findings of the research, outlining challenges, success factors, and exemplary cases across different European contexts, delving into the strategies and approaches adopted by SMEs to leverage data analysis and AI on a global scale. It not only provides an analytical overview, but the research also extends beyond the mere technical aspects of data utilization to encompass its broader societal implications. With a dedicated commitment to accessibility, inclusion, and sustainability, at least two business cases per partner were specifically designated to incorporate aspects related to each of these critical dimensions.

3.2 Best Practices Presentation

A complementary visual presentation highlights the most relevant and innovative cases identified during the research. It is designed for communication and dissemination purposes, providing concise examples that can be used in workshops, conferences, and stakeholder engagement activities.





3.3 Interactive Survey Diagram

The interactive diagram allows users to visually explore the results of the online questionnaire. It is an intuitive, user-friendly interface for navigating responses by country, stakeholder type, or thematic area.

Conclusion

The implementation of WP2 has provided a valuable foundation for the project's subsequent activities. Through a structured and participatory research process, the consortium successfully developed a comprehensive overview of how SMEs and VET stakeholders engage with digital data across Europe.

The combination of desk research, focus groups, and survey data has yielded a diverse and representative picture of current practices, while also identifying skills gaps and innovation opportunities. The results of WP2 will directly inform the design of training activities and competence frameworks in the following work packages, ensuring that future outputs are grounded in real-world business and educational contexts.

The Business Case Inventory thus stands as a cornerstone of the project, supporting both internal development and external communication of its outcomes.

Annex - Output Materials

The following materials are attached both as annexes to this report and included as hyperlink:

- 1. <u>Business Case Inventory Report</u> (PDF) full research findings and analysis.
- 2. <u>Best Practices Presentation</u> (PDF) visual summary of selected cases.
- 3. <u>Interactive Survey Diagram</u> (web-based) visual exploration of survey data.



SMERALD

SMEs – Raising Awareness and Learning on Digital data, data analysis and artificial intelligence

Business case inventory report

April 2024













Project Number: 2023-1-IT01-KA220-VET-000151990 +76 209 1092 4095





Introduction

In today's rapidly evolving digital landscape, small and medium-sized enterprises (SMEs) stand at the forefront of harnessing the power of data analytics and artificial intelligence (AI) to drive innovation and competitiveness.

This report presents a comprehensive analysis of **53 best practices and case studies**, delving into the strategies and approaches adopted by SMEs to leverage data analysis and AI on a global scale.







Methodology

- The methodology of this desk research is structured to ensure comprehensive coverage and comparability across European Union (EU) countries. Each SMERALD partner was tasked with providing business cases from at least two EU countries, resulting in a total of approximately seven or more cases each.
- Emphasizing a holistic approach, the research extends beyond the mere technical aspects of data utilization to encompass its broader societal implications. With a **dedicated commitment to accessibility, inclusion, and sustainability,** at least two business cases per partner were specifically designated to incorporate aspects related to each of these critical dimensions.
- Furthermore, to streamline the data collection process and facilitate comparability, the initial phase of the desk research involved the structured gathering of information using a Google Form. This approach ensures that the data collected is uniform across countries, enabling rigorous analysis and evaluation of the identified business case studies.
- Please find more information in the <u>research guide</u>.





The inventory at a glance

Key information about the business cases

Total business cases = 53

Almost 70% are SMEs of 5 + employees

When it comes to the **geographical focus** of SMEs activities, over 80% is either **global** or **european**

- The **top 3 clients** of the companies are:
 - Businesses / B2B
 - General public / B2C
 - Government Agencies

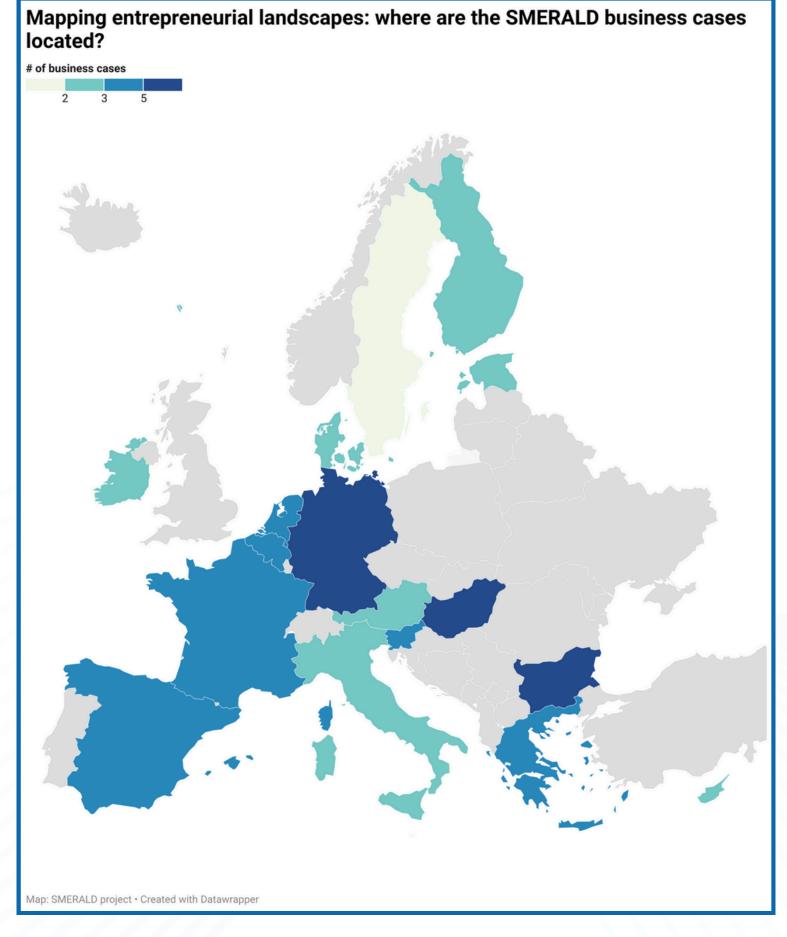




This map displays the distribution of business cases across the various European countries the consortium considered for the desk research. The data reveals a diverse landscape, with Bulgaria, Germany, and Hungary standing out with the highest number of business cases at 5 each. Other countries like France, Greece, Slovenia, and Spain follow closely behind with 4 cases each. On the other hand, smaller economies such as Austria, Cyprus, and Estonia exhibit fewer cases, ranging from 2 to 3.

Click on the map for the interactive version!









Key aspects of the research

The investigation into the valorisation of the activities of the business cases led us to investigate several critical aspects.

- First, we analysed the **main fields of activity** of the respective companies or organisations, identifying key areas of interest and specialisation.
- Furthermore, we explored the field of **digital transformation**, trying to unveil the crucial aspects where these entities have implemented innovative solutions.
- Through this exploration, we sought to understand the **extent to which AI and data analytics have been exploited**, thus determining the relevance of SMERALD's areas of interest: AI, data analytics or both.
- In addition, we endeavoured to classify the nature of the companies' activities, whether they are primarily engaged in research, development or tool utilisation.



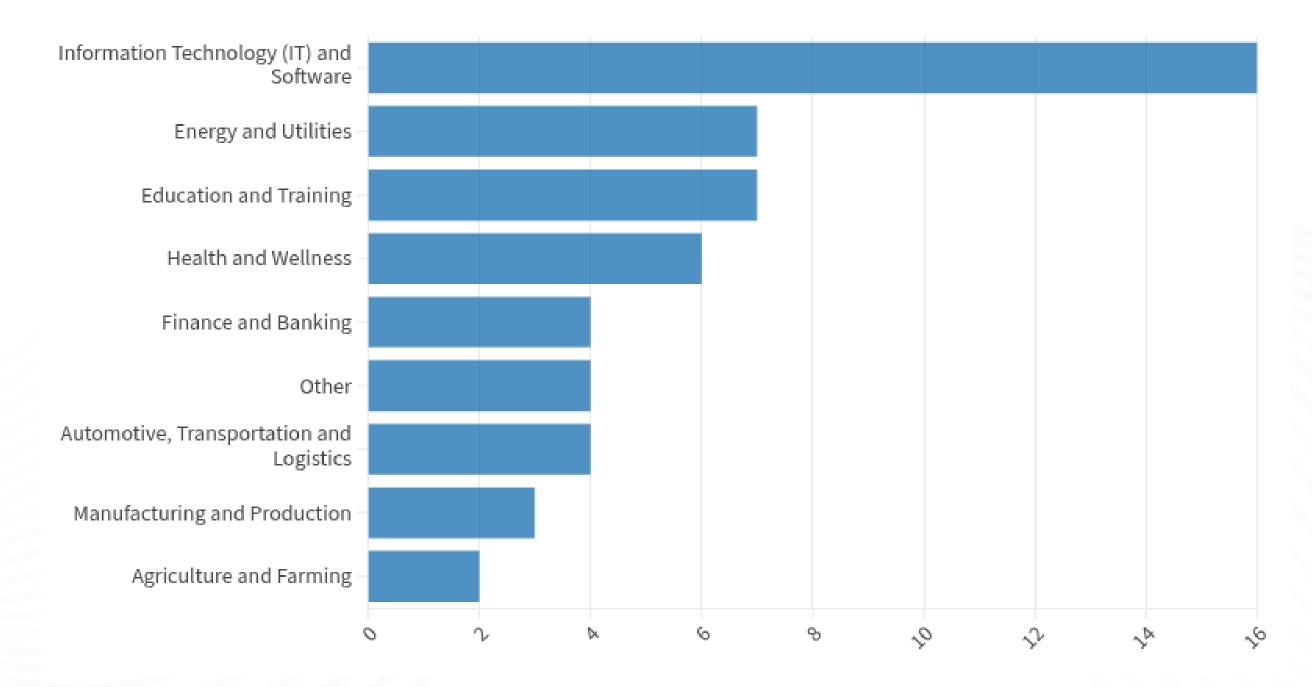


Information Technology
(IT) and Software emerged
as the dominant sector,
constituting 16 cases, closely
followed by Energy and
Utilities, along with Education
and Training, each with 7
cases.

Click here for the interactive
 version of the chart

What are the main sectors of operation for the company or organization?

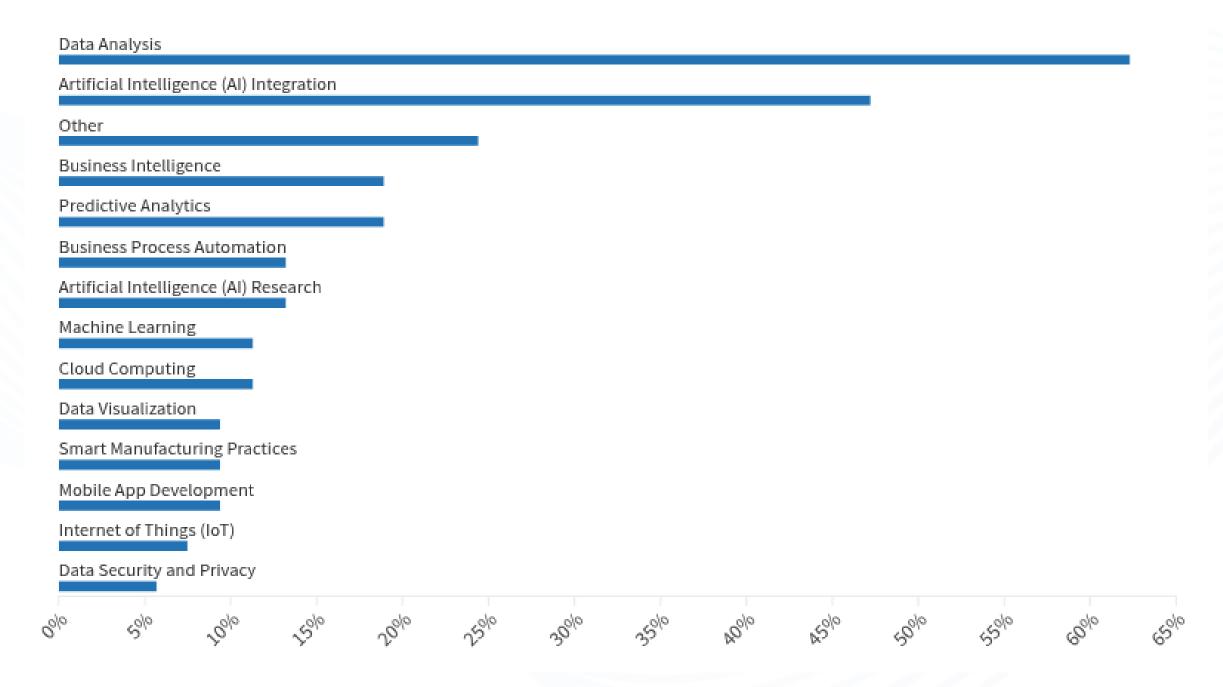
of business cases







What are some key aspects of the digital transformation for which the company or organization has implemented a solution?



The chart highlights the fundamental role of data analysis and artificial intelligence (AI) as key drivers of digital transformation, perfectly in line with the focus of the SMERALD project.

Click here for the interactive
 version of the chart



SMERALD priorities: sustainability and inclusion

The survey responses probed the extent to which business cases incorporated the two SMERALD priorities:

- accessibility and inclusion
- green and sustainable development

The responses indicate that these critical dimensions received substantial attention, with **32%** of business cases **addressing accessibility and inclusion**, and an **equal proportion** (32%) focusing on **green and sustainable development.**

Notably, 8 out of the 53 business cases addressed both priorities concurrently, showcasing a nuanced approach towards holistic sustainability and social responsibility.





SMERALD priority: green and sustainable development

In what ways does the business case contribute to sustainability, according to publicly available information?

| Green and sustainable development top 3 actions | # Of business cases |
|---|---------------------|
| Use of Green Technologies | 15 |
| Reduction in Carbon Footprint | 14 |
| Sustainable Supply Chain Practices | 8 |





SMERALD priority: accessibility and inclusion

How has the business case demonstrated a commitment to accessibility and inclusion, as per publicly available information?

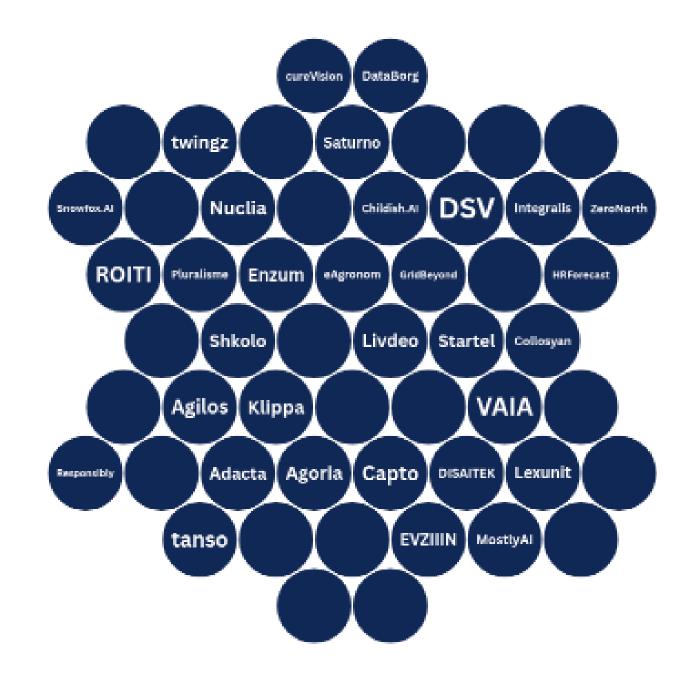
| Accessibility and inclusion top 3 actions | # Of business cases |
|---|---------------------|
| Support for Diverse Customer Base | 23 |
| Accessible Website Design | 21 |
| Inclusive Hiring Practices | 8 |

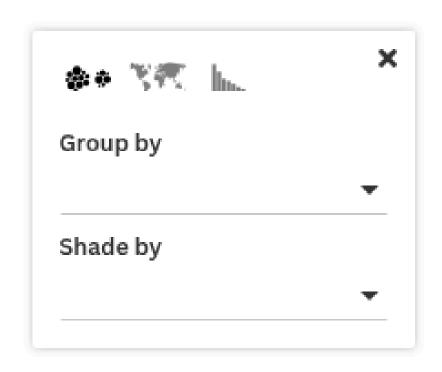


Explore the business cases inventory



Hover the mouse over each dot on the survey chart to display additional information





Click here for exploring the survey chart



THANK YOU

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SMEs – Raising Awareness and Learning on Digital data, data analysis and artificial intelligence

WP 2 Business case inventory: a selection of the best practices

Turin TPM

05/06/2024













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Criteria for choosing THE BEST of the best practice?

- Geographical representation
- Focus AI or data analysis
- Type of activity: Research / Tool dev / Tool Use
- Priorities: sustainability and inclusion

BUT ALSO:

- Inspiration / Innovation
- Specific focus on education / competences







follows

- Company ID: basic info
- Brief description
- How does it address the SMERALD priorities
- Why it should be considered as a best practice







Bee Smart Technologies

Company ID

<u>Website</u>

| SMERALD FOCUS AREA | Data analysis, Al |
|--------------------------|--|
| SMERALD PRIORITIES | Yes: green and sustainable development |
| COUNTRY | Bulgaria |
| ACTIVITY | Tool Development |
| MAIN SECTOR OF OPERATION | Agriculture and Farming, Information Technology (IT) and Software, Retail and E-Commerce |
| GEOGRAPHICAL FOCUS | Global |





Bee Smart Technologies

The great **mission** of Bee Smart Technologies is to **save the bees from extinction**.

In the past 7 years the company has been developing avant-garde technologies for remote monitoring of beehives and innovative business model for fair trading of bee products.

Their main product, Beebot, is an intra-hive device that monitors key colony indicators and informs the beekeeper of changes that have occurred in the hive.

Their sensor devices are fully developed in Bulgaria and are used by customers and beekeepers on 5 continents.



How does the business case address the priority of SUSTAINABILITY?

Use of Green Technologies Sustainable Supply Chain Practices

The honey offered on the IstinskiMed platform is from producers who use their technology. They monitor the health status of the bees and their productivity, thus ensuring that the bees are sustainably managed and have produced quality honey. Each jar of honey directly funds its producer and at the same time helps to build sustainable beekeeping in Bulgaria.



Why should it be considered as a best practice?

Striving for a noble cause, their hybrid business model combining IT technologies and innovative e-commerce elevates a sustainable ecosystem of producers, green corporations and customers of bee products.



hydrop-systems

Company ID

<u>Website</u>

| SMERALD FOCUS AREA | Data analysis |
|--------------------------|--|
| SMERALD PRIORITIES | Yes: green and sustainable development |
| COUNTRY | Germany |
| ACTIVITY | Tool Use |
| MAIN SECTOR OF OPERATION | Energy and Utilities, Information Technology (IT) and Software |
| GEOGRAPHICAL FOCUS | National |





hydrop-systems

Hydrop-systems open the black box of water and thereby enable everyone to use the resource water consciously.

The company offers central recording of water consumption via **a plug-and-play adapter** for the analogue water meter, our hydrop meter. Plug it in, connect it and you can see your consumption!



Use of Green Technologies Reduction in Carbon Footprint

How does the business case address the priority of SUSTAINABILITY?

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hydrop- system increases the appreciation of water as a finite resource and has the goal to **develop a technical solution to a sustainability problem**. They are committed to the Sustainable Development Goals (SDGs) and support three of the 17 SDGs with our hydrop meter.

- **SDG 6:** Clean Water and Sanitation. Water is our lifeblood. We will end the waste of drinking water in households.
- SDG 13: Climate Action. We educate people about water consumption and raise awareness about our drinking water.
- **SDG 15**: Life on Land. We are taking long-term action to counteract soil drying. For us and future generations!





Why should it be considered as a best practice?

Water consumption in buildings is a black box to which private individuals only have limited access via their annual water bill. The company Hydrop-Systems offers the opportunity to gain insight into your own data (consumption) - a transparent approach!



A Thousand Colibris

Company ID

<u>Website</u>

| SMERALD FOCUS AREA | Data analysis |
|--------------------------|----------------------------------|
| SMERALD PRIORITIES | Yes: accessibility and inclusion |
| COUNTRY | Spain |
| ACTIVITY | Research, Tool Development |
| MAIN SECTOR OF OPERATION | Health and Wellness |
| GEOGRAPHICAL FOCUS | Global |





A Thousand Colibris

A Fem-Tech company specialized in providing **mental and reproductive care personalized support to women** by integrating cutting-edge predictive intelligence and digital technologies.

Their **core product is Dana**, an app that provides support for women from pregnancy to motherhood, with a focus also on mental health during such periods. Dana is a certified software-as-a-medical device for the screening, diagnosis support and patient monitoring.

In parallel the company, through the use of advanced technology and data analysis, is creating **innovative solutions** that can provide **personalized precision drugs for each individual**.



Support for Diverse Customer Base Mitigation of Data Bias and Discriminatory Data Practices

How does the business case address the priority of ACCESSIBILITY AND INCLUSION?

The company designs and researches for women, with the specific stated goal of closing an health data gap

- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 5: Achieve gender equality and empower all women and girls



Why should it be considered as a best practice?

The company not only designs and researches for women, with the specific stated goal of closing an health data gap, but has also been supported by universities as clinincal partners, and by important funding programs (EU NExt Generation, ENISA, Spanish National Secretary of Digitalization and AI, and many more)



SoapBox Labs

Company ID

<u>Website</u>

| SMERALD FOCUS AREA | Data analysis, Al |
|--------------------------|---|
| SMERALD PRIORITIES | Yes: accessibility and inclusion |
| COUNTRY | Ireland |
| ACTIVITY | Research, Tool Development, Tool Use |
| MAIN SECTOR OF OPERATION | Education and Training, Information Technology (IT) and Software |
| GEOGRAPHICAL FOCUS | Global |





SoapBox Labs

SoapBox is on a mission to improve educational outcomes for students and believes that all students can achieve grade level proficiency in reading.

That's why they built a proprietary voice Al engine that gives teachers the real-time data and insights they need to personalize the instruction they offer to students in the classroom.

This child-specific speech technology creates highly accurate, age-appropriate and safe voice-enabled experiences for children.

SoapBox Labs' technology is integrated across a range of application areas including toys, gaming, robotics, AR/VR as well as Education (reading and English Language Learning).





Support for Diverse Customer Base Mitigation of Data Bias and Discriminatory Data Practices

How does the business case address the priority of ACCESSIBILITY AND INCLUSION?

Commitment to **equity and inclusivity** as well as reducing bias in their technology systems.

In 2022, they became the first AI company to be certified for prioritizing **racial equity in AI Design**.

The team also comprehends the profound implications of voice technology for children's data privacy and has extensive experience and understanding of data and AI regulations. Protecting children's fundamental right to voice data privacy is a cornerstone of the company's values and philosophy.



Why should it be considered as a best practice?

The most accurate voice engine for kids in the world

A world-class and diverse team of experts

A company focused on social impact and equity

Al built using privacy-by-design





Livdeo

Company ID

<u>Website</u>

| SMERALD FOCUS AREA | AI |
|--------------------------|--|
| SMERALD PRIORITIES | Yes: accessibility and inclusion |
| COUNTRY | France |
| ACTIVITY | Tool Development |
| MAIN SECTOR OF OPERATION | Tourism and Hospitality, Museums and cultural institutions |
| GEOGRAPHICAL FOCUS | Global |



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Livdeo

Livdeo provides inclusive and accessibles **digital solutions for cultural institutions**. It has **three main platforms**:

- GEED
- DEEALOG and
- Feel the Art.

GEED platform brings storytelling and interactive experiences to visitors' mobile devices without constraints, with universal accessibility in mind. It includes innovative features like AI objects recognition, augmented multilingual audio description and audio storytelling for video screens.

Livedeo has also developed **a multilingual chatbot** that speaks with natural voices and can simulate conversations with legendary figures like Leonardo da Vinci, Paul Cézanne, or Vincent van Gogh.





Support for Diverse Customer Base

Accessible Website Design

How does the business case address the priority of ACCESSIBILITY AND INCLUSION?

Livdeo's "solution addresses a range of disabilities, including visual, hearing, mental, and mobility impairments", showing a commitment to make museums universally accessible.



Why should it be considered as a best practice?

Livdeo has been active for 10 years and its products have received several international awards and recognitions. (Webby Award Winner 2022, 2nd place at IMAGINES "Projects of Influence 2020" organised by The Best in Heritage and ICOM, 2019 GLAMi Awards).



Focus on Education and Training

VAIA

Growth Tribe

Startel





Company ID

<u>Website</u>

| SMERALD FOCUS AREA | AI |
|--------------------------|---|
| SMERALD PRIORITIES | Yes: accessibility and inclusion |
| COUNTRY | Belgium |
| ACTIVITY | Research, Tool Development, Tool Use |
| MAIN SECTOR OF OPERATION | Education and Training, Information Technology (IT) and Software |
| GEOGRAPHICAL FOCUS | Local/Regional |





VAIA, the Flanders AI Academy, is a collaboration between all the universities and universities for applied sciences and arts in Flanders, that aims to let professionals and researchers learn about artificial intelligence and to recognise and use the possibilities of it.

VAIA channels the available expertise on AI from the academic to the business world, thus contributing to the Flemish knowledge economy. With its accessible range of courses and training, VAIA aims to stimulate everybody to adopt lifelong learning.



Accessible Website Design

How does the business case address the priority of ACCESSIBILITY AND INCLUSION?

Knowledge hub:

- User-friendly interface for the course search, lots of filters options (including course for free)
- Blog with free resources
- Pool of expertes





Why should it be considered as a best practice?

For its aim to guide public institutions, educational institutions, businesses and NGOs to effectively implement AI within their organizations, to boost the Flemish economy.

Connection b/w academia and business world



Focus on Education and Training

VAIA

Growth Tribe

Startel

Growth Tribe is a **digital learning partner** for individuals & organisations, specialising in data science, growth, innovation and customer experience. It aims at empowering learners to acquire the **most in-demand digital capabilities** through actionable, hands-on and enjoyable courses & learning programs.

Linker



Relevant features:

- Growth Tribe's Course Advisor
 Tool → quiz to choose the best
 learning path
- Data & Al path
- Ask an expert + Personal career coaching sessions





Business

Learn Al fundamentals and how to leverage ChatGPT and prompt engineering for content and design generation. Boost productivity with Al solutions and make data-driven decisions for the future.

- ⊕ English / cc English

tom bunq ★ Heineken miro nakeaway.com invision Spotify

Unlock business potential with Al



Gain a competitive edge

Master Al's core principles and strategically apply them to your business operations. Get insights that revolutionise decision-making.

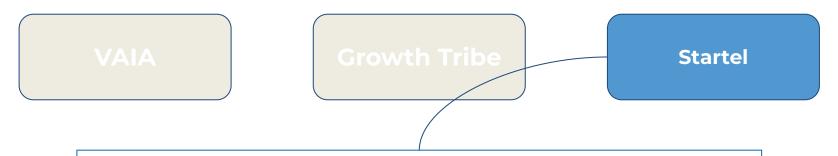


Streamline operations and foster innovation

Boost efficiency, drive productivity, and ignite innovation. Implement Al solutions across your business landscape to optimise processes and spark creative thinking.



Focus on Education and Training



IT company that offers a wide range of education and training in the field of IT, cybersecurity, cloud computing and others and they have specialized in providing high-quality training that prepares participants for the demands of today's labor market.





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- Open Source specialist
- Software developer

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- Cloud Engineer
- Data analyst
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- Software Tester
- > IT consultant
- Functional manager

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- Open Source
- Cloud Computing
- Artificial intelligence
- Project and process management
- Soft skills and personal development

- Cybersecurity
- Data science and analytics
- > IT Fundamentals
- Network management
- Software Testing
- Software development



THANK YOU

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