

Microsoft Azure Marketplace

Azure - Large Language Model

Smart Search with ChatGPT

8 weeks Proof of Concept

Index

01 - Avvale

02 - Proof of concept

Context

Solution

Outcomes and deliverables

Approach

Planning



Avvale

Corporate profile





[valēre, present active infinitive of valeō] - be strong, healthy, matter.

Avvale is a Global Digital Business Transformation Company on a mission to **evolve modern business through the circular economy, enabled by technology.**

Industry Focused approach

Supporting both Fortune 500 and Midmarket in 15 sectors on the field.



3000+ People

An inclusive mix of cultures, competences, attitudes and experiences to create **One Unique Company.**

350 M\$ Revenue for 2023

Double digit growth year over year, since **2004 - Techedge foundation.**

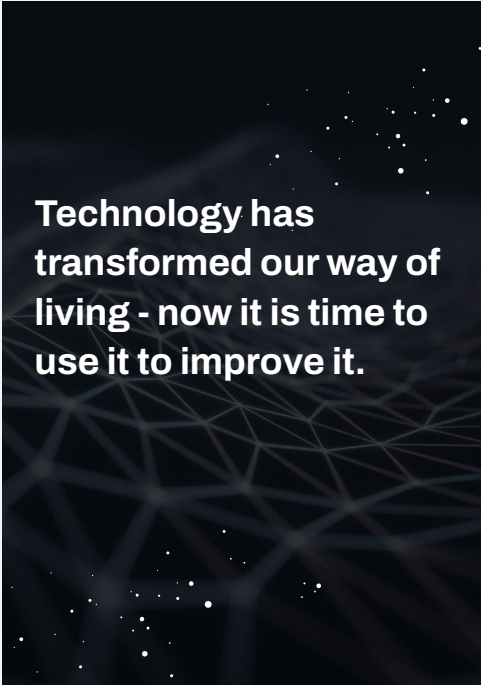


distribution in 20+ offices

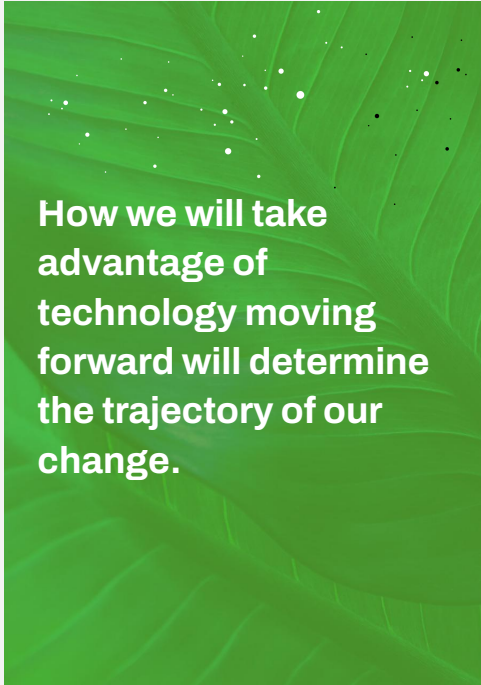


20 Years and still counting...

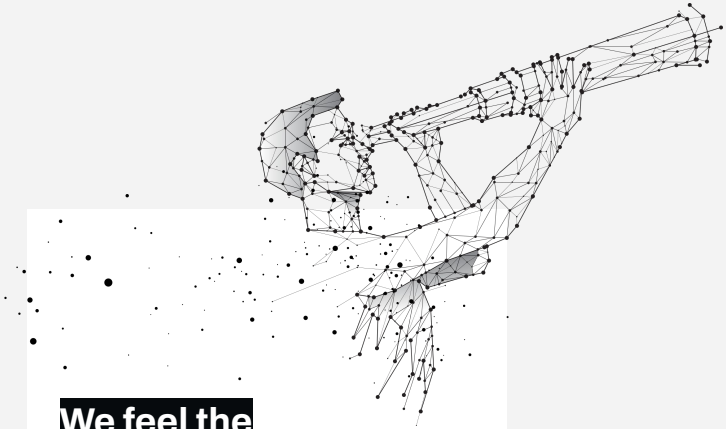




Technology has transformed our way of living - now it is time to use it to improve it.



How we will take advantage of technology moving forward will determine the trajectory of our change.



We feel the responsibility to embrace this purpose:
leveraging our technology expertise and ingenuity to enable the deployment of more sustainable business models.



We truly believe that digital innovation and circular economy represent the **most effective means** corporations have to achieve their end of being profitable and sustainable.

Circular business models, based on lease, share, reuse, repair, recycle, **decouple revenues from production and resource consumption** by leveraging smart, connected products and digitally hyper-automated processes across the entire value chain.

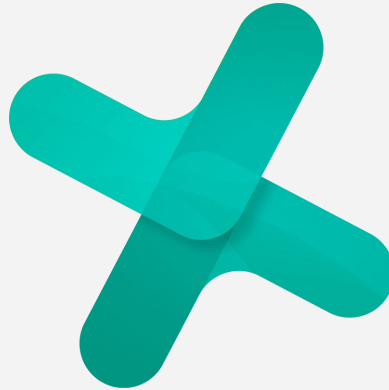


Avvale Circular Accelerators

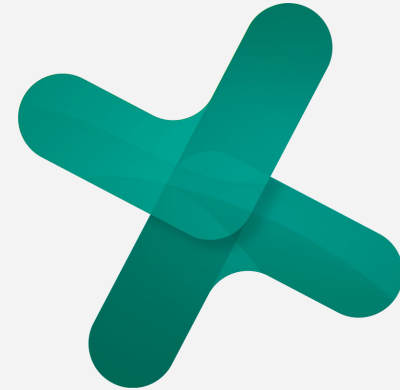
to reimagine business models by designing **smart products / services** and **sharing data** across the entire value chain, deeply enabled by **technology**.



Connecting
People & Products

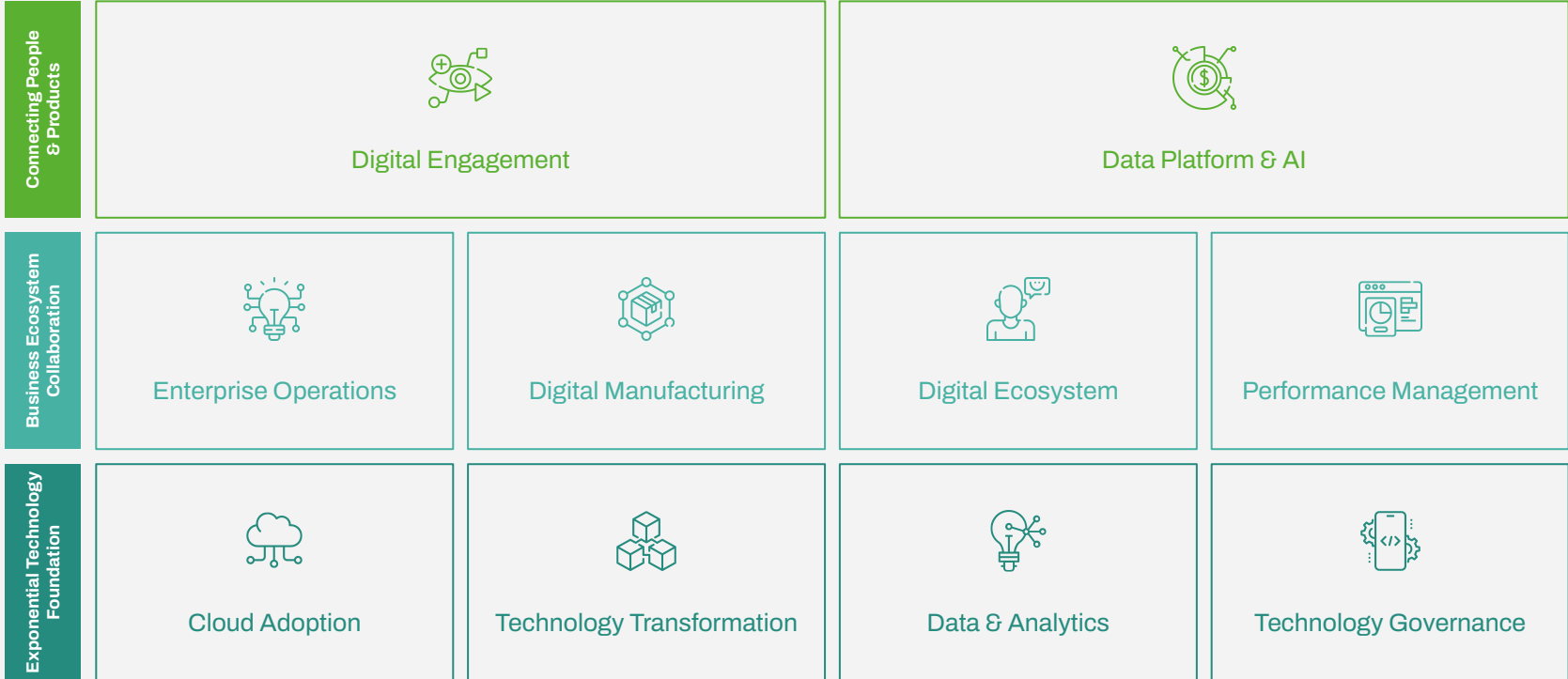


Business Ecosystem
Collaboration



Exponential Technology
Foundation

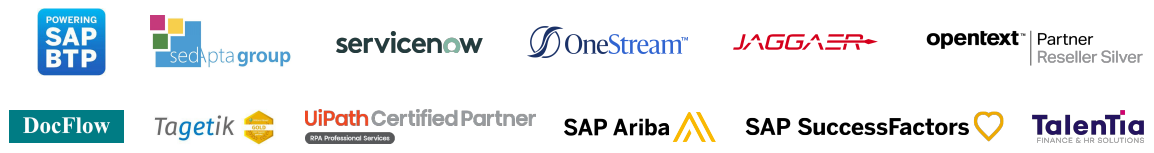




Connecting People & Products



Business Ecosystem Collaboration

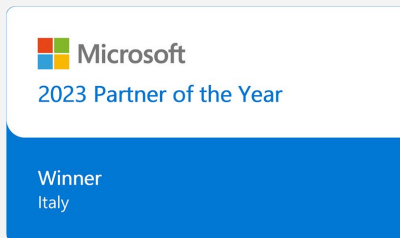


Exponential Technology Foundation



Focus on **Microsoft** Partnership

“**Microsoft** Italy chooses **Avvale** as **Partner of the Year 2023** for its ability to combine sustainability and profit through technology.” *2023, July 19th*



Our Solutions

Microsoft
Solutions Partner

Infrastructure
Azure

Specialist
SAP on Azure
Infra and Database Migration

Microsoft
Solutions Partner

Data & AI
Azure

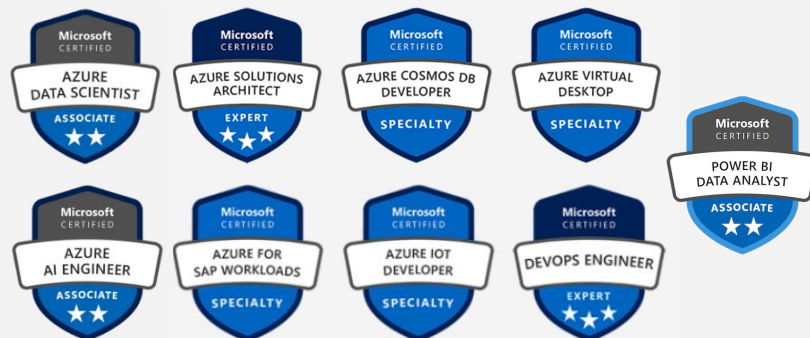
Specialist
Modernization of Web
Applications
Infra and Database Migration

Microsoft
Solutions Partner

Digital & App Innovation
Azure

Specialist
Modernization of Web
Applications

Our Certifications



Smart Search with ChatGPT

Proof of concept



Context and goal

Business users increasingly demand **fast and reliable feedback** querying large volumes of data or specific textual contents.

Whether in the financial, manufacturing, or scientific sectors, documentation can often be **verbose** and **time-consuming** to read or browse in its entirety.

This verbosity constrains the depth and effectiveness of analyses.

Initiative is geared towards creating a system that can be queried with **natural language questions** generating responses from a specially designed Knowledge Base (KB).

The solution aims to harness the power of AI to facilitate **intuitive, human-like interactions** with a repository of information, ultimately **enhancing accessibility and usability**.

By combining the **robustness of Azure OpenAI** with the potential of **generative AI**, the project seeks to enable a seamless flow of information retrieval and knowledge dissemination through the generation of contextually relevant responses from the pre-established document-based Knowledge Base.



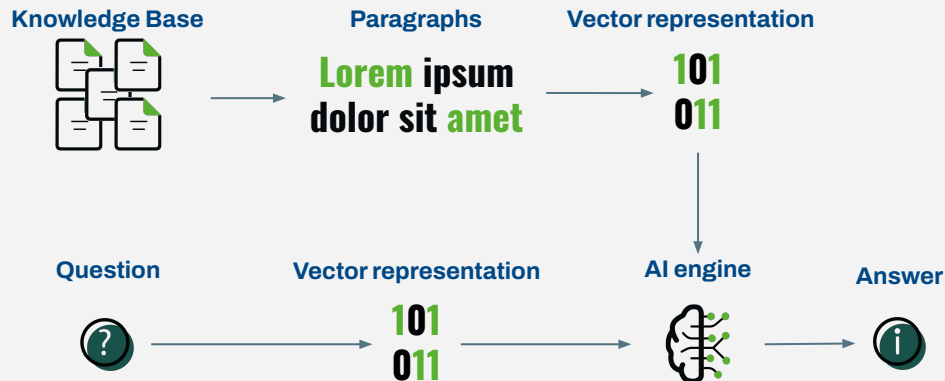
Solution - High level description

KB Natural Language Querying

Solution offers a wide array of features for processing and accessing info from docs with **heterogeneous layouts**. Extracted info can be structured into one or more separate **Knowledge Bases** enabling users to query them in **natural language** to obtain responses based on KBs content. Responses are tailored and specific to precise questions and can be crafted into summaries of broader topics. Solution supports chronological event distinction, allowing for temporal processing of responses that can be translated into various languages, accommodating different writing styles on demand, and formatting them according to user preferences (bulleted lists and tables). Solution provides a comprehensive approach to information access and processing, ensuring **flexibility, accuracy, and customization**.

Solution details in numbers

- 1+ Knowledge bases
- 1 language (Eng preferred)
- <200 documents in KB
- 1 visualization layer (web application) with limited features



Outcomes and Deliverables

Awareness



Contextual **understanding** of the selected Azure analytical tools for the specific use case

Discover how **ML and AI** could be **exploited** to **improve** the considered process or phenomena

Model **explanation** and meaningful **information extraction** from **data**

Knowledge and modeling



Setup Azure prototypical **reference architecture**

Knowledge base from manually uploaded docs (pdf)

Azure ML and AI overview (Form recognizer, OpenAI services)

How to **extend** PoC functionalities

Easy to use



Simplified **graphical interface** for user interaction allows the insertion of a question and then report the result of the model in text format.

This interface will be made available through a **mockup web application**



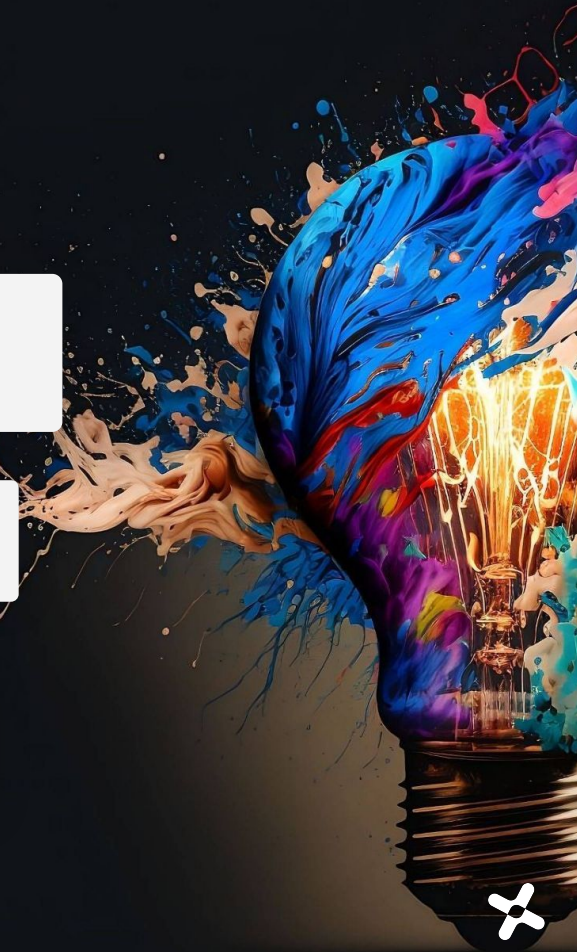
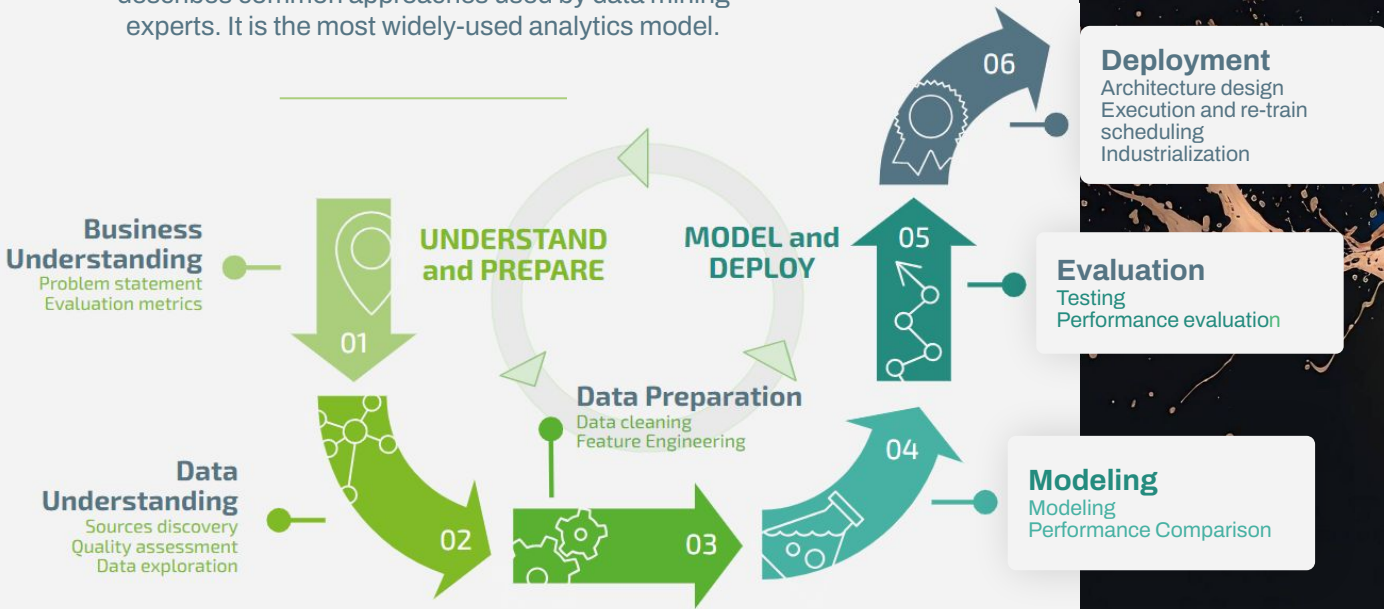
Approach



Accelerate

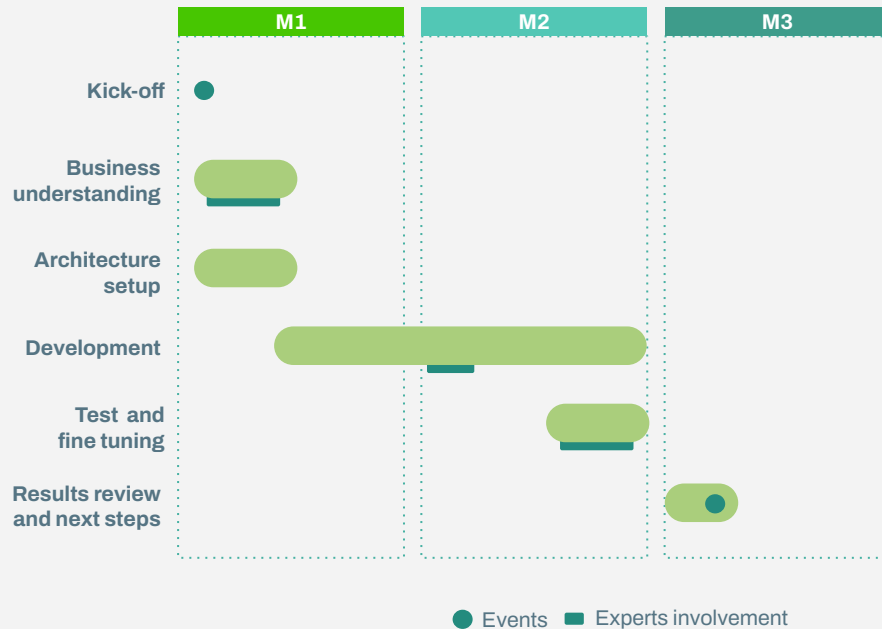
CRISP

Cross-industry standard process for data mining, known as **CRISP-DM**, is an open standard process model that describes common approaches used by data mining experts. It is the most widely-used analytics model.



Planning

Expected timeline for the implementation of proposed solution is **2 months**.



Avvale proposes a delimited Proof Of Concept to establish the effectiveness of the methodology as soon as possible and possibly follow a phase of industrialization and evolution of the system.





This document and the information contained herein are proprietary to Avvale.

This document, either in whole or in part, may not be reproduced in any form or by any means without Avvale's prior written permission.

Any third-party names, trademarks and copyrights contained in this document are the property of their respective owners.





Thank you!
avvale.com

