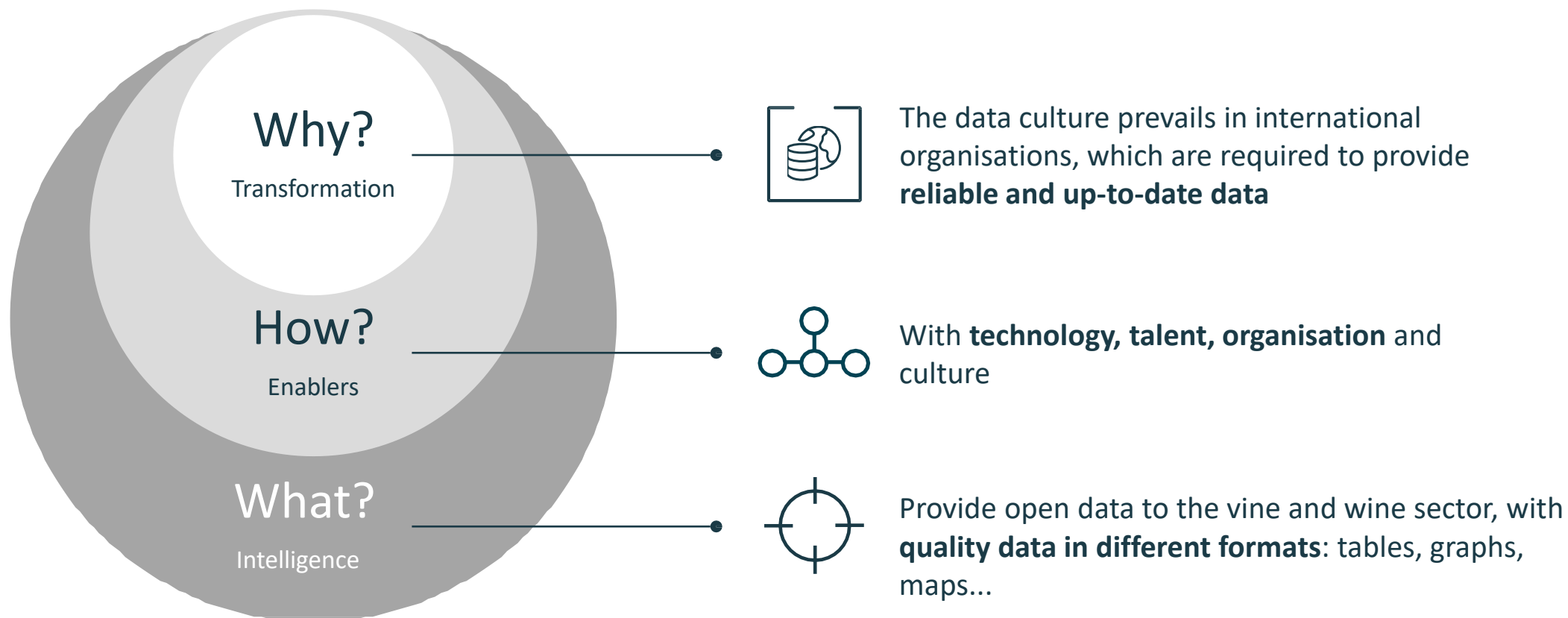# In the current context, data has become one of the main assets of leading IGOs, who are rapidly evolving their analytical capabilities

Offer valuable service presenting statistics on the sector based on quality and reliable data

Why?
Transformation

The data culture prevails in international organisations, which are required to provide **reliable and up-to-date data**

How?
Enablers

With **technology, talent, organisation** and culture

What?
Intelligence

Provide open data to the vine and wine sector, with **quality data in different formats**: tables, graphs, maps...

The main objective of the data service is to improve the data gathering by evolving questionnaires towards a digital model to ease data entry and ensure consistency

At present, most publications rely heavily on MS Excel **questionnaires**, which experts have to update manually. The current process has some limitations, as it…

- …requires a lot of time from the experts;

- …does not facilitate the mitigation of manual errors (numerical fields filled with texts, numerical data that doesn't add up, data that doesn't match with their historical series…); and

- …requires a subsequent harmonisation process to achieve a consistent output.

The objective is to **progressively replace MS Excel** with a **data entry solution** capable of securely exchanging and storing such information, with a common protocol of data identification, (periodicity, units, currency…) issuing warnings to ensure consistency with past data, ensuring that data is entered in the required format (text, number…)

The solution allows two types of data entry. This way it will be able to coexist with the electronic questionnaires and Excel forms during the transition

- Forms include predefined field types such as drop list, checks, open field, labels or with custom rules.

- Excel (Templates): Excel mass uploads. The update will include defined checks to ensure the quality of the data updated, informing about any errors with several options (i.e. reject the whole file or part of it plus an error log to facilitate remediation).
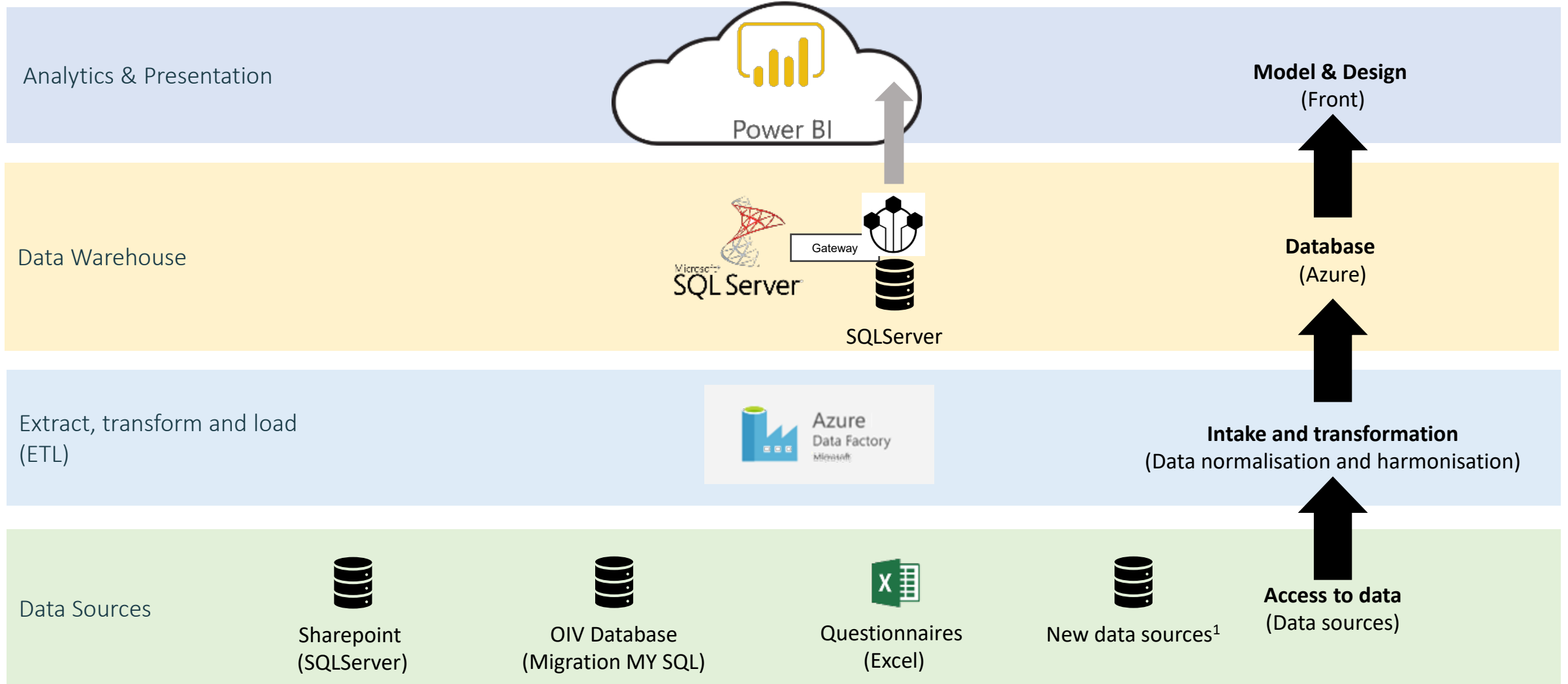
With this scalable solution, the OIV Secretariat and Experts will be able to save time and resources to collect additional data in the future

A standard architecture with the flexibility to evolve data analysis and data management capabilities to make the OIV a go-to data source


Analytics & Presentation

Power BI

Model & Design
(Front)

Data Warehouse

SQL Server

Gateway

SQLServer

Database
(Azure)

Extract, transform and load
(ETL)

Azure
Data Factory
Microsoft

Intake and transformation
(Data normalisation and harmonisation)

Data Sources

Sharepoint
(SQLServer)

OIV Database
(Migration MY SQL)

Questionnaires
(Excel)

New data sources[1]

Access to data
(Data sources)

Data management type structure to maximise data value

Proposed architecture layers
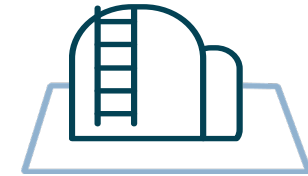

Data Sources

Data Factory (ETL)

Data Warehouse

- Transition to a more efficient data gathering process without Excel questionnaires, through the implementation of **Microsoft Sharepoint data entry** and intake processes to upload data to the data warehouse.
- Initial estimated development of 11 **advanced entry forms in Sharepoint** (4 statistics + 6 for other areas) with visibility of the **historical data and normalisation rules —**to ultimately improve data quality and automate data treatment. **Validation of the data entered by OIV staff**
- Mass data loading functionality from Excel (for the data entry of historical and other sources).
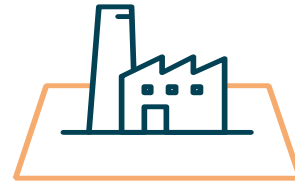
- Development of the processes to **achieve the transformation required for properly storing and transferring the information** from the data sources to the data warehouse.
- The proposed solution is a **scalable and market-standard architecture,** allowing the expansion of information in different formats.
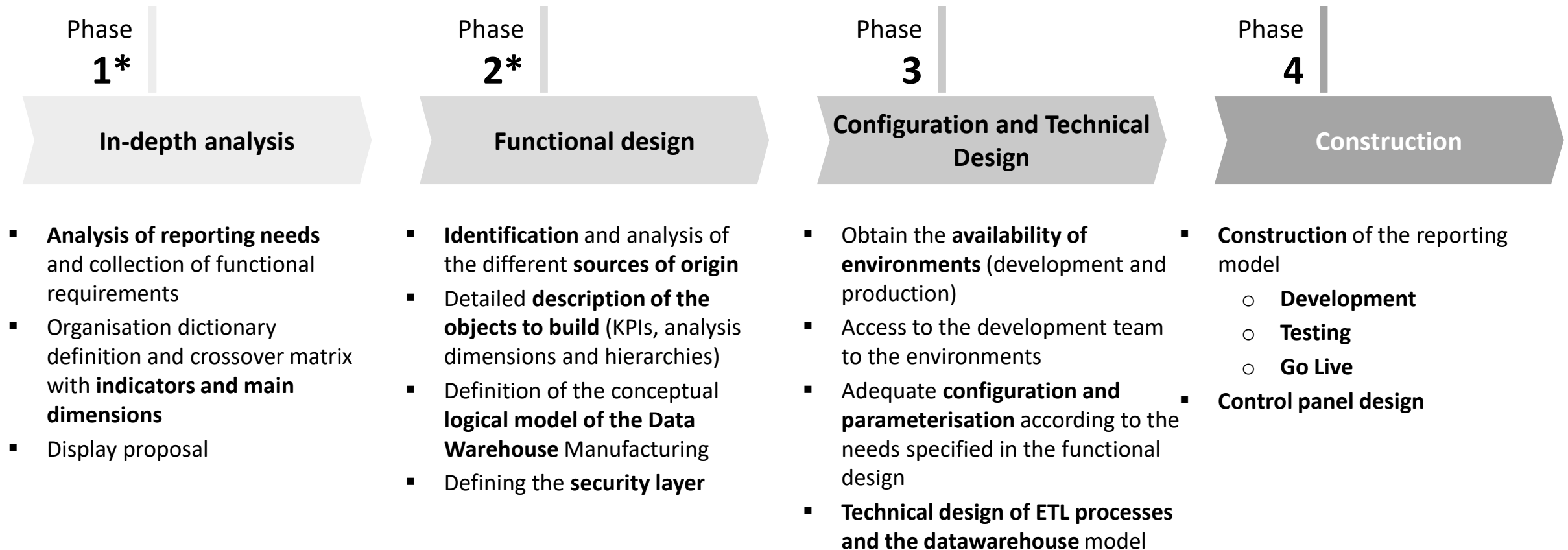
- An **information repository** (data warehouse) will be built to **validate and consolidate the information** entered from the different sources.
- Support for the configuration of the environment required for construction of the **Microsoft SQL Server data warehouse.**
- The proposed solution is a **market-standard architecture** that has been designed to **adapt to the OIV's long-term needs.**

Improve data collection, treatment and normalisation capabilities to focus on the development of the database as opposed to working via manual, repetitive and low-value tasks

Configuration, construction and change management will be addressed once the analysis and functional design phases are completed

Phase
1*

In-depth analysis

Phase
2*

Functional design

Phase
3

Configuration and Technical Design

Phase
4

Construction

- **Analysis of reporting needs** and collection of functional requirements
- Organisation dictionary definition and crossover matrix with **indicators and main dimensions**
- Display proposal

- **Identification** and analysis of the different **sources of origin**
- Detailed **description of the objects to build** (KPIs, analysis dimensions and hierarchies)
- Definition of the conceptual **logical model of the Data Warehouse** Manufacturing
- Defining the **security layer**

- Obtain the **availability of environments** (development and production)
- Access to the development team to the environments
- Adequate **configuration and parameterisation** according to the needs specified in the functional design
- **Technical design of ETL processes and the datawarehouse** model

- **Construction** of the reporting model
  - o **Development**
  - o **Testing**
  - o **Go Live**
- **Control panel design**

(*) For phases 1 and 2, the OIV's collaboration is required and will be necessary before phases 3 and 4 can be launched

Inspired by the open data culture, one of the top priorities for the OIV is to provide free, timely, accessible and accurate data on the wine and vine sector
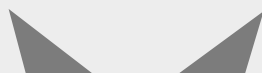
Data Entry
Sharepoint

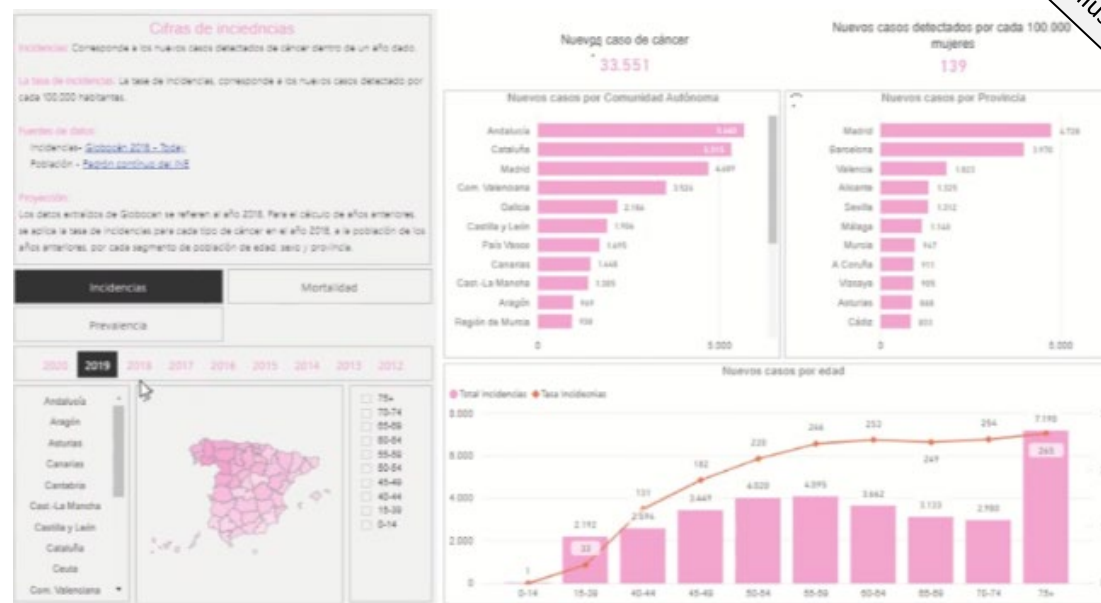**Data Warehouse**
SQL Server

Data analysis
Power BI

General secretariat users and selected experts[1]
OIV Secretariat & Selected Experts

Website users
OIV website

- Analysis to extract **more value from data**

- **Attractive and intuitive reports** via Power BI for

  o   General secretariat users[1]

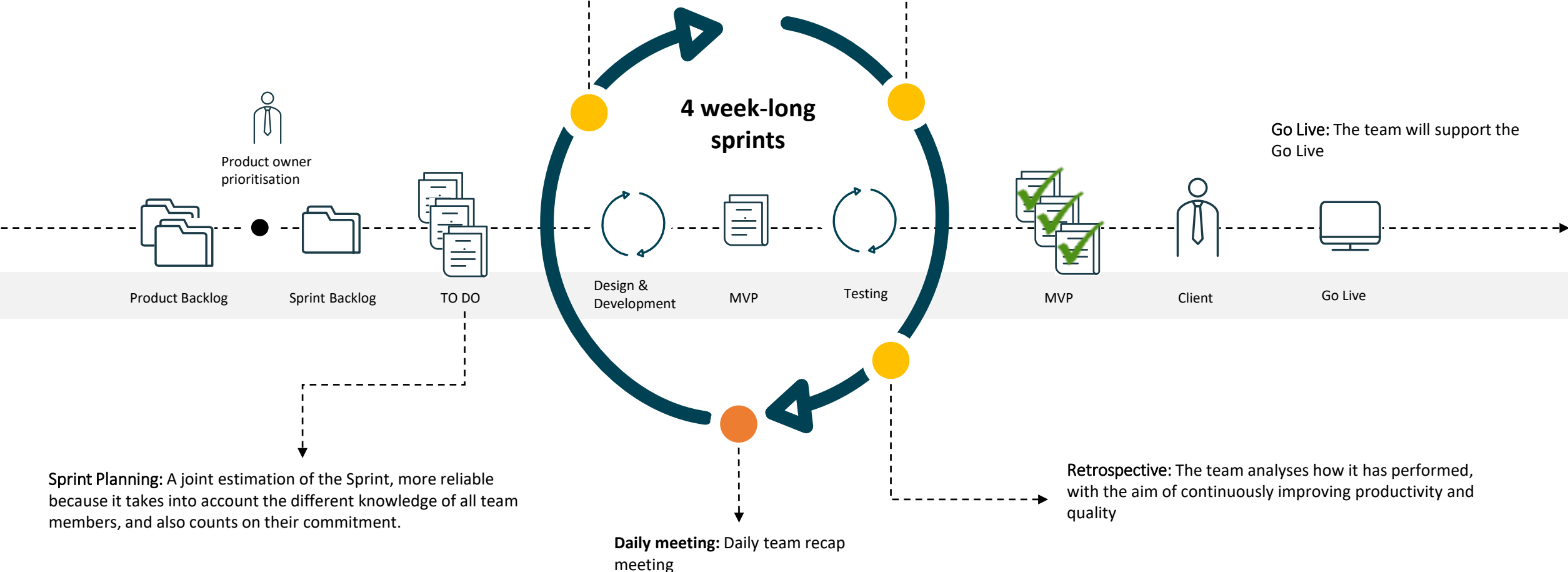 o   OIV website users through iFrame (HTML reports)

Illustrative

1. Power BI Pro or Premium license required

An agile methodology will be implemented during the development of the data visualisation initiative, delivering 3-4 reports each month (10 reports in 3 months)

3 weeks - Design and Construction: Execution of the tasks that have been planned in the previous activity. Each iteration provides an enhancement of the potentially deliverable product.

1 week - Testing : Testing of the developments carried out during Sprint1

Go Live: The team will support the Go Live

4 week-long sprints

Product owner prioritisation

Product Backlog

Sprint Backlog

TO DO

Design & Development

MVP

Testing

MVP

Client

Go Live

Sprint Planning: A joint estimation of the Sprint, more reliable because it takes into account the different knowledge of all team members, and also counts on their commitment.

Daily meeting: Daily team recap meeting

Retrospective: The team analyses how it has performed, with the aim of continuously improving productivity and quality

minsait