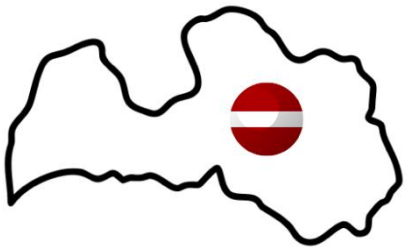
PROJECT PROPOSAL

Comparison dashboard between France & Latvia



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Introduction

In light of the increasing significance of data visualization in economic and social analysis, our project compares France and Latvia in the areas of culture and society, volunteering and philanthropy, and the environment using Power BI. Based on a pre-study of visualization tools, this method finds that Power BI is the best at processing and displaying complicated data from a variety of sources, including national statistical agencies, Eurostat, and the World Bank. The goal is to draw attention to the distinctions and convergences between the two nations to comprehend their influence on economic dynamics and make informed strategic decisions about public policy and investment.

Project scope

The goal of the project scope is to develop a dashboard that makes it easier to compare environmental and cultural statistics between France and Latvia.

The main goal is to provide a thorough dashboard that makes comparative research easier by gathering, organizing, and displaying pertinent data for both nations. To do this, an interface that enables efficient data comparison for users must be created.

Ensuring that data is presented in a clear and easily readable manner is another important objective. This necessitates creating an intuitive user interface that anyone can use, regardless of technical skill level, to efficiently see and interact with data.

Additionally, accessibility is essential. A broad spectrum of users with different technical skill levels must be accommodated by the dashboard. Therefore, in order to satisfy a variety of user needs, it should have user-friendly features and straightforward navigation.

Moreover, the dashboard need to offer insightful and pertinent data on environmental and cultural issues pertaining to both nations. It ought to satisfy consumers' requirements and let them infer important conclusions from the data that is displayed.

It's crucial to recognize some of the project's limits, though. First off, there is a chance that the dashboard's results could be impacted by the low quantity, caliber, and geographic coverage of environmental and cultural data.

Furthermore, the cultural and language distinctions between Latvia and France could affect how well data is understood, thus this will need to be carefully taken into account while designing the project. Furthermore, the complexity and functionalities of the dashboard may be constrained by available technology and infrastructure. Thus, it's essential to maintain a realistic outlook regarding the technical capabilities and tools available for creating the dashboard.

Lastly, scalability is crucial to ensure the dashboard remains relevant over time. It should be adaptable to accommodate new data as it becomes available or as user needs evolve. This may necessitate additional resources and ongoing planning to ensure its long-term effectiveness.

Technical approach

Because Power BI excels at integrating diverse data, which is crucial for our France-Latvia comparison, our method depends on it. Microsoft claims that Power BI supports our benchmarking objective by streamlining reporting with an easy-to-use interface and interfaces for variety of data sources. Through customization of visualizations, the display can be tailored to the particulars of the data gathered, offering a comprehensive grasp of the industries under investigation. Additionally, Power BI promotes a data-driven culture that is user-friendly and available to everybody thanks to its user-friendly interface and free training materials. Our approach combines these elements to evaluate how cultural, environmental, and philanthropic disparities affect the two nations' economic outcomes. The usefulness of Power BI in lowering energy usage and enhancing operational management is demonstrated by case studies, such the ones used by Heathrow Airport and Carnegie Mellon University. These case studies also highlight the significance of our project for investment plans and decision-makers.

Work plan

To successfully execute this project, we have identified four main stages, each comprising key activities to be accomplished. This detailed plan over a 10-week period will enable effective project management, thereby ensuring the delivery of an informative and functional dashboard for the relevant stakeholders.

- **Introduction (Week 1-2)**:
  - Week 1: Team building and requirements discovery
  - Week 2: First meeting with Mrs Spirinovska Nadzeda.

- **Data Collection (Week 3-5)**:
  - Week 3: Identify and prioritize data sources.
  - Week 4: Conduct analysis research
  - Week 5: Import data from identified sources.

- **Data Model Creation (Week 4-7)**:
  - Week 4-5: Design the database schema and define relationships between tables.
  - Week 6-7: Apply transformations and calculations to create a comprehensive data model. Meeting with Mrs Spiridovska Nadezda.
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- **Dashboard Creation (Week 6-8)**:
  - Week 6: Design the layout and structure of the dashboard, including the selection of appropriate visualizations.

- Week 7: Develop initial versions of visualizations and integrate them into the dashboard.
- Week 8: Add interactive features and functionalities such as filters, slicers, and drill-through options. Meeting with Mrs Spiridovska Nadezda.
- Week 9: Conduct thorough testing of the dashboard to ensure all visualizations are working correctly and the user experience is optimal.

- **Improvement and Clarification (Week 8-10)**:

- Week 8: Gather feedback from teachers on the dashboard.
- Week 8-9: Make change and optimize the dashboard

Meeting with Mrs Spiridovska Nadezda

- Week 10:Training and preparation for the conference

Project management

Project Team

Our team consists of several engineering students from different backgrounds. We have several skills such as :

- Project Management, the capacity for overall project coordination, resource management, and communication.

- The Data Analyst, ability to lead data collection, preparation, and analysis, ensuring data relevance and usability.

- The Power BI Developers, many of us have been using this sofware for projects. We will be tasked with designing and developing easely interactive dashboards in Power BI to visualize data.

- Critical thinking, we will provide sector-specific expertise to interpret results and draw relevant conclusions.

- The Testing, we will conduct tests to ensure the quality and reliability of developed dashboards.

Agile Methodology: We choose the agile methodology for this project, adopting principles such as flexibility, continuous collaboration, and rapid iteration. The project is divided into 10 weeks to enable delivery of features and analyses. We want facilitating quick adaptation to changes and continuous feedback teachers.

Initial Planning: In this sprint, we define specific objectives for each area of comparison, identify relevant data sources such as national statistical agencies, Eurostat, and the World Bank. We will establish comparison criteria and key performance indicators, and develop a project roadmap with key milestones to guide our progress.

Data Collection and Preparation: This sprint will focus on collecting pertinent data for each area from identified sources. We will clean, normalize, and prepare the data for analysis in Power BI, collaborating closely with our teachers to validate the accuracy and relevance of the collected data.

Dashboard Development: we will design and develop interactive dashboards in Power BI for each area of comparison. We will integrate the collected and prepared data into the dashboards and iterate with stakeholders to ensure that the visualizations meet their needs and are user-friendly.

Comparative Analysis: This sprint will involve analyzing trends and differences between France and Latvia in each area using the developed dashboards. We will identify strengths, weaknesses, opportunities, and threats for each country, and then present the results to teachers for validation and feedback.

Finalization and Presentation: In the final week, we will optimize the dashboards and analyses based on teachers feedback. We will hold a meeting with Mrs Spiridovska Nadezda. And repare our final presentation for the conference meeting to share the results with attendees.

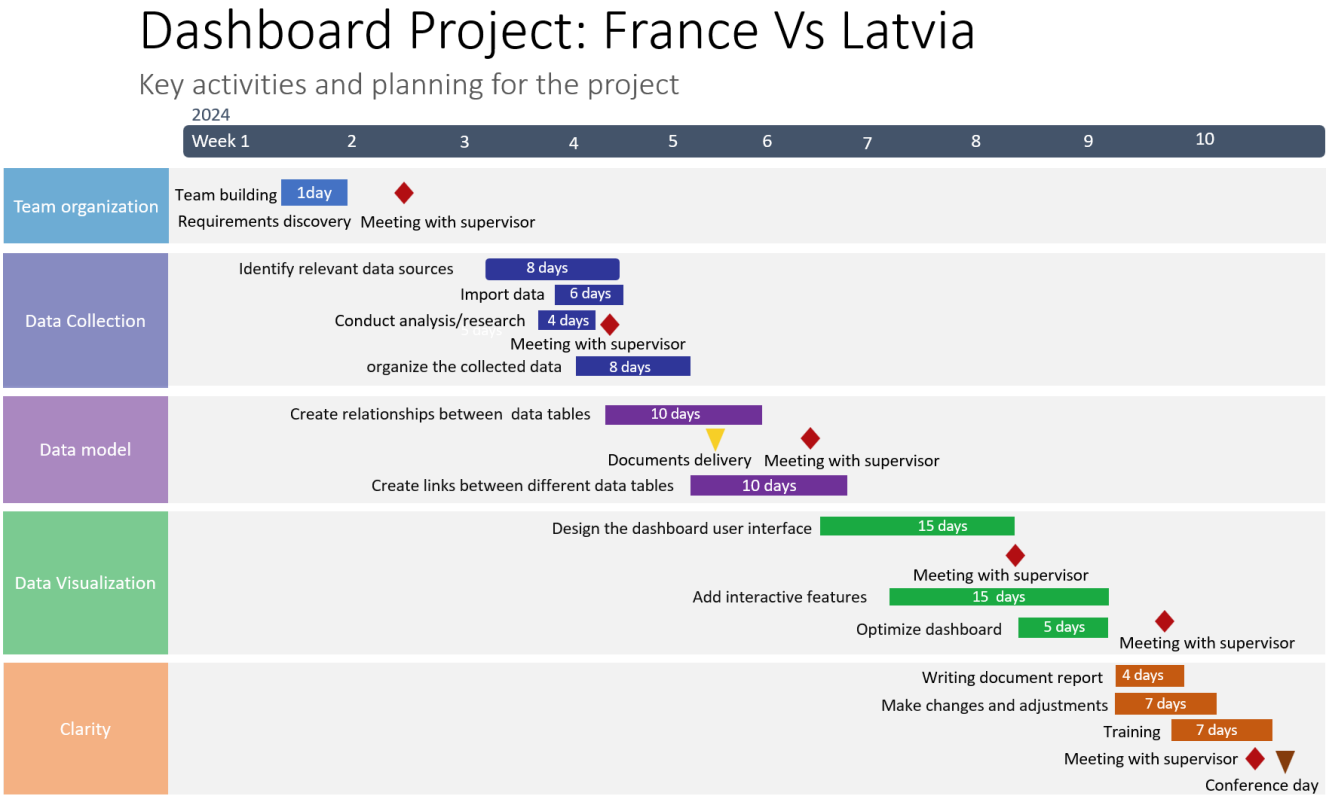
Risk Management: We will identify potential risks throughout the project, such as delays in data collection or errors in analysis. We will implement mitigation measures for each identified risk and conduct regular risk reviews with the team to ensure they are managed proactively.

Monitoring and Adaptation: We will hold weekly meetings to share progress and obstacles. We will conduct discussions and feedback about our achievement and plan next steps, adapting to changes in priorities or new stakeholder needs throughout the project.

By following this agile approach, we will be able to deliver a comprehensive comparison project between France and Latvia efficiently and collaboratively, ensuring that the results are relevant and actionable for policymakers and investors.

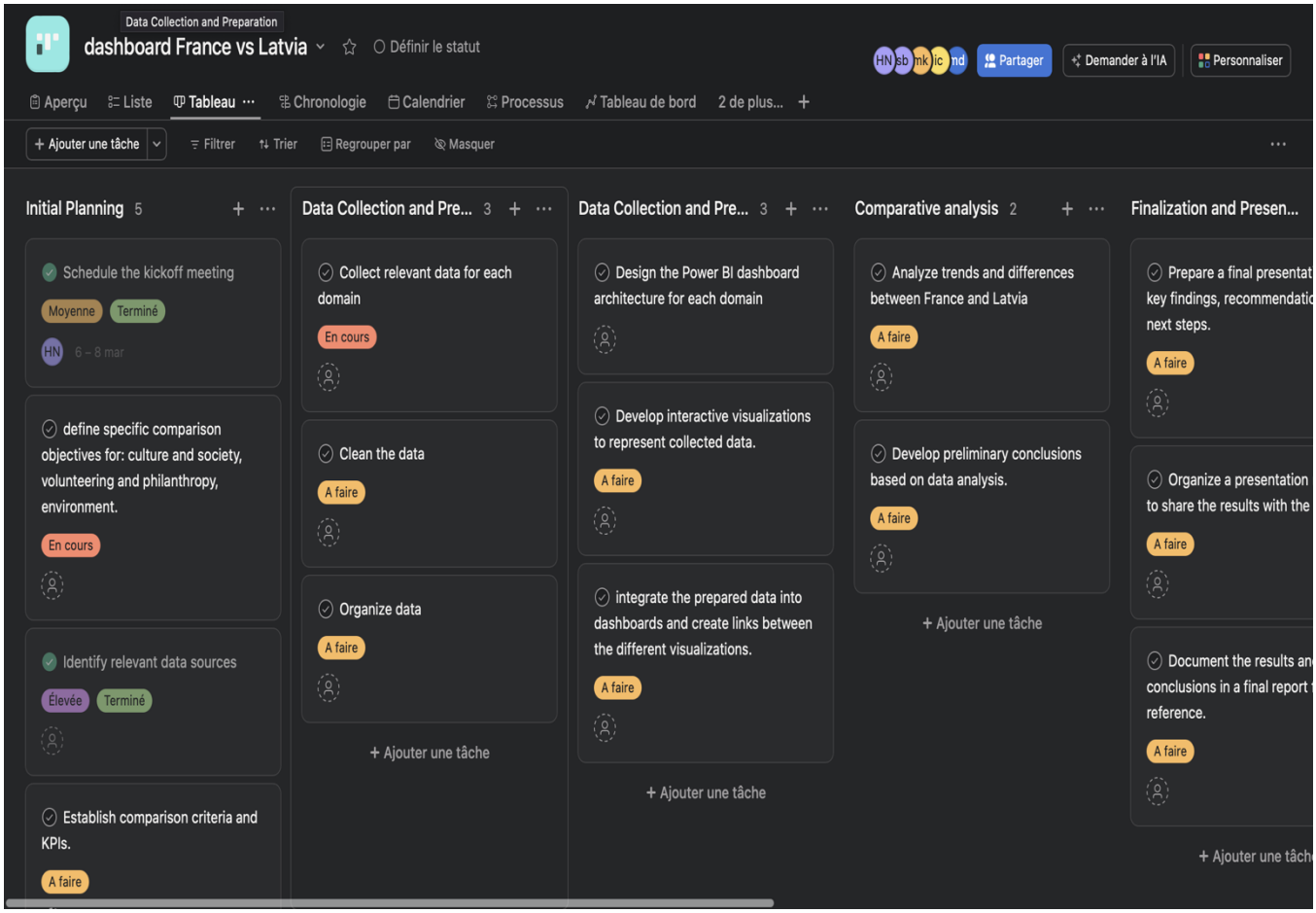
Supplemental materials

- Gantt Diagram



- Workspace Tool : Asana

https://app.asana.com/0/1206769818867351/1206770124715748 : Online workspace link demonstrating Projet Mangement



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