

Business Intelligence Project - Week 1 Use Case Proposal

1. Industry and Organization Description:

This project is situated within the assistive technology and digital accessibility industry. The organization is a non-profit digital accessibility platform whose mission is to improve access to knowledge for visually impaired individuals. The organization focuses on converting open-source and public-domain books into Braille format and distributing them through digital and physical channels. Given the increasing availability of open-source books, the organization seeks scalable and efficient ways to expand Braille content coverage while managing limited resources.

2. Business Problem:

Despite the large volume of freely available books, only a small percentage are transcribed into Braille. The transcription process varies in complexity depending on book length, language, and genre, leading to inefficiencies, high costs, and delays. Currently, the organization lacks a centralized data-driven system to prioritize transcription efforts, measure productivity, track quality, and optimize resource allocation. This results in suboptimal coverage of high-demand content and an increasing backlog of untranslated books.

3. BI Objectives:

The objective of this Business Intelligence project is to design an analytical solution that monitors transcription performance, costs, quality, and demand. The BI system will support data-driven decisions to prioritize books for transcription, improve operational efficiency, reduce error rates, and maximize accessibility impact.

4. Analytical Questions

- 1 How many books are transcribed per month?
- 2 What is the average transcription time per book?
- 3 Which genres require the highest transcription effort?
- 4 What is the average cost per transcribed book?
- 5 Which languages have the highest demand for Braille content?
- 6 What percentage of transcriptions contain errors?
- 7 Which books generate the highest reader demand?
- 8 How does transcription time vary with book length?
- 9 Which transcription methods are most efficient?
- 10 What is the current backlog of books awaiting transcription?

5 Key Performance Indicators (KPIs)

- Total Books Transcribed
- Total Braille Pages Generated
- Average Transcription Time (hours per book)
- Average Cost per Book
- Error Rate (%)
- Books Transcribed per Month
- Reader Demand Coverage (%)
- Backlog Size (Pending Books)