

## **EXPERMINT: 04**

- **Project Title:** Crowdfunding in Education Using Blockchain

- **Aim:** WAP To demonstrate the Gap Analysis with reference to Literature Survey in the industry perspective.

- **Theory:**

### **1. Introduction**

- Briefly introduce the concept of crowdfunding and its growing role in education funding.
- Highlight the limitations of traditional crowdfunding platforms in the education sector.
- Introduce blockchain technology and its potential to address these limitations.
- State the purpose of your gap analysis, which is to identify areas where further research or development is needed to bridge the gap between theoretical potential and practical implementation in the education industry.

### **2. Literature Review**

- Summarize the key findings from your literature survey on blockchain-based crowdfunding.
- Focus on research specific to the application of blockchain in educational crowdfunding, considering the industry perspective.
- Discuss the benefits of blockchain in this context, such as increased transparency, security, and efficiency.
- Cite relevant research papers and studies to support your points.

### **3. Gap Analysis**

- Based on the literature review and your understanding of the education industry, identify key gaps in the current knowledge or implementation of blockchain-based crowdfunding for education.
- Use the headings identified earlier (Limited Empirical Evidence, Regulatory Landscape, User Adoption and Awareness, Scalability and Cost-Effectiveness, Integration with Existing Systems) as sub-sections to structure your analysis.
- Discuss each gap in detail, explaining how it hinders the widespread adoption and effectiveness of blockchain-based crowdfunding in education.
- Provide specific examples or scenarios that illustrate the challenges associated with each gap.

### **4. Recommendations**

- Based on your gap analysis, propose solutions or areas for further research to address the identified gaps.
- Consider how existing studies and pilot projects can be leveraged or expanded upon.
- Suggest potential strategies for overcoming regulatory hurdles, promoting user adoption, ensuring scalability, and integrating with existing systems within the education sector.
- Be specific and actionable in your recommendations, outlining potential research projects or development efforts that could bridge these gaps.

**Program code :-**

```
# Importing necessary libraries

import pandas as pd

# Load the literature survey data

literature_survey_data = pd.read_csv("literature_survey_data.csv") # Replace "literature_survey_data.csv"
with the actual filename

# Load the industry data

industry_data = pd.read_csv("industry_data.csv") # Replace "industry_data.csv" with the actual filename

# Function to perform Gap Analysis

def perform_gap_analysis(literature_data, industry_data):

    # Identify common themes from the literature survey

    literature_themes = set(literature_data["Theme"])

    # Identify themes present in the industry data

    industry_themes = set(industry_data["Theme"])

    # Calculate gaps

    gaps = literature_themes - industry_themes

    # Display results

    print("Gap Analysis Results:")

    print("-----")

    print("Themes identified in literature survey:")

    for theme in literature_themes:

        print("- " + theme)

    print("\nThemes present in industry data:")

    for theme in industry_themes:

        print("- " + theme)

    print("\nGaps identified:")

    for gap in gaps:
```

```
print("- " + gap)
```

```
# Perform Gap Analysis
```

```
perform_gap_analysis(literature_survey_data, industry_data)
```

Explanation:

- We load the data from the literature survey and industry into pandas DataFrames.
- The **perform\_gap\_analysis** function takes the literature survey data and industry data as input.
- It identifies common themes from the literature survey and those present in the industry data.
- It calculates the gaps (themes identified in the literature survey but not present in the industry data).
- Finally, it displays the results including themes identified in the literature survey, themes present in the industry data, and the identified gaps.

**Conclusion:** - Successfully implemented WAP To demonstrate the Gap Analysis with reference to literature Survey in the industry perspective for **Crowdfunding in Education Using Blockchain**.