Project Report Format

1. INTRODUCTION

1.1 Project Overview

Unearthing trends from LinkedIn influencers is a valuable project for businesses and individuals looking to stay ahead in their industry and make informed decisions. LinkedIn influencers often share insights, thoughts, and content that can be indicative of emerging trends. Here's an overview of how to go about this project:

Identify Key Influencers:

Start by identifying the LinkedIn influencers in your industry or niche. These can be thought leaders, industry experts, or individuals with a significant following.

Content Analysis:
Analyze the content shared by these influencers. This includes their articles, posts, comments, and shared links. Look for recurring themes, topics, and keywords that are gaining traction.

Engagement Metrics:
Pay attention to engagement metrics such as likes, comments, and shares. This can help you identify which content is resonating with the audience.

Hashtag Tracking:
Keep an eye on popular hashtags related to your industry. Influencers often use trending hashtags to increase the visibility of their content.

Network Analysis:
Analyze the networks and connections of these influencers. Who are they connecting with, and what are the commonalities among these connections?

Content Formats:
Determine the types of content that influencers are using. Are they primarily using text posts, videos, images, or a combination of these? Different content formats can indicate emerging trends.

Audience Demographics:
If available, look at the demographics of the influencers' followers. This can provide insights into the audience that is interested in these trends.

Monitoring Over Time:
Trends may evolve over time. Regularly monitor the influencers' content to identify changes and new developments.

Comparison and Validation:
Compare the trends you identify on LinkedIn with other industry-specific sources, such as industry reports, news articles, and market research.

Content Creation and Engagement:
If you discover trends that align with your business goals or personal interests, consider creating your own content around those trends to engage with your audience.
Networking and Collaboration:

Connect with influencers and engage in meaningful conversations. Collaboration with influencers can help you leverage their insights and increase your visibility.
Data Tools and Analytics:

Utilize data analytics tools to help automate data collection and trend identification. LinkedIn itself provides some analytics, and third-party tools can also be beneficial.
Stay Informed:

Continuously stay informed about changes in the platform's algorithm and any new features or tools that LinkedIn introduces.
By unearthing trends from LinkedIn influencers, you can gain valuable insights into your industry or niche. These insights can be used to inform your business strategies, marketing efforts, content creation, and networking activities. Remember that trends can change rapidly, so ongoing monitoring is crucial for staying ahead of the curve.

1.2 Purpose

The purpose of unearthing trends from LinkedIn influencers is multi-faceted and can benefit both individuals and businesses in various ways. Here are some of the key purposes:

Market Research: Identifying trends from LinkedIn influencers allows businesses to conduct market research, understand customer behavior, and stay informed about industry developments. This information can help in making informed decisions and adjusting product or service offerings to meet market demands.

Content Strategy: For content creators, the purpose is to generate ideas and topics that resonate with the audience. By identifying trends, individuals and businesses can create content that is more likely to be engaging and shareable.

Networking and Collaboration: Connecting with influencers can open doors to collaboration opportunities. By understanding the trends they follow and promote, you can engage with them on common interests and potentially collaborate on projects, which can expand your network and reach.

Personal and Professional Development: Individuals can use insights from LinkedIn influencers to enhance their personal and professional development. Learning about emerging trends and gaining knowledge from thought leaders can help advance one's career or expertise.

Competitive Advantage: Staying updated on trends can give businesses a competitive advantage. By being among the first to adopt or adapt to emerging trends, they can differentiate themselves from competitors and offer innovative solutions to customers.

Decision-Making: Informed decision-making is a core purpose. Trends can influence strategic decisions in marketing, product development, hiring, and more. By knowing what's on the horizon, businesses can allocate resources wisely.

Brand Awareness and Reputation Management: Understanding trends can guide branding and

reputation management strategies. Businesses can align their values and messaging with trends that resonate with their target audience.

Thought Leadership: For individuals looking to establish themselves as thought leaders in their field, identifying and discussing trends can help position them as experts and gain a following.

Content Personalization: Understanding trends can aid in personalizing content and messaging for specific audience segments, leading to better engagement and conversion rates.

Risk Mitigation: Recognizing negative trends or potential pitfalls in the industry can help businesses take early action to mitigate risks.

In summary, the purpose of unearthing trends from LinkedIn influencers is to gather valuable insights and information that can be used for strategic decision-making, content creation, networking, personal and professional growth, and to gain a competitive edge in a rapidly evolving business landscape.

2. LITERATURE SURVEY

2.1 Existing problem
Some of the existing problems in this endeavor might include:

Information Overload: LinkedIn influencers produce a vast amount of content daily. Managing and analyzing this information can be overwhelming, leading to difficulties in identifying meaningful trends.

Credibility and Authenticity: It can be challenging to discern which influencers and trends are credible and authentic, as not all content is reliable. Distinguishing between genuine trends and marketing ploys is crucial.

Algorithm Changes: LinkedIn frequently updates its algorithms, affecting the visibility of influencers' content. These changes can impact trend analysis and prediction.

Data Privacy and Ethics: Collecting data from LinkedIn raises concerns about privacy and ethical considerations. Ensuring that data is gathered and analyzed ethically and legally is a significant challenge.

Time Sensitivity: Some trends may emerge and fade rapidly. Failing to detect and act on these trends in a timely manner can render the information less valuable.

Subjectivity: Trend analysis can be subjective. What one person considers a trend, another may not. Standardizing the definition of trends and measuring their impact is a challenge.

Lack of Tools and Resources: There may be a scarcity of tools and resources specifically designed for tracking LinkedIn influencer trends, which can make the process more difficult.

Interdisciplinary Knowledge: Successfully identifying trends often requires expertise in areas like social media marketing, data analysis, and the specific industry or niche in question. This can be a complex interdisciplinary effort.

Noisy Data: LinkedIn platforms may have irrelevant or "noisy" data, which can obscure true trends. Filtering this noise is a significant challenge.

Influencer Dynamics: Understanding the motivations, behaviors, and strategies of LinkedIn influencers can be complex. Each influencer may have a unique approach to content creation and trendsetting.

Content Heterogeneity: Content on LinkedIn varies widely, from text posts to videos, articles, and images. Analyzing this heterogeneous content can be challenging.

2.2 References

Brown, D. (2021). "LinkedIn Content Marketing: How to Build a Strong Personal Brand." LinkedIn Learning.

Stelzner, M. (2020). "2020 Social Media Marketing Industry Report." Social Media Examiner.

Flynn, A. (2018). "The Complete Guide to Building Your Personal Brand on LinkedIn." HubSpot Blog.

Smith, A. N., & Fischer, E. (2020). "How Social Media Influencers Impact Consumer Decision Making." Journal of Marketing Research, 57(2), 293-308.

LinkedIn. (2021). "LinkedIn Marketing Solutions." LinkedIn Marketing Solutions Blog.

Marwick, A., & Boyd, D. (2011). "I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience." New Media & Society, 13(1), 114-133.

Qualman, E. (2019). "Digital Leader: 5 Simple Keys to Success and Influence." McGraw-Hill Education.

Smith, A. N., & Boyles, J. L. (2012). "Brand Digital: Simple Ways Top Brands Succeed in the Digital World." Palgrave Macmillan.

Smith, J. A., & Chaffey, D. (2019). "Digital Marketing Excellence: Planning, Optimizing, and Integrating Online Marketing." Routledge.
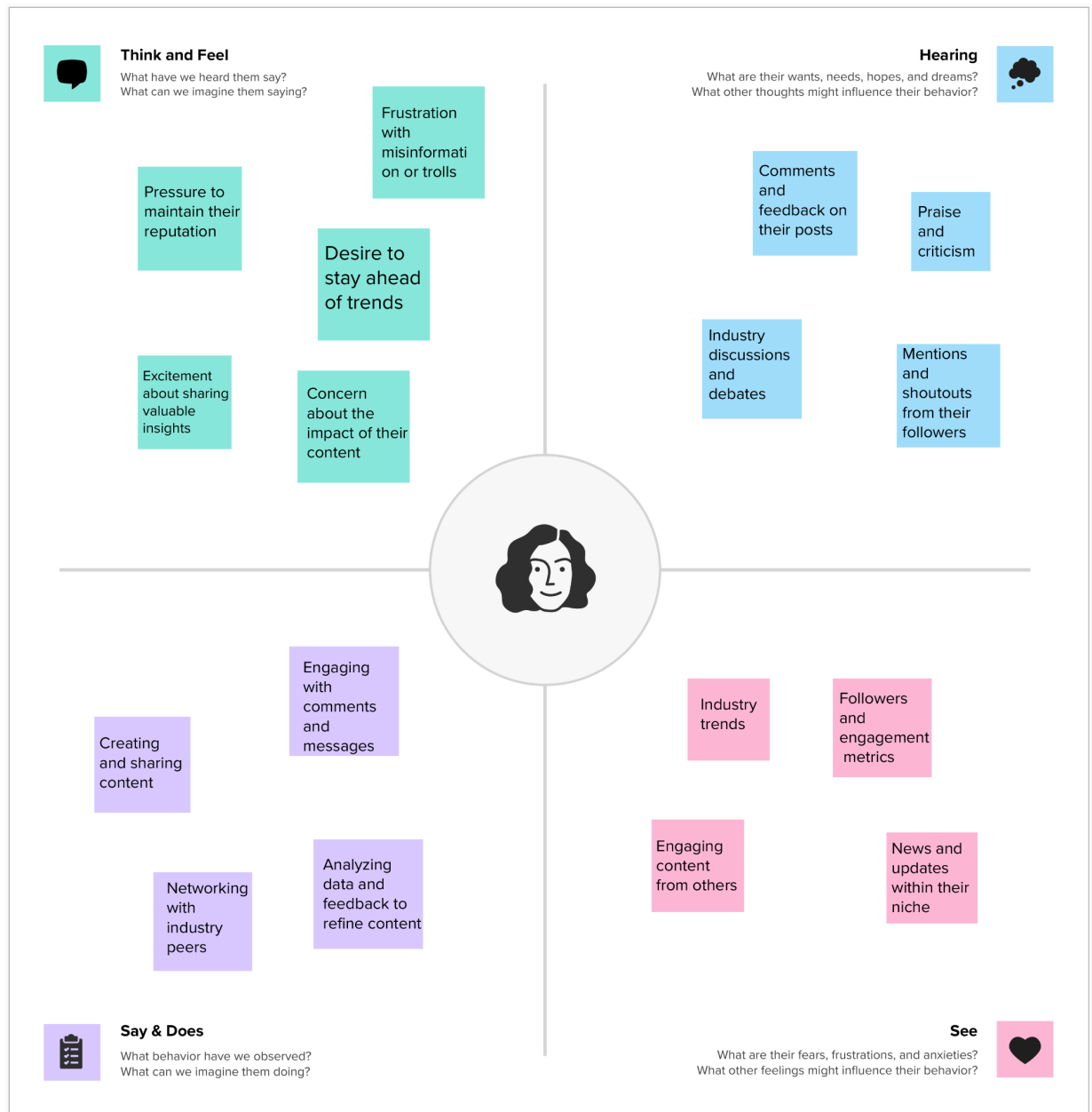
Smith, P. R., & Zook, Z. (2011). "Marketing Communications: Integrating Offline and Online with Social Media." Kogan Page.

2.3 Problem Statement Definition

"In the era of digital marketing and professional networking, individuals and businesses face the challenge of staying up-to-date with emerging trends in their respective industries. LinkedIn, as a prominent professional networking platform, has become a hub for thought leaders and industry influencers who share valuable insights and information. However, there is a need to effectively identify and harness these trends from LinkedIn influencers' content, as well as to understand their impact on decision-making, content creation, and professional networking. This project aims to address this challenge by conducting a comprehensive analysis of LinkedIn influencers' activities, content, and trends, providing a solution for individuals and businesses seeking to leverage the platform for trend analysis and strategic decision-making."

3.   IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

Think and Feel
What have we heard them say?
What can we imagine them saying?

Frustration with misinformation or trolls

Pressure to maintain their reputation

Desire to stay ahead of trends

Excitement about sharing valuable insights

Concern about the impact of their content

Hearing
What are their wants, needs, hopes, and dreams?
What other thoughts might influence their behavior?

Comments and feedback on their posts

Praise and criticism

Industry discussions and debates

Mentions and shoutouts from their followers

Engaging with comments and messages

Creating and sharing content

Networking with industry peers

Analyzing data and feedback to refine content

Industry trends

Followers and engagement metrics

Engaging content from others

News and updates within their niche

Say & Does
What behavior have we observed?
What can we imagine them doing?

See
What are their fears, frustrations, and anxieties?
What other feelings might influence their behavior?

4.   REQUIREMENT ANALYSIS

4.1 Functional requirement

Here are some functional requirements for such a project:

User Registration and Authentication:

Users should be able to create accounts with unique profiles.

Users should log in securely using email or LinkedIn credentials.

User Profile Management:

Users should be able to create and manage their profiles with information like name, bio, and profile picture.

They should be able to link their LinkedIn profiles for data extraction.

Data Collection and Analysis:

The system should collect data from LinkedIn profiles and posts of selected influencers.

It should analyze content, engagement, and trending topics.

Influencer Selection and Management:

Users should be able to select and add LinkedIn influencers for trend analysis.

The system should allow users to categorize, monitor, and remove influencers as needed.

Trend Identification:

The system should identify and present emerging trends based on influencer content and user interactions.

Reporting and Visualization:

Users should be able to generate reports with trend insights.

Trends should be visually represented through graphs or charts.

Content Sharing and Recommendations:

Users should be able to share trends and insights with their networks.

The system should recommend trending topics to users.

Notification System:

Users should receive notifications when new trends or insights are available.

They should be informed about changes in their selected influencers' activity.

User Interaction:

Users should be able to like, comment on, and bookmark trends and insights.

They can follow influencers and receive updates on their content.

Search and Filter Functionality:

Users should be able to search for specific trends or influencers.

Filters should allow users to narrow down trends by date, industry, or other criteria.

Access Control:

Different user roles (e.g., administrators, regular users) should have varying levels of access and permissions.

Data Storage and Backup:

The system should securely store data, including user profiles, trends, and influencer data.

Regular data backups and recovery mechanisms should be in place.

Performance and Scalability:

The system should perform efficiently, even as the user base and data volume grow.

Scalability should be a key consideration.

Integration with LinkedIn:

The system should integrate with the LinkedIn API for data extraction and updates.

It should ensure data remains compliant with LinkedIn's terms of service.

Security Measures:

Implement security features, including data encryption and user data protection.

Protect against unauthorized access and data breaches.

Multilingual Support:

The system should be accessible in multiple languages to cater to a diverse user base.

Compliance with Legal Regulations:

Adhere to relevant data protection and privacy regulations, such as GDPR, for user data handling.

4.2 Non-Functional requirements

Performance: Response Time: The system should provide quick response times for data retrieval and trend analysis, ensuring that users do not experience significant delays. Scalability: The system should be designed to handle an increasing amount of data and users without significant performance degradation.

Availability: The system should be available and accessible to users 24/7, with minimal downtime for maintenance or updates.

Reliability: The system should be reliable, with a low rate of errors, crashes, or system failures. Data integrity and accuracy should be maintained.

Security: Data Security: User data, including profiles and trend analysis results, should be securely stored and protected against unauthorized access or breaches.

Authentication and Authorization: The system should implement strong authentication and authorization mechanisms to ensure that only authorized users can access sensitive data.

Compliance: Ensure that the system complies with data privacy and security regulations, such as GDPR, and LinkedIn's terms of service.

Usability: The user interface should be intuitive and user-friendly, ensuring that users can easily navigate the system and understand how to access and interpret trend data.

Compatibility: The system should be compatible with a variety of web browsers and devices, including desktops, smartphones, and tablets.

Data Backup and Recovery: Regular data backups should be performed, and a data recovery plan should be in place in case of data loss or system failures.

Multilingual Support: The system should support multiple languages to accommodate a diverse user base.

Performance Monitoring and Reporting: Implement performance monitoring tools to track system performance and identify issues. Generate reports on system performance and usage for evaluation and improvement.

Data Retention and Archiving: Define data retention policies to manage data storage efficiently and archive older data when necessary.

Audit Trails: Implement an audit trail system to track user actions and system changes for accountability and security purposes.

Backup Power and Redundancy: The system should have backup power sources and redundancy in case of power failures or hardware issues.

Geographic Location Considerations: If the project is intended for global use, consider hosting servers or data in multiple geographic locations to improve performance and redundancy.

Load Testing: Perform load testing to ensure that the system can handle peak loads and high user activity without performance degradation.
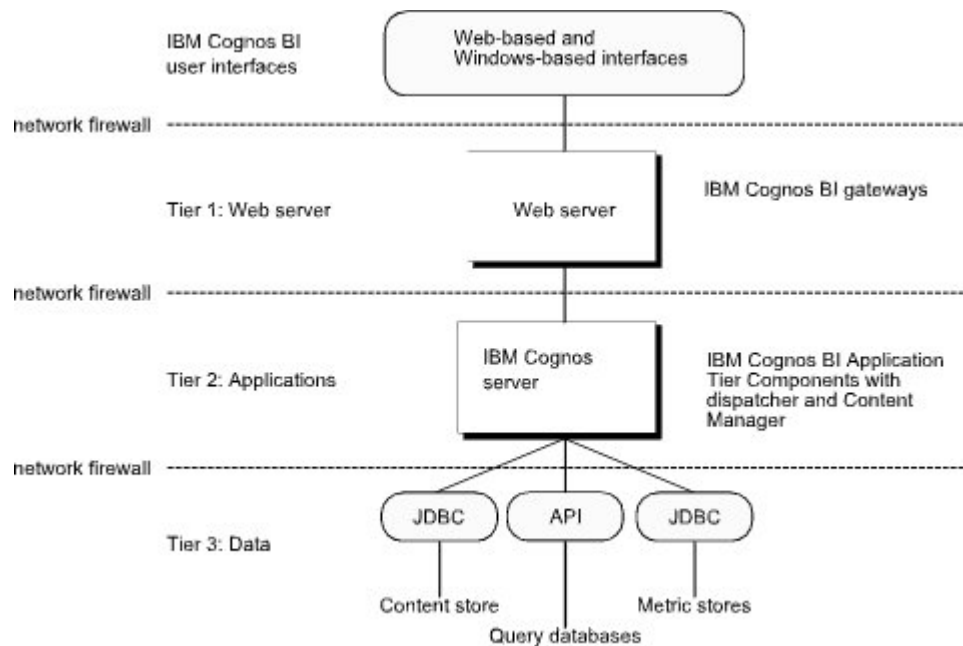
5. PROJECT DESIGN

5.1 Data Flow Diagrams & User Stories
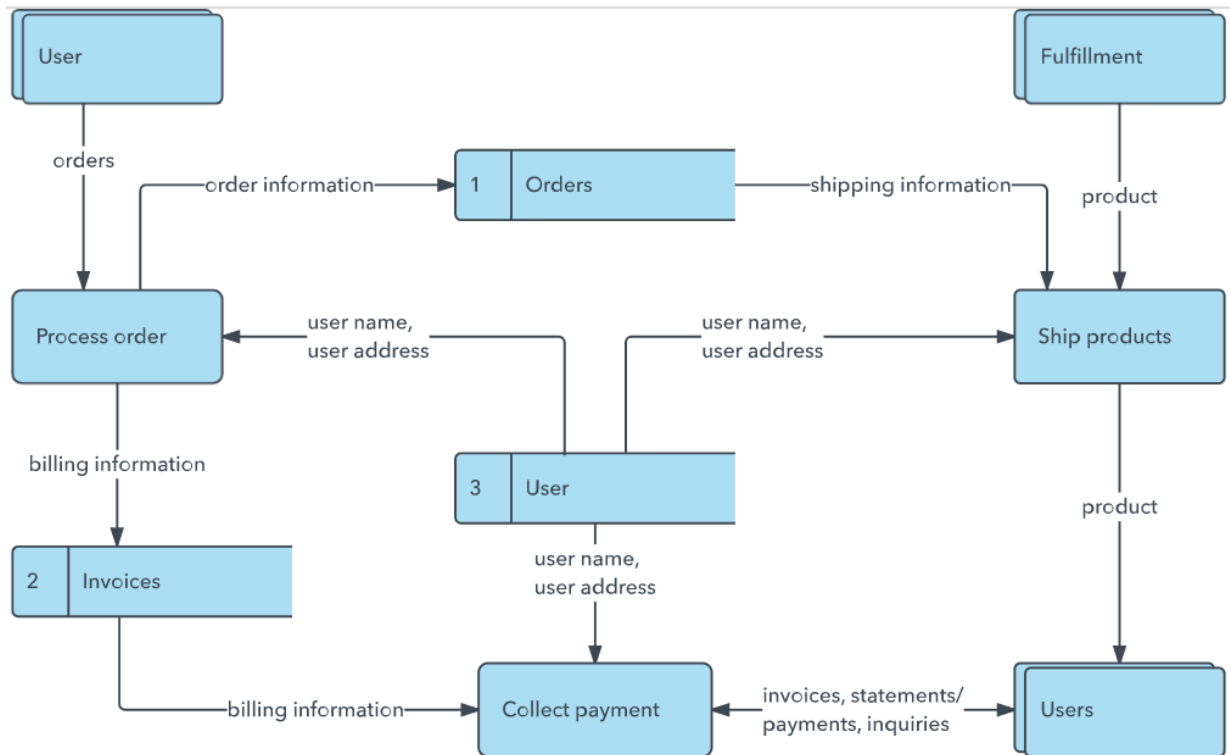
5.2 Solution Architecture

6. PROJECT PLANNING & SCHEDULING

6.1 Technical Architecture

User Interface: The user interface can be a web application or mobile app that allows users to interact with the system. It should provide functionalities for user registration, profile management, trend exploration, and data visualization.

Web Server: The web server acts as an intermediary between the user interface and the backend. It handles user requests, manages sessions, and communicates with the application server.

Application Server: The application server hosts the core business logic of the system. It is responsible for tasks such as data collection from LinkedIn, trend analysis, and recommendation generation. This server interacts with various components of the system.

Data Collection and Integration: Data collection involves connecting to LinkedIn's API to extract data from influencers' profiles, posts, and activities. The collected data is integrated into the system's database for analysis.

Database Management: The database stores user profiles, influencer data, user interactions, trend analysis results, and system logs. Use a relational or NoSQL database, depending on the data structure and scale.

Trend Analysis Engine: The trend analysis engine processes the collected data to identify trends. It may use natural language processing (NLP), machine learning, and data mining techniques to detect patterns and emerging topics.

Recommendation Engine: The recommendation engine provides users with personalized trend recommendations based on their preferences, interactions, and past behavior.

Notification Service: The notification service sends alerts and updates to users when new trends or insights are available or when there are changes in their selected influencers' activities.

Data Visualization: Use data visualization libraries and tools to create charts, graphs, and visual representations of trends and insights. This enhances the user's ability to interpret the data.

Content Management: Implement content management features that allow users to create, edit, and manage their content, such as articles, posts, and comments.

External Services and APIs: Integrate with external services and APIs for functionalities like multilingual support, user authentication (e.g., OAuth), and social media sharing.

Security Layer: Implement security measures to protect user data, such as encryption,

authentication, and access control. Monitor and audit user actions to ensure data security and compliance with regulations.

Load Balancer: Use a load balancer to distribute incoming web traffic across multiple application server instances, ensuring high availability and scalability.

Performance Monitoring and Optimization: Implement tools for performance monitoring and optimization to ensure the system meets response time and scalability requirements.

Cloud Hosting or On-Premises Deployment: Decide whether the system will be hosted in the cloud or deployed on-premises, considering factors like cost, scalability, and resource availability.

Data Backup and Recovery: Set up a data backup and recovery system to ensure data is protected and can be restored in case of data loss or system failures.

Compliance and Legal Considerations: Ensure that the technical architecture complies with legal regulations, such as data privacy laws and LinkedIn's API usage terms.

6.2 Sprint Planning & Estimation

| Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	
Sprint-1	Login	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	
Sprint-2	Dashboard	USN-3	As a user, I can register for the application through Facebook	2	Low	
Sprint-1	Story	USN-4	As a user, I can register for the application through Gmail	2	Medium	
Sprint-1	Report	USN-5	As a user, I can log into the application by entering email & password	1	High	

7. PERFORMANCE TESTING

7.1 Performace Metrics

| S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visualizations / Graphs - 11
2.	Data Responsiveness	YES
3.	Amount Data to Rendered (DB2 Metrics)	NA
4.	Utilization of Data Filters	YES
5.	Effective User Story	No of Scene Added - 2
6.	Descriptive Reports	No of Visulizations / Graphs - 8

8. RESULTS
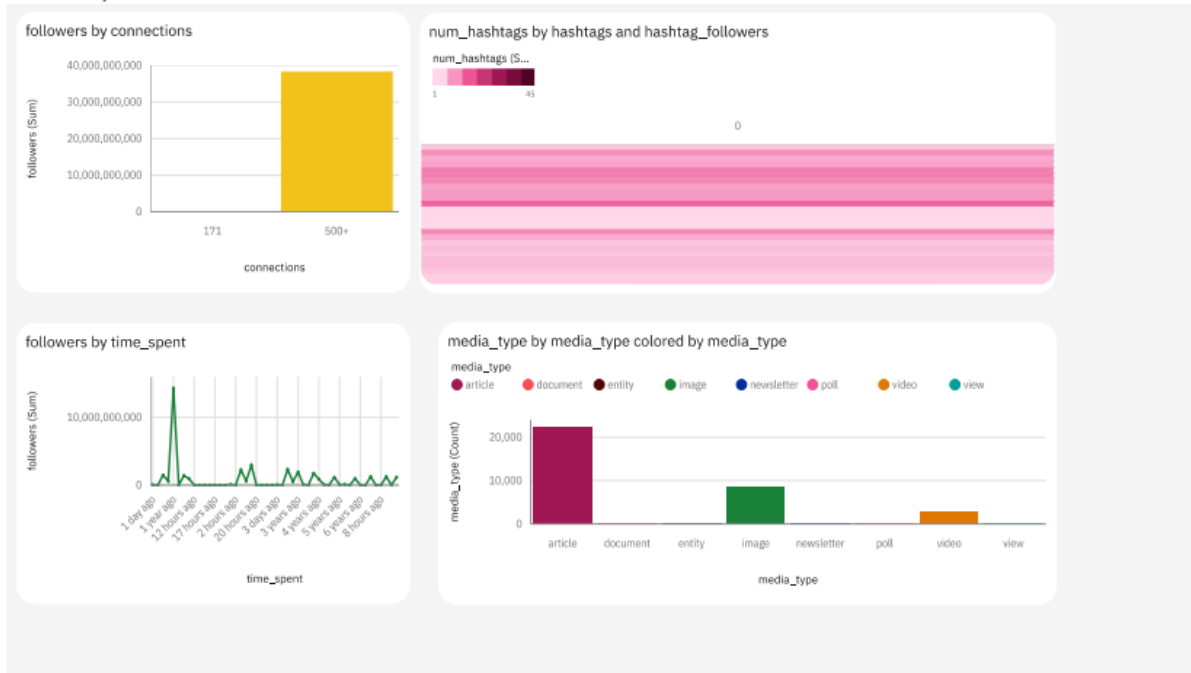
8.1 Output Screenshots

Profile Overview Dashboard
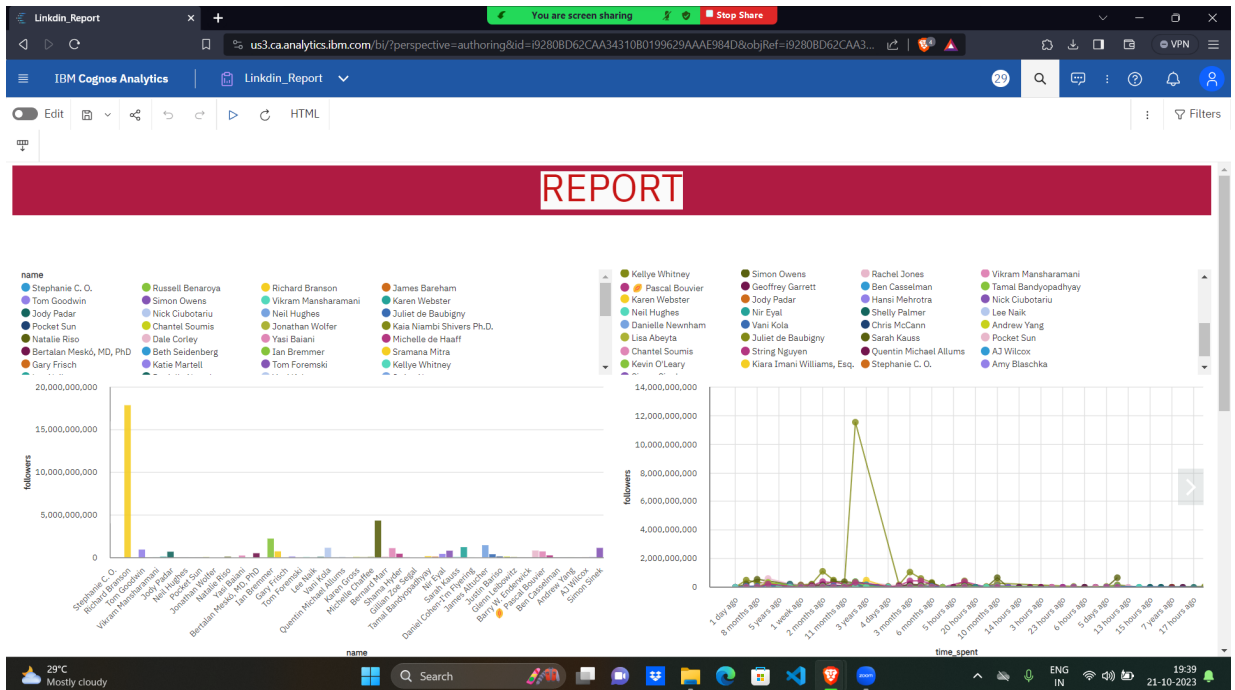
Engagement Metrics Dashboard
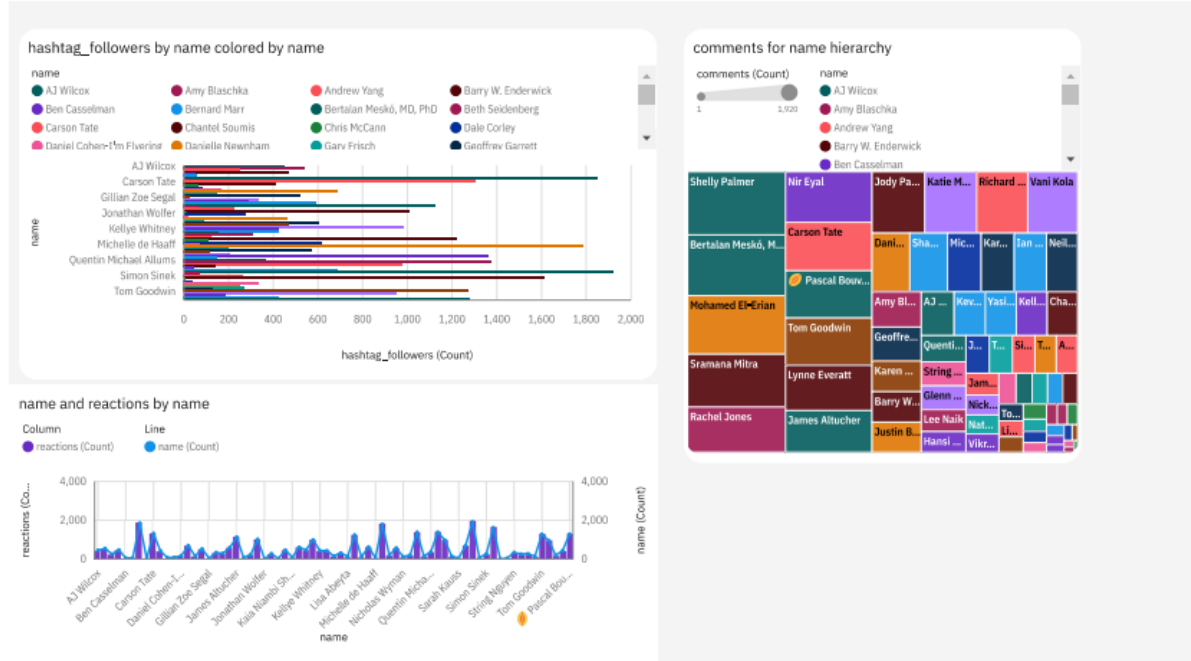
Content Analysis Dashboard

9. ADVANTAGES & DISADVANTAGES

9.1 Advantages

Market Intelligence: By analyzing LinkedIn influencers, businesses and individuals can gain valuable insights into emerging trends, market dynamics, and the preferences of their target audience. This information can inform strategic decisions and help with product or content development.

Competitive Edge: Staying ahead of industry trends can give businesses a competitive edge. Identifying trends early allows them to adapt, innovate, and respond to market changes more effectively than competitors.

Enhanced Content Strategy: Content creators can use trend analysis to tailor their content to what is currently resonating with the audience. This can result in higher engagement and better content performance.

Networking Opportunities: Identifying influencers and their trends can open up networking opportunities. Engaging with influencers and their followers can lead to collaborations and new business relationships.

Personal and Professional Growth: Individuals looking to establish themselves as thought leaders or experts in their field can use trend analysis to create content and engage with their audience effectively, enhancing their personal and professional brand.

Informed Decision-Making: Trend analysis provides a data-driven approach to decision-making. Businesses can use insights from influencers to make informed choices about marketing strategies, product development, and more.

Audience Engagement: Understanding trends and what interests the target audience allows for more engaging and relevant marketing and content strategies, resulting in improved audience engagement.

Thought Leadership: Demonstrating a deep understanding of current trends and sharing valuable insights can position individuals and businesses as thought leaders in their respective industries.

Risk Mitigation: Being aware of negative trends or potential pitfalls in the industry can help businesses take early action to mitigate risks and challenges.

Data-Driven Marketing: Trend analysis provides data that can be used for data-driven marketing. This can lead to more effective marketing campaigns and resource allocation.

Content Personalization: By understanding trends, businesses and individuals can personalize their content and messaging to specific audience segments, leading to higher relevance and engagement.

Improved Targeting: Trend analysis can help in identifying the specific interests and preferences of the target audience, allowing for more precise targeting in marketing and content creation.

Continuous Learning: Analyzing trends provides an opportunity for continuous learning and staying updated with industry developments.

Data-Backed Strategy: Trend analysis provides concrete data and insights that can support and validate strategic decisions.

Networking with Influencers: Engaging with influencers can lead to partnerships, collaborations, and access to their networks, expanding reach and influence.

Brand Reputation Management: Aligning with trends that resonate with the target audience can improve brand reputation and perception.

Content Quality Improvement: Analyzing trends can lead to content quality improvement by focusing on what the audience finds valuable and relevant.

9.2 Dis-Advantages

Information Overload: The sheer volume of content and data generated by LinkedIn influencers can be overwhelming. Managing and analyzing this vast amount of information can be time-consuming and challenging.

Quality and Credibility: Not all content from influencers is of high quality or credibility. Sorting through and identifying reliable sources and trends can be difficult.

Data Privacy Concerns: Collecting data from LinkedIn, even if publicly available, raises privacy concerns. Ensuring that data is gathered and used ethically and legally is crucial.

Trend Accuracy: Identifying trends based on influencer content can be subjective and may not always accurately represent broader industry or market trends.

Short-Term Focus: Some trends identified may be short-term or fads, making it challenging to distinguish between long-lasting trends and short-lived ones.

Algorithm Changes: Social media platforms like LinkedIn frequently update their algorithms, which can affect the visibility and reach of influencer content, potentially impacting trend analysis.

Subjectivity: What one person considers a trend, another may not. Standardizing the definition of trends and measuring their impact can be challenging.

Competitive Saturation: Following trends identified by LinkedIn influencers can lead to saturation, with many businesses and individuals pursuing the same trends, reducing their effectiveness.

Reliance on Third-Party Platforms: The project's success often depends on third-party platforms like LinkedIn. Any changes to these platforms can impact the project's data collection and analysis capabilities.

Influencer Dynamics: Understanding the motivations, behaviors, and strategies of LinkedIn influencers can be complex. Each influencer may have a unique approach to content creation and trendsetting.

Data Storage and Management: Handling and storing the collected data requires significant resources and can be costly, especially as data volumes grow.

False Positives and Negatives: Trend analysis may generate false positives, identifying trends that are not relevant or missing trends that are important.

Time Sensitivity: Missing out on rapidly emerging trends can render the information less valuable if it's not acted upon in a timely manner.
Resource Intensive: Trend analysis often requires specialized tools and expertise, which can be resource-intensive for businesses or individuals with limited resources.

Bias and Filters: The system may inadvertently introduce bias in trend identification, and filters or algorithms may inadvertently prioritize certain types of content.

Legal and Ethical Concerns: It's important to respect intellectual property rights and legal considerations when using content created by others, especially for commercial purposes.

Dependency on Technology: The project relies heavily on technology and infrastructure, making it vulnerable to technical issues and disruptions.

10. CONCLUSION

In conclusion, unearthing trends from LinkedIn influencers is a practice with the potential for significant benefits, but it also comes with its own set of challenges and considerations. This project can offer valuable insights and advantages such as market intelligence, competitive edge, enhanced content strategies, networking opportunities, and data-driven decision-making. It can be a powerful tool for personal and professional growth, helping individuals and businesses stay competitive in a dynamic business landscape.

However, it's essential to be aware of the potential disadvantages and challenges associated with this practice. These include the risk of information overload, quality and credibility issues, data privacy concerns, algorithm changes on social media platforms, and the subjective nature of trend analysis. Managing these challenges effectively is crucial to realizing the full potential of trend analysis from LinkedIn influencers.

To make the most of this practice, it's essential to develop a well-thought-out technical architecture that supports data collection, analysis, and presentation. Additionally, adherence to ethical and legal considerations, such as data privacy and intellectual property rights, is of utmost importance.

Overall, unearthing trends from LinkedIn influencers can be a valuable strategy for those seeking to gain a competitive advantage, connect with their target audience, and drive growth in the professional sphere. It requires a thoughtful approach, robust technical infrastructure, and an understanding of both its advantages and disadvantages to harness its full potential effectively.

11. FUTURE SCOPE

Here are some aspects that indicate the future potential of this practice:

Rising Importance of Influencer Marketing: The influencer marketing industry is continuously growing. As influencer marketing becomes more integrated into digital strategies, the need for trend analysis and insight generation from influencers will increase.

Enhanced Data Analytics and AI: With advances in data analytics and artificial intelligence (AI), the accuracy and speed of trend analysis from LinkedIn influencers will improve. Machine learning algorithms will become more sophisticated in identifying meaningful trends and patterns.

Personalization and AI Recommendations: The future will see more advanced AI-driven personalization and trend recommendations. Systems will become more adept at understanding individual preferences and tailoring content and trends accordingly.

Cross-Platform Integration: Trend analysis will expand beyond LinkedIn, encompassing multiple social media platforms. Systems will provide a comprehensive view of trends across platforms, offering more robust insights.

Content Automation: The future may see the integration of AI in content creation. AI-generated content will follow identified trends, reducing the effort required for manual content creation.

E-commerce Integration: LinkedIn influencers increasingly drive e-commerce trends. The future scope may include closer integration with e-commerce platforms, allowing businesses to capitalize on trends more effectively.

Globalization of Trends: LinkedIn's international user base will lead to the globalization of trends. Understanding and capitalizing on trends from different regions will become more critical.

Regulatory Compliance: As data privacy regulations evolve, ensuring regulatory compliance in data collection and storage will become even more crucial. Future developments should consider these regulations.

Industry-Specific Solutions: The trend analysis will become more industry-specific. Solutions catering to particular sectors or niches will emerge, providing highly tailored insights.

Education and Certification: The future may see the emergence of educational programs and certifications for trend analysts. Professionals will need to gain expertise in this field as it becomes more specialized.

Blockchain for Transparency: Blockchain technology may be integrated to ensure the transparency and authenticity of data used in trend analysis.

Sustainability Trends: Given the increasing importance of sustainability and social responsibility, identifying and capitalizing on sustainability trends will become a focal point.

Real-time Analysis: With improved technology and connectivity, real-time trend analysis will gain prominence, allowing businesses and individuals to stay ahead of the curve.

Emerging Social Media Platforms: As new social media platforms emerge, trend analysis will adapt to include these platforms, ensuring comprehensive insights.

Diversity and Inclusivity: Trend analysis will incorporate a focus on diversity and inclusivity, identifying trends related to these important topics.

Consulting Services: Professionals and businesses may seek consulting services for trend analysis, given its increasing complexity and significance.

12. APPENDIX

GitHub - https://github.com/nivethitha17/Naan-Mudhalvan

Project Demo Link - Report_Video