



From TED to Fintech: Mining Speaker Sentiments for Insights into The Future of Finance

Virly Cahyani^{1⊠}, Dini Turipanam Alamanda², Eti Kusmiati³

¹Universitas Garut, Garut, Indonesia. ²Universitas Garut, Garut, Indonesia. ³Universitas Garut, Garut, Indonesia. [⊠]Corresponding author: vcahyani03@gmail.com

Abstrak

This research explores the diverse perspectives of TED Talks speakers on Fintech and its role in the future of finance. This study utilizes opinion mining and InfraNodus to identify trends, similarities, differences, and viewpoints that emerged in TED Talks talk's discussions about Fintech on YouTube. The methodology involves analyzing opinions expressed by TED Talks speakers on YouTube channels using opinion mining techniques and InfraNodus tools to structure and deepen understanding of the speaker's point of view. By examining these perspectives, this study aims to enrich the understanding of how Fintech permeates culture and influences financial perspectives. The study results classified opinions into four main categories: Fintech Access, Banking Simplify, Trust Business, and AI Transaction, which helped identify critical themes in TED Talks discussions on Fintech. These findings reflect the importance of increased access to financial services, banking innovation, and positive changes in financing. The study's implications include insights for policymakers, regulators, and industry stakeholders to develop frameworks that support financial technology development while ensuring consumer protection and security.

Abstrak

Penelitian ini mengeksplorasi beragam perspektif pembicara TED Talks tentang Fintech dan perannya dalam masa depan keuangan. Penelitian ini memanfaatkan opinion mining dan InfraNodus untuk mengidentifikasi tren, persamaan, perbedaan, dan sudut pandang yang muncul dalam diskusi TED Talks talk tentang Fintech di YouTube. Metodologi ini melibatkan analisis pendapat yang diungkapkan oleh pembicara TED Talks di saluran YouTube menggunakan teknik penambangan opini dan alat InfraNodus untuk menyusun dan memperdalam pemahaman tentang sudut pandang pembicara. Dengan mengkaji perspektif tersebut, penelitian ini bertujuan untuk memperkaya pemahaman tentang bagaimana Fintech menembus budaya dan memengaruhi perspektif keuangan. Hasil studi mengklasifikasikan opini ke dalam empat kategori utama: Akses Fintech, Penyederhanaan Perbankan, Bisnis Kepercayaan, dan Transaksi AI, yang membantu mengidentifikasi tema-tema penting dalam diskusi TED Talks tentang Fintech. Temuan ini mencerminkan pentingnya peningkatan akses ke layanan keuangan, inovasi perbankan, dan perubahan positif dalam pembiayaan. Implikasi studi ini mencakup wawasan bagi pembuat kebijakan, regulator, dan pemangku kepentingan industri untuk mengembangkan kerangka kerja yang mendukung pengembangan teknologi keuangan sekaligus memastikan perlindungan dan keamanan konsumen.

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Kata kunci

Fintech; Masa Depan Keuangan; Infranodus; Penambangan Opini; Pembicaraan TED.

1. Introduction

Fintech refers to the use of technology in financial services and has significantly transformed how we interact with money (Jamal et al., 2023). This includes services such as digital payments, online loans, investment, and financial management that make it easier to access financial products and services (Akbar et al., 2022). Advanced technologies such as Big Data, cloud computing and machine learning used to provide more efficient and innovative financial services (Barroso & Laborda, 2022).

Research in the field of Fintech has become an increasingly relevant and discussed topic. Much research has focused on financial technology development and how Fintech influences how we interact with financial services (Amrin et al., 2022). Research Fintech it has also explored this phenomenon's social, economic, and policy impacts.

Demirgüç-et al. (2018) showed how Fintech has enabled financial inclusion by providing broader financial access, especially in developing countries. Further, Demirgüç-et al. (2018) emphasized that the development of financial technology has allowed individuals who previously did not have access to financial services to make transactions and access banking products.

In addition to financial inclusion, research Fintech has also highlighted the role of innovation in the financial industry. Research by El Amri et al. (2021) highlights, that Fintech has driven innovation within the sector by observing that Fintech has encouraged the banking and other financial industries to respond by innovating and providing better services for customers.

There is increasing attention to the role of technologies such as artificial intelligence (AI) and data analytics in services Fintech. Zou et al. (2023) highlight how AI technology has changed how financial transactions are executed by emphasizing that AI has helped reduce transaction costs, improve user experience, and provide efficiencies in financial services.

Research Fintech it also increasingly emphasizes challenges related to policies and regulations. Research Damayanty et al. (2022) consider how regulations should adapt to developments in Fintech. The research highlights the need for cooperation between regulators, industry, and other stakeholders to develop frameworks supporting financial technology development while maintaining security and consumer protection.

However, opinion mining became a very relevant tool in this research to understand Fintech's various views and perspectives and its impact on society and the economy at large (Trianto et al., 2023). Opinion mining allows us to identify and analyze opinions, sentiments, and ideas scattered across diverse text sources, providing a deeper understanding of different points of view in the context of Fintech (Chen et al., 2021).

When considering how opinion mining can play a role in understanding views, it is also essential to acknowledge the role played by YouTube, the platform of the world's most extensive video sharing, in providing access to a wide range of content related to Fintech (Khan et al., 2016). With numerous prominent presentations and interviews published on the platform, YouTube has become a significant source of dissemination of thoughts and ideas around Fintech. Opinion mining, as an analytical tool that makes it possible to explore these views, will play a crucial role in detailing and understanding the diversity of perspectives in platform .ini (Bi et al., 2021). Thus, it will enrich our understanding of how Fintech seeps into culture and influences how finance is viewed.

In this study, the selection of Channel YouTube as the primary source of analysis can take work. Channel It has a vital role in disseminating and exchanging ideas about Fintech. TED Talks, one of the Channel YouTube is the top choice in analytics opinion mining about Fintech (Ningsih & Megawati, 2022). Channel YouTube TED Talks in opinion mining about Fintech have become a leading source for presentations that have high quality and in-depth content (Lukmana et al., 2021). Speakers featured on YouTube are usually experts in their respective fields, including experienced thinkers, innovators, scientists, and entrepreneurs.

Channel YouTube TED Talks also has comprehensive global coverage. That way, opinion mining at Channel This allows researchers to gather diverse views that emerge across different cultures and backgrounds, providing richer insight into how Fintech is Accepted and understood worldwide (Zaidan et al., 2022). In addition, people's trust is inherent in Channel YouTube TED Talks, which

makes speakers' views very influential. As a reliable and high-grade source, opinion mining at Channel YouTube TED Talks significantly weighs the speaker's views on Fintech.

Observations of opinions from speakers on the TED Talks YouTube channel program about Fintech as the future of finance need to be explored and will be the main focus of this study. The selection of speakers and topics relevant to the research topic in the Channel will help initial effectiveness in starting opinion observation.

In progress opinion mining at Channel YouTube TED Talks on Fintech, InfraNodus is essential in analyzing text and data. InfraNodus allows researchers to explore and parse the opinions expressed more efficiently. A measure of centrality of connectedness exists in the InfraNodus to determine the range of nodes in a text network based on their contextual importance (Nodus Labs Support Center, 2023). In the case of Fintech, this tool helps researchers look beyond the raw text and understand how those opinions are structured, interact, and influence a common understanding of Fintech as the future of finance (Mothe et al., 2022). With the help of InfraNodus, opinion mining at Channel YouTube TED Talks becomes more structured and informative and allows researchers to explore a deeper understanding of the speakers' views on Fintech.

From the explanation above, this study aims to explore the diverse perspectives of TED Talks speakers on Fintech. Through opinion mining and InfraNodus, researchers try identifying trends, similarities, differences, and views in TED Talks YouTube speakers about Fintech. Another objective of this research is to understand how the views of the speakers on the TED Talks YouTube channel contribute to a general understanding of Fintech's role in the future of finance, with practical impacts that can help better decision-making and development in the Fintech industry as well as keep up with the constant changes in the global financial world.

2. Method

2.1. Characteristics and Stages of Research

This research has a qualitative nature with an exploratory approach that aims to explore more information about understanding Fintech from the perspective of the speakers on the TED Talks YouTube channel. In addition, this study also uses a semantic orientation approach that includes the classification of opinions from selected TED Talks speakers. The opinions obtained from the speakers on the TED Talks YouTube channel were then analyzed using Text Network Analysis with the InfraNodus tool. In use, InfraNodus is dynamic and can produce different results every time. Therefore, researchers limit the results of this study based on the period of using InfraNodus tools, which in this study, researchers use the results of using InfraNodus in the period October 8, 2023. In addition, researchers also limited the results obtained from InfraNodus based on node relationships with the highest connectivity centrality above 10%. The structural gap of this study was also limited to the findings of scattered node groups. The stages of opinion mining in this study can be seen in Figure 1.



Figure 1. Stages of Opinion Mining Source: Alamanda et al. (2021) Author Modification Included

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In the first stage, the author searched for YouTube channel sources using a digital search engine (Google) and used several keywords such as "Informative YouTube Channel," "Opinion YouTube Channel," "Inspirational YouTube Channel," and "Global YouTube Channel" to identify suitable channel candidates. After finding a suitable YouTube channel, the second stage involves finding a target source of opinion from the selected YouTube channel, focusing on the speaker's relevance and the study's topic. To facilitate the search, the author uses several keywords such as "Fintech," "Future of Finance," and "General of Fintech."

Furthermore, the third stage involves validating the source of the speaker and the topics discussed in the selected YouTube channel program. This validation is done by checking the title and description (caption) of the video, which usually contains background information about the speaker and the date of upload of the video. In the fourth stage, the author begins to take opinions from each speaker who has been selected by transcribing or scraping these opinions into text form assisted by activating GPT 3 AI extensions in the browser.

Furthermore, in the fifth stage, opinions converted into text are imported into the InfraNodus software and analyzed using Text Network Analysis with an approach that allows the analysis of Fintech phenomena. In the sixth stage, the Text Network Analysis analysis results will produce a visualization of the graphical structure, which will be presented as visual graphs.

Finally, in the seventh stage, the author will summarize the research results obtained from Text Network Analysis through InfraNodus software and relate them to the current condition of the Fintech phenomenon, helping to gain a deeper understanding of how Fintech affects the future of finance. Thus, this research helps fulfil a key goal: a better understanding of Fintech and its role in the future of finance.

2.2. Target and Sources of Opinion

Target opinion refers to the person, object, feature, event, or topic expressed by a person (Alamanda et al., 2021). Further, Alamanda et al. (2021), the person or media that expresses an opinion is called the owner of the opinion or the source of the opinion, which authentically has the power, application, and classification of the opinion because the quality and reliability of the opinion depends very much on the source. This research will collect opinions from speakers in the program Channel YouTube TED Talks per the research topic: Fintech and the future of finance. Channel YouTube was chosen based on its characteristics, including focusing on opinions about the research topic.

3. Result and Discussion

While finding YouTube channel sources as the first stage of opinion mining in this study, the author found several options related to YouTube channels that would be chosen as the target of opinion sources. This option is based on the author's observations, and the results of these observations were considered in choosing the TED Talks YouTube channel as the primary source of opinion-making on this research topic.

Speakers on the TED Talks YouTube channel have proven their expertise and influence in various fields, becoming a source of inspiration and knowledge for people worldwide. This study has entered the third stage of opinion mining, validating the speaker's source and the topic conveyed by the speaker for his opinion. In this regard, researchers will explore the speaker profiles on the TED Talks YouTube channel, especially those relevant to Fintech as the future of finance. These speakers have played an important role in discussing Fintech-related issues and provided valuable insights into how developments in financial technology affect the global financial landscape. Some of the speakers who are highly relevant and will be the main focus of this research are Spiros Margaris, a Fintech expert known for his superior insights in the industry; Ruzbeh Bacha, founder of P2P Currency Exchange; Emilie Allaert, a researcher who specializes in financial innovation; Prof. Arman Eshraghi, a professor with expertise in Fintech and digital economy; Juan José Espinoza, a banking executive who spoke about the transformation of the financial sector; and Talal Al Badareen, an entrepreneur focused on financial technology. This research will explore the ideas and

views of speakers to understand more deeply how Fintech is influencing and shaping the future of global finance. Speaker profiles are presented in Table 1.

Speaker Name	Speaker Roles	Name of TED Talks Program	Content Title	Upload Date	Link Channel YouTube
Spiros Margaris	Venture capitalist and advisor	TEDxAcademy	How Fintech can positively impact the world	30 November 2017	https://www.youtube.com/ watch?v=Sz_21SD4xCs&list= PPSV
Ruzbeh Bacha	CEO and Founder CityFalcon	TEDxAveiro	The future with FinTech, Crypto and AI	5 September 2018	https://www.youtube.com/ watch?v=ft75f3Iaa- s&list=PPSV
Emilie Allaert	Head of Operations and Projects at The LHoFT Foundation (Luxembou rg House of Financial Technology)	TEDxUniversityof Luxembourg	Fintech: paving the way to a new era	11 December 2018	https://www.youtube.com/ watch?v=VWRZRYWf_bk&li st=PPSV
Prof. Arman Eshraghi	Professor of Finance and Chair of Finance and Investment at Cardiff Business School	TEDxCardiffUniv ersity	Fintech and the future of finance	6 December 2019	https://www.youtube.com/ watch?v=DiWyf_RtIYM&list =PPSV
Juan José Espinoza	Co- Founder Payphone	TEDxCuenca	Fintech: present and future	9 November 2022	https://www.youtube.com/ watch?v=yxV01xVX4bc&list =PPSV
Talal Al Badareen	Senior in Sharjah American Internation al School, Sharjah Campus	TEDxYouth@INP SAA	Fintech: Redefinin g Money	7 January 2023	https://www.youtube.com/ watch?v=n6Ixe9pAy6g&list= PPSV

Table 1. TEI) Talks	YouTube	Channel S	peaker Profile
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Source: Author's Observations Through TED Talks YouTube Channel (2023)

Table 1. shows the profiles of speakers who have been selected through the observation process on the TED Talks YouTube channel according to the stages of opinion mining in this study. The data in this table was obtained using keywords relevant to the study, including "Fintech" and "Future of Finance," which were added during observations on the TED Talks YouTube channel. Table 2. provides an overview that each selected speaker has a background role or role that is closely related

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to the topic of Fintech and the future of finance. In addition, the content's title delivered on the TED Talks YouTube channel also has high relevance to the topics explored in this study.

This table will be an essential reference in exploring the views and opinions of the speakers on the topic of Fintech and the role of financial technology in the future of global finance. The information in the role columns, content titles, and backgrounds of these speakers will provide deeper insight into the perspectives that will be expressed in the content to be analyzed.

After collecting speaker profile data from the TED Talks YouTube channel, which will be used as an opinion source, the next step is to scrape to get transcriptions or opinions from each speaker assisted by activating GPT 3 AI extensions on the browser, which is selected as the fourth stage in opinion mining this research. This stage is a crucial step before classifying the selected speakers' opinions.

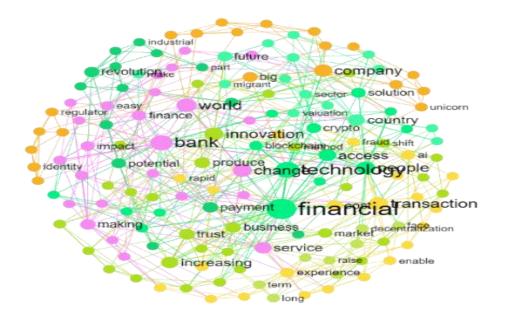


Figure 2. Opinion Visual Text Research

In the opinion of this TED Talks speaker, the network's structure is focused with a modularity value of 0.57. The type of propagation dynamics is cyclical variability with an alpha exponent value of 0.49 and falls into the medium category (according to the Analysis of Fluctuations Exempt from Influence). This means that the opinions expressed have an optimal level of plurality and a diverse representation of topics. By enabling GPT 3 AI on InfraNodus provides topical cluster results by category. There are four categories detected groups of node relationships with a high amount of centrality of connectedness, consisting of:

Fintech Access Category	: financial, technology, people	(28%);
Banking Simplify Category	: bank, world, change	(24%);
Trust Business Category	: innovation, increasing, trust	(16%);
AI Transaction Category	: transaction, cost, experience	(11%).

Grouping data into different categories or clusters is a key step in opinion mining research on Fintech. These categories help organize the diverse opinions and views of speakers on the TED Talks YouTube channel. Each category reflects the main themes and topics that emerged in the presentation, and the following further explanation of these categories and their relation to the research topic.

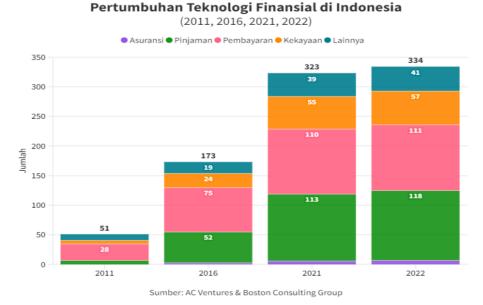
1) Fintech Access Category (28%)

This first category focuses on the role of Fintech in increasing access to financial services, especially for segments of society who previously faced difficulties in accessing them. Fintech innovation has brought solutions that allow individuals from various countries with diverse social

and economic backgrounds to more easily access financial services. Countries around the world, including developing and developed countries, have been the subject of attention in efforts to improve financial accessibility through Fintech.

Financial accessibility issues are a significant concern in various countries Taking into account the diversity of social and economic backgrounds of its people, many countries are trying to address these challenges through Fintech. Top priorities are countries that have low financial inclusion, especially in remote areas or where populations find it difficult to access traditional banking services. Some examples of countries that fall into this category include India, Kenya, Nigeria, Indonesia, and many countries in Sub-Saharan Africa that are struggling to improve financial inclusion for their populations.

Fintech Access Category is a category that is very relevant in the development of financial technology in Indonesia The findings in this category indicate how Fintech has managed to improve access to financial services for Indonesians Reported in web DataIndonesia.id (2023), in the last ten years, the number of Fintech companies in Indonesia has increased sixfold A report made by AC



Ventures and Boston Consulting Group (BCG) shows that the number of participating fintech companies began to increase from 51 in 2011 to 334 in 2022 The data is attached to Figure 3.

Figure 3. Fintech Growth in Indonesia

The report shows that the payment segment initially dominated the Fintech industry in Indonesia. This is indicated by the fact that in 2011, the number of Fintechs engaged in this sector reached 50%. The fintech landscape in Indonesia is growing. New Fintech segmentations, such as lending, insurance, wealth management, and others, are growing. As many as 35% of Fintechs in Indonesia are engaged in loans in 2022, with payments following in second place with a percentage of 33% as many as 17% of Fintechs are engaged in wealth management, 2% are engaged in insurance, and 12% are engaged in other fields.

2) Banking Simplify Category (24%)

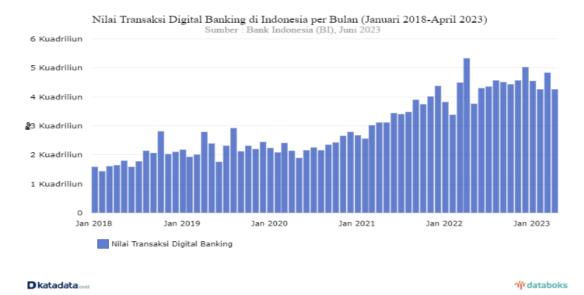
The Banking Simplify category reveals the essence of the banking transformation that has taken place thanks to Fintech. In the TED discussion, speakers explored how the banking sector has changed significantly. Financial technology has changed the way banking services are provided to customers. The highlight in this category is that it highlights significant changes and how Fintech is affecting the way banking operates.

Fintech has made banking more straightforward and more efficient through its technological solutions; Fintech has changed the banking landscape, focusing on providing more efficient and user-friendly banking services. In research, this category plays a vital role in understanding the

impact of Fintech changes on the banking world and also how it relates to the ongoing evolution of global finance.

With a deep look into Banking Simplify, we can better understand how Fintech's role has changed the overall banking paradigm. It also helps us link the development of Fintech with future developments in the global financial sector, where technology will continue to play an increasingly important role in delivering better and efficient financial services.

The findings reflect a significant shift in how the public provides and accessed financial services. In Indonesia, an increasingly simplified banking trend has been seen through the increasing



adoption of digital banking technology Launching on the web Katadata.co.id (2023) According to Bank Indonesia (BI) data, digital banking transactions in the country reached around Rp4,264.8 trillion, or nearly Rp4.3 quadrillion in April 2023 This value includes various types of digital banking classified by the Financial Services Authority (OJK), such as internet banking, SMS or mobile banking, and telephone banking Further such data is attached to Figure 4.

Figure 4. Value of Digital Banking Transactions in Indonesia in the Last 5 Years

3) Trust Business Category (16%)

The Trust Business category takes centre stage in this study, focusing on business innovation and how it contributes to increasing trust levels in the financial industry. In a series of in-depth TED discussions, speakers covered important topics that included innovations in data protection, transaction security efforts, and strategies to increase consumer confidence in financial services.

The importance of trust in the financial industry cannot be ignored, especially given the complexity and uncertainty often faced by consumers in the financial aspect. This research provides invaluable insights into Fintech's role in strengthening the foundation of trust in the ever-changing world of finance. Despite increasingly complex cyber threats, data and transaction security have become an important topic in this effort.

Through an in-depth understanding of Trust Business, researchers can explore innovative ways Fintech has used to build and maintain customer trust. This is particularly relevant in strategizing the future in an ever-changing and challenging financial industry. Thus, this category brings valuable perspectives in understanding the evolution and development of Fintech in the field of trust in financial services.

Discoveries in this category indicate that efforts Fintech to maintain data and transaction security is a critical factor in building user trust in Indonesia. This research illustrates the importance of innovation in the field of data protection and transaction security as a critical element in building trust in the world. Fintech Data on Indonesia's cybersecurity report shows increasing challenges in data protection in Indonesia Reported on the page Katadata.co.id (2022) The National Cyber Security Index (NCSI) report noted that Indonesia's cybersecurity index score was 38.96 points out of 100 in 2022 This figure places Indonesia in the third lowest rank among G20 countries Globally, Indonesia ranked 83rd out of 160 countries on the report.

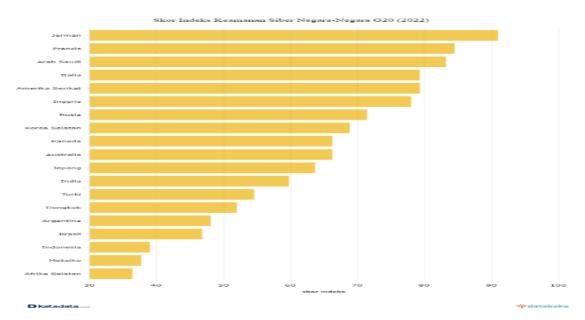


Figure 5. G20 Countries Cybersecurity Index Score 2022

In the digital age, customer data is becoming a valuable asset, and its security is a top priority that Fintech companies must maintain. Cybersecurity threats such as hacking, data theft, and fraud are becoming increasingly pressing issues in the Fintech world. This strengthens the argument regarding the importance of the Trust Business Category in this study, highlighting the need for innovation in security and data protection to build customer trust.

4) AI Transaction Category (11%)

This category focuses on the use of artificial intelligence (AI) in financial transactions. Speakers in this category discussed the central role of AI technology in changing the financial transaction landscape, with particular emphasis on three key aspects: reduction of transaction costs, improvement of user experience, and creation of efficiencies in the financial transaction process.

One of the most striking developments is the ability of AI technology to reduce transaction costs with sophisticated automation and data analysis, costs associated with financial transactions can be minimized, making them more efficient and affordable. In addition, the application of AI technology also contributes to the improvement of user experience, by ensuring that the transaction process is smoother and responsive.

On a larger scale, the AI Transaction category reflects the impact of AI technology in changing the paradigm of financial transactions in the future The use of AI technology is not only an essential addition in Fintech, but also an integral element in the development of global finance. The research provides valuable insights into how Fintechs have leveraged artificial intelligence to create positive change in an increasingly complex financial ecosystem. This helps us understand the critical role AI plays in the future of global finance.

Microsoft research titled Future Ready Business: Assessing Asia-Pacific's Growth with Artificial Intelligence (AI), which is passed through the site Katadata.co.id (2019) mention, the financial industry in Asia Pacific that applies artificial intelligence (artificial intelligence/AI) recorded improvements in five areas. Those areas are customer engagement, competitiveness, innovation, margins, and business intelligence.

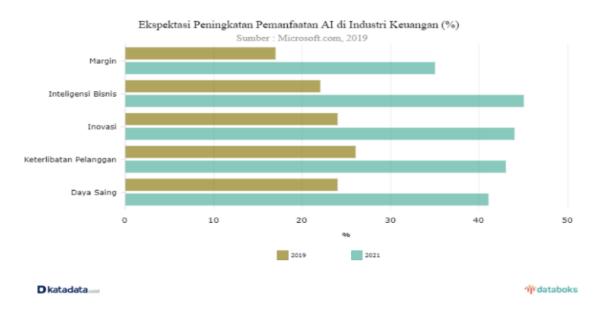


Figure 6. Expectations of Increased Utilization of AI in the Financial Industry

Based on Figure 6 above, the margin area is expected to double, from 17% in 2019 to 35% in 2021. Based on this report, AI also states that, AI increases competitiveness by 41% by 2023. More pages Katadata.co.id (2019) Moula, a startup in Australia, uses AI for real-time credit decision-making services The company also uses machine learning and Azure AI to predict the likelihood of bad debts The same is true in Indonesia for financial technology companies or Fintech, which provides productive loans to the public online.

Grouping the data into these categories will form the basis for further analysis related to the opinions of speakers on the TED Talks YouTube channel on Fintech. In outlining the opinions and perspectives of the speakers, the data collected from each of these categories will provide deeper insights into Fintech's role in the future of global finance.

Following on from research and analysis, network visualization has so far become an invaluable tool in exploring the opinions and views of speakers on the TED Talks YouTube channel on Fintech. In addition to being used to summarize and categorize opinions, network visualization also has the potential to identify structural gaps that can provide valuable new insights. The identification of these structural gaps can be done through a qualitative approach by researchers or by using software algorithms that automatically perform network analysis.

For example, network visualization analysis shows a structural gap between the bank-focused, change-focused "Banking Simplify" category and the "Trust Business" category, which focuses on innovation, increasing, and trust) (see Figure 3.) The structural gaps in the study were selected based on the size of the combination of graph connectivity and community structure. It involves selecting groups of scattered nodes to form a more connected graph. These findings signal that increased access to financial services and innovation in the banking industry can make it easier for individuals to borrow, trust financing solutions, generate market shifts, and ultimately have a positive impact on the world through changes in the way they do financing.

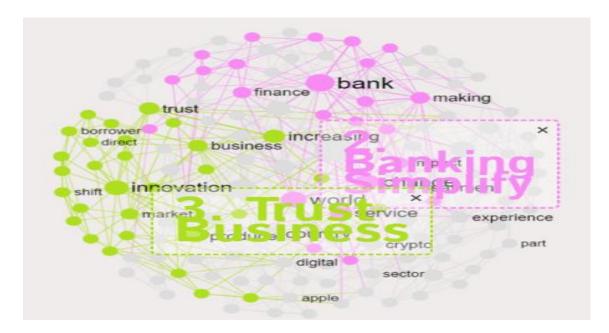


Figure 7. Examples of Structural Gaps

These findings are significant in understanding the phenomenon of Fintech and the future of finance. This topic is being discussed in the banking and finance industry today. The analysis shows that we can create reliable solutions in the financial world by improving access and provision of financial services in synergy with evolving technological innovations.

The results of this study are consistent with the findings in research conducted by Marginingsih (2021), which shows that Fintech has great potential to revolutionize the financial world Alfiana et al. (2023) His research also underscores the role of financial technology in equalizing access to financial services, especially in regions that previously had limitations in terms of access to banks and traditional financial services The research also reinforces the view that Fintech has the potential to create more inclusive and reliable financial solutions.

In addition, research conducted by Taherdoost (2023) supports the argument that a positive view of the Fintech As a catalyst for change in the financial sector is a very relevant approach Yadav (2020), in its research has presented data and evidence supporting the view that Fintech is not a threat, but on the contrary, an opportunity to improve financial services and transaction security This is in line with the findings in this study which emphasize the importance of focusing on improving financial services through technological innovation.

The results of this study also refer to the validation of opinion text searches from TED Talks speakers, which shows that the views of experts and prominent speakers are verified and validated in this study. This suggests that the contributions of those speakers provide a solid foundation in supporting a positive outlook on Fintech's role in the future of global finance. These results make a valuable contribution to the development of knowledge and understanding of Fintech and how this technology can shape the face of the financial sector in the future. Visualization of opinion text search validation results from selected speakers is summarized in Table 4, which can later be an important reference in illustrating insights and understanding of Fintech's role in the future of global finance.

	-	•	
Speaker Name	Important Points in Understanding the	Category Group	Klaster Topical
	Fintech Phenomenon of the Future of		
	Finance		
Spiros Margaris	Better banking access, identity and bank	Fintech Access	Bank, World,
	accounts for refugees, and cooperation	Banking	Change,
	between relevant parties.	Simplify	People,

Table 2. Text Search Validation of TED Talks Speaker Opinions with Citations

			Finance, Technology,
Ruzbeh Bacha	User experience, using automation and specialization, reduces transaction costs and spotting fraud.	AI Transaction	Transaction, Cost, Experience
Emilie Allaert	Changing the banking world, increasing trust and reducing intermediaries.	Banking Simplify Trust Business AI Transaction	Bank, World, Change, Increasing, Trust
Prof. Arman Eshraghi	Fintech innovation centres on blockchain technology.	Fintech Access	Financial, Technology
Juan José Espinoza	Fintech can help businesses enter the market, increase trust, concentrate on speed, and simplify financial transactions.	Trust Business AI Transaction	Increasing, Trust, Transaction, Cost, Experience
Talal Al Badareen	Fintech has the potential to impact the entire world. a new financial technology that meets the needs of individuals, entrepreneurs, and businesses.	Fintech Access Banking Simplify	Financial, Technology World, Change, People

The research results of the TED Talks speakers in the Trust Business and Banking Simplify categories provide valuable insights related to the adoption of Fintech by the public and government in Indonesia, especially in identifying gaps in current conditions.

Category Trust Business of the TED Talks speakers discussed several key issues that are highly relevant to the adoption Fintech in Indonesia One important aspect discussed is data protection and transaction security in financial services In the digital age, customer data is a precious asset, and its security is the main thing that must be maintained (Zhang et al., 2022) Customer trust is critical in the world Fintech, and to build this trust, the company Fintech Indonesia needs to focus on innovation in data security and transaction protection (Pratama, 2021).

Indonesians, like many other countries, have reasonable concerns related to data privacy and transaction security (Elis & Hamimah, 2022) In this study, the results of the TED Talks speakers can help governments, regulators, and companies Fintech to understand better and address these concerns A deep perspective on how innovations in data security and protection can build customer trust is essential for Indonesia as it actively adopts services Fintech By addressing these privacy and security concerns, the company, Fintech in Indonesia, can speed up the adoption process and ensure that people feel comfortable using services Fintech with confidence that their data is safe and secure.

Fintech is becoming increasingly relevant to simplify banking services. Although the adoption of digital banking technology is still in its developmental stage, essential steps have been taken to advance Fintech in the banking sector. Many banks and companies Fintech have partnered to provide more efficient and accessible banking services through mobile banking applications (Sari et al., 2021). This has provided opportunities for Indonesians to access banking services without having to go to a physical bank office. However, there are still several challenges that need to be overcome to accelerate the adoption of digital banking technology in Indonesia. One of the main challenges is ensuring transaction security and user data protection. People need to trust that the use of digital banking applications is safe and reliable.

In addition, understanding of digital banking applications also needs to be improved so that people can use this technology more effectively. At present, people's understanding of Fintech still diverse (Aqualdo et al., 2023). Further Aqualdo et al. (2023) Said, some people already have in-depth knowledge and have adopted digital banking applications, using services Fintech actively, and comfortable with various aspects of this technology. Even some people have also taken advantage of digital banking services for various needs, ranging from bill payments to investment. Fintech has become an integral part of everyday financial life. On the other hand, there are also parts of society

that are still not familiar with the concept Fintech or don't even know what Fintech is. Some feel anxious or lack confidence in using digital banking applications, or even do not have access to this technology (Hutagaol & Napitupulu, 2022). It is important to remember that each individual has a different level of understanding of Fintech, and this diversity reflects varying levels of adoption and exposure to financial technology across Indonesian society (Munawar et al., 2023).

With a diverse understanding of the level of public knowledge about Fintech, steps to increase education and awareness about Fintech in Indonesia are becoming increasingly crucial. Through collaboration between governments, Fintech companies, educational institutions, and civil society organizations and through education and training initiatives, we can help people from diverse backgrounds benefit from financial technology innovation and understand its practical use, while keeping privacy and security issues in mind. The more people understand how to protect data and keep transactions secure the greater trust people can have in Fintech. By reducing the gap in understanding and adoption of Fintech, we can ensure that its benefits can be enjoyed by all levels of society in Indonesia. In addition, Fintech can continue to grow and play an important role in increasing financial inclusion and efficiency in financial services in the country.

4. Conclusion

Based on the research that has been done, this study highlights the significance of the TED Talks YouTube channel as a primary source in exploring views and opinions related to Fintech and the future of finance The diversity of perspectives, educational resources, and inspiration provided by TED Talks speakers is a strong choice The profiles of selected speakers such as Spiros Margaris, Ruzbeh Bacha, Emilie Allaert, Prof. Arman Eshraghi, Juan José Espinoza, and Talal Al Badareen, add important value in understanding the impact and role of Fintech in the global financial landscape Through analysis of selected content from the TED Talks channel, this research offers deeper insights into the future of financial technology The results classified content into four main categories, such as Fintech Access, Banking Simplify, Trust Business, and AI Transaction, which helped identify key themes in the discussion These findings reflect the importance of increased access to financial services, banking innovation, and positive changes in financing Fintech is not a threat, but rather a potential revolution in the financial sector The verified views of TED Talks speakers provide a solid foundation and valuable reference in understanding Fintech's role in the future In the Indonesian context, the study highlights challenges in the adoption of digital banking technology, including transaction security and user data protection Further education and understanding of digital banking applications is key, with cooperation between governments, Fintech companies, educational institutions, and community organizations as a solution Increased understanding will strengthen confidence in Fintech, support financial inclusion, and improve the efficiency of financial services in Indonesia.

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