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THE IMPACT TO THE ECONOMY FROM FAKE REVIEWS ON FINTECH PRODUCTS: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT
Given the increasing competition in the fintech business world, investigating how consumer-generated reviews influence consumer decisions has become crucial. Fake reviews are generated to increase sales as online reviews play an important role in consumer decision making. Likewise, the problem that arises from FinTech is fake review. Online platforms may claim to remove fake reviews, but it's still a pretty big problem for companies. The aim of our research is to conduct research on the impact on the economy from fake reviews on FinTech Products using the systematic literature reviews (SLR) method. Literature data used in this paper are obtained from Scopus, PubMed, Science Direct and then imported into Mendeley software the most widely used databases in academics. At this stage, some irrelevant papers are excluded based on the title and abstract. From the appropriate paper, the second stage of selection is carried out to determine the final paper. By conducting a systematic literature review, we identified the main impact to the economy from fake Reviews on FinTech Products, namely that it will influence the results of purchasing decisions, marketing and the loss of business opportunities. Meanwhile, the positive impact of consumers can save decision-making time before the transaction and they achieve psychological balance when consumers ask for approval after purchasing.

Keywords: marketing, consumers, fake reviews, FinTech Products

INTRODUCTION
Fake news has been spreading for years and is not a new problem (Rafique et al, 2022). Although this untrue or misleading news is deliberate propaganda that causes people to believe misleading information, identifying fake news from real news based on the information the content shares is becoming increasingly challenging. Due to the active fosters the flow of information among users on social media, identifying fake news content can be challenging. Because social media actively fosters the flow of information from user to user, it is difficult to spot fake news content. As a result of this global diffusion and humanity's inability to deal with the internet's rapid spread of news, dealing with misinformation is a challenging task.

Fake reviews are online reviews created to mislead consumers. Fake reviews are created to promote one's business or damage a competitor's reputation. Fake news has been spreading for years and is not a new problem (Rafique et al, 2022). Research on fake reviews has been suggested as one of the top agenda items in digital and social media marketing research (Dwivedi et al., 2020). Online product reviews, as a form of electronic Word-of-Mouth (eWOM), are a key driver in influencing consumer purchasing decisions (Duarte et al., 2018; Kaushik et al., 2018; Sandra MC Loureiro and Javier Miranda, 2018; Tran and Strutton, 2020). In the United States, more than 80% of consumers indicate that they use online reviews before purchasing a product (Smith and Anderson, 2016).

Studies find that 97% of consumers read online reviews for local businesses, and 93% of individuals are influenced by online reviews in their consumption decisions (Meijerink & Schoenmakers, 2020; Schoenmueller et al., 2020). Because consumers rely on online reviews when deciding which products and services to purchase, some marketers have unwisely begun using fake reviews to influence potential customers' decisions (Akdim, 2021; Filieri et al., 2015; Wu et al., 2020). Because reviews are one of the most influential factors on consumer buying behavior, fraudsters are tempted to employ writers who specialize in or use automated methods to generate fake reviews increasing the attractiveness of their products and services, or lowering the reputation of competitors.

Review manipulation is defined by (Mayzlin et al., 2014) as "reviewers with a material interest in a consumer's purchasing decision may post reviews that are designed to influence consumers and resemble the reviews of disinterested consumers." Later, (Zhuang et al., 2018) pointed out "Despite efforts by e-marketplace operators to filter out fake reviews and strengthening guidelines and enforcement in various countries, online review manipulation persists and takes more varied forms" (Azimi et al. , 2022; Filieri et al., 2015; Zhuang et al., 2018). The prevalence of fake reviews violates online business environment regulations and misleads consumers in their decision-making. Meanwhile, the credibility of online platforms and businesses is threatened because of this. Low credibility can undermine consumers' intentions to persist and impede the growth of online businesses (Filieri et al., 2021; Filieri & Mariani, 2021). Fake online reviews cost businesses and consumers more than $152 billion annually, according to the World Economic Forum (2021).

Much of the discussion in the literature is around how to create and extract value in customer engagement. The customer journey has been defined as "the process a customer goes through, across all stages and touch points, that shapes the customer experience" (Lemon & Verhoef, 2016). Post-purchase customer behavior in the form of online reviews is an important stage in the customer journey (Akyüz, 2013; Stevens et al., 2022; Zhao et al., 2021). Online reviews can create value for customers (e.g. through customer recognition and a sense of community), businesses (e.g. through loyalty and positive word-of-mouth customer behavior) and other customers (e.g. through information provided and recommendations). Value creation is very important for businesses due to increasing competition due to the development of the internet and social media (Baker & Kim, 2019; Hussain et al., 2018; Lee & Park, 2022; Teng et al., 2017).

Given the increasing competition in the fintech business world, investigating how consumer-generated reviews influence consumer decisions has become crucial. The prevalence of fake online reviews, both positive and negative, is increasing and represents a growing theoretical and managerial problem (Zhang et al., 2020). Fake reviews are generated to increase sales because online reviews play an important role in consumer decision making (Xu et al., 2022).

Research has shown that user reviews have a major impact on consumer purchasing decisions (Malbon, 2013). Hu et al (2012) also show that consumers are increasingly relying on such reviews. Therefore, if user reviews on online platforms, such as Amazon, Google, or TripAdvisor, are fake, consumers may be manipulated into purchasing low-quality or unsafe products or services. It is not yet possible to determine the specific costs to consumers of fake reviews, in part because there has been no long-term research indicating their impact (Spithoven, 2020).

On the other hand, the problem that arises from FinTech is feke review. Online platforms may claim to remove fake reviews, but it's still a pretty big problem for companies. The problem of fake reviews has become so common that the UK Competition Authority is investigating Google to see whether they are doing a good job of adequately protecting shoppers from fake reviews posted on their site. On the other hand, responding to questions about how online stores detect fake reviews, Amazon said it uses a tracking system to proactively remove reviews that appear on its site. While it's impossible to know how many product or service reviews are inauthentic, Amazon claims it removed more than 200 million suspected fake reviews on the web in 2020, while Google claims Google blocked 55 million comments that appeared due to policy errors in the year. The same. In the case of Amazon and Google, they have made it easier for consumers to leave legitimate reviews, including offering textless "one-click review" buttons designed to hide fake reviews with real ones, but it's unclear whether that strategy is sound. really works. If a business is found to be using fake or incentivized reviews, Yelp stops businesses from creating fake reviews by penalizing their ratings and issuing a "consumer alert" warning on the

Yelp reviews page. As mentioned above, astroturfing occurs when a company directly misleads the public by posting fake, glowing five-star online reviews about their products or services. According to ReviewFraud, as part of the campaign, fake user profiles left excellent four-star reviews for businesses that should maintain five-star ratings (Fastcompany, 2021; Jfitzgeralsgroup, 2022).

Fake reviews are reviews that aim to mislead customers in their decision to purchase a product. They are often written by reviewers who have little or no real experience with the product or service. Fake reviews can be positive and unwarranted, aimed at promoting a product, or unjustified negative, for example damaging the reputation or sales of competitors' products and brands (Zhang et al., 2016). As research on fake review detection has increased in recent years (e.g. Patel & Patel, 2018; Rastogi & Mehrotra, 2017; Santos et al, 2020), existing literature reviews such as Vidanagama et al. (2020) and Hussain et al (2019) have focused on algorithmic machine learning techniques. Fake detection algorithms are mostly used by businesses, as users generally do not have the capacity to compare thousands of reviews through algorithmic approaches (Ansari & Gupta, 2021; Cohen, 2020).

To this end, studying fake reviews has been suggested as one of the top agenda items in digital and social media marketing research (Dwivedi et al., 2020; Salminen, et al., 2022(name of journal)). Online product reviews, as a form of electronic Word-of-Mouth (eWOM), are a key driver in influencing consumer purchasing decisions (Duarte et al., 2018; Endo et al., 2012; Kaushik et al., 2018; Sandra MC Loureiro and Javier Miranda, 2018; Tran and Strutton, 2020).

FinTech is driven by various emerging cutting-edge technologies. It is a series of new business models, new technology applications, and new products and services that are having a significant impact on financial markets and the supply of financial services. It has attracted widespread attention due to the following advantages: increasing operating efficiency, effectively reducing operational costs, disrupting existing industry structures, blurring industry boundaries, facilitating strategic disintermediation, providing new gateways for entrepreneurship, and democratizing access to financial services (Agarwal and Zhang 2020; Cao et al. 2020; Admati and Hellwig 2013; Loubere 2017; Pinochet et al. 2019; Yang et al. 2020; Suryono et al. 2020). The main technologies of FinTech include internet technology (including the Internet and Web of Tings) (Ruan et al. 2019), big data (Chen et al. 2017; Gai et al. 2018a), artificial intelligence (Belanche et al. 2019), distributed technology (blockchain and cloud computing) (Belanche et al. 2019; Gomber et al. 2018; Chen et al. 2019; Wamba et al. 2020; Miau and Yang 2018), and security technology (biometric technology) (Gai et al. 2018a, b; Wamba et al. 2020). Under the influence of this technology, the traditional development model of the financial industry has changed.

In addition, scientists have conducted research involving theory and application. To examine the adoption and use of FinTech from a technology acceptance perspective, Singh et al. (2020) proposed a research framework by adding a substructure to the technology acceptance model. A FinTech ecosystem consisting of FinTech startups, technology developers, governments, financial customers, and traditional financial institutions is presented by Lee and Shin (2018). Therefore, the application of FinTech has been involved in many fields, such as mobile payments (Gomber et al. 2018), mobile networks (Gai et al. 2016; Wen et al. 2013; Zhang et al. 2013; Zhang and Soong 2004), big data (Yin and Gai 2015), blockchain (Wamba et al. 2020; Iman 2018), P2P lending (Gomber et al. 2018; Ge et al. 2017; Suryono et al. 2021; Wang et al. 2020a, b), cloud computing (Castiglione et al. 2015; Gai et al. 2018a, b), banking services, investment funds, retail groups and telecommunications operators (Singh et al. 2020), image processing (Castiglione et al. 2007), and data analysis techniques (Qiu et al. 2015).

So in this research, we conducted systematic literature reviews (SLR) research on the impact to the economy from fake Reviews on FinTech Products. This topic has never been carried out by researchers before so this topic is the first research in the academic world. We hope that the results of the research will increase knowledge on economic impact topics such as marketing from fake Reviews on FinTech Products using the systematic literature reviews (SLR) method.

RESEARCH METHODOLOGY

1. Search Terms

Literature data used in this paper are obtained from the SCOPUS, PubMed, Science Direct and then imported into Mendeley software the most widely used databases in academics. At this stage, some irrelevant papers are excluded based on the title and abstract. From the appropriate paper, the second stage of selection is carried out to determine the final paper. In this paper, we derived data through the search function in SCOPUS, PubMed and Science Direct by selecting as Database. Core Collection database; Topic “Fake reviews" OR "Financial technology" Timespan=2000–2023.

2. Selection Criteria

Paper search Research met the following criteria: (1) research published between 2000 and 2023; (2) studies were found in English; (3) with a primary focus on digital platform fake news; (4) articles published in IT journals or any technology related articles in journals and conference proceedings; (5) journal articles that have been cited more than 10 times. Research results must meet the following criteria: (1) the research is not presented in a journal article (for example in the form of a slide show or overhead presentation); (2) published research, not related to technology or IT; (3) articles about fake news but not identified.

3. Flowchart of Search Process

Figure 1 depicts a flowchart of the search process: the identification of articles, the screening, the selection process and the number of the included articles.

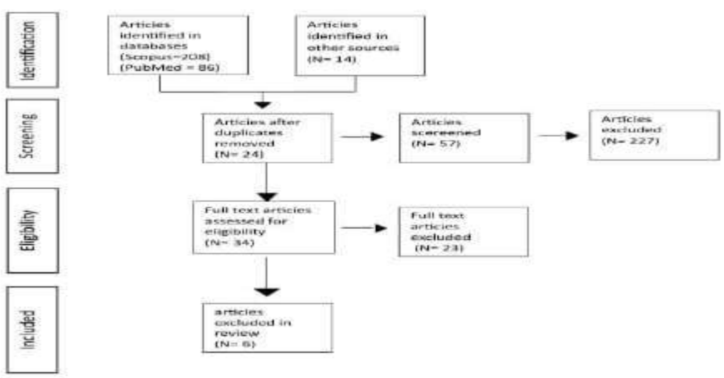

Figure1. Flow diagram of database search using PRISMA

RESULT AND DISCUSSION

Fake reviews have potentially devastating consequences for businesses that maintain a digital presence, especially emerging FinTechs and cost-sensitive early-stage companies. For these new companies, the increased costs of fighting fake reviews can impact their bottom line and raise uncomfortable questions during financing rounds, possibly resulting in fewer investors and lower overall investment (Vallabhaneni, 2020).

Cao (2023) states that fake reviews have several positive impacts. First, consumers can save decision-making time before online transactions. Second, they achieve psychological balance when consumers seek approval after purchase. Whether a review can provide effective information is the primary function of an online review. The key is whether the company can provide comprehensive and objective product information to consumers and the factors to determine whether consumers have the intention to make a transaction. If consumers do not understand all the features of financial products, the sales volume of financial products cannot be improved (Minjuan et al, 2022). There are three impacts of fake reviews in the economic field, namely:

1. Impact of fake news on Purchase Decisions

In the era of big data and information technology, faced with many online financial companies and limited consumption time, consumers usually pay attention to large companies and the credibility of these companies when choosing product objects in transactions or choosing financial companies according to the list of recommendations set by the platform. Decision making by consumers to choose financial product schemes is not optimal. This is because decision makers are limited by information sources and time in the decision making process, and it is impossible to find all the schemes. Moreover, it is difficult to find a comprehensive standard for assessing optimal schemes. Therefore, in the actual process, it is often found that a number of schemes meet the objectives and then choose the best one.

In the process of online financial transactions, consumers tend to conduct a thorough review of online financial companies before making a decision, including the company's reputation and the number of overall reviews of the company. On the one hand, according to the rule of credibility value, the higher the level of company credibility, the higher the level of consumer benefit from the products offered by the financial company, and the easier it is for consumers to trust online financial companies (Xiangmei & Jinghua, 2010; Wu et al , 2011). On the other hand, due to suitability and risk avoidance, consumers always tend to choose products that attract more attention. Many studies show that reviews reflect the popularity of a financial product and have a significant positive impact on its usefulness, trust and transaction intention from online reviews (Onyang et al, 2019; Zongwei at al, 2017).

In the context of online financial transactions, consumers can only evaluate product descriptions and comments and ultimately decide whether to accept it. However, the product description only provides basic information such as the form and amount of credit offered. For consumers, just looking at the product description does not necessarily make a decision. At this point, reviews become additional information, providing a reference for consumers.

Online financial companies show different features, different angles, and different views and images are used to complement their detailed description of the product, which undoubtedly provides consumers with a large amount of additional information for reference. When consumers conduct financial transactions with different sources, there is less information between different brands, and they focus more on whether the appearance of the product is reasonable and profitable, whether the time and place of purchase are convenient, and the time since purchase, the motivation for the purchase decision is short . However, compared to complex purchasing behavior, consumers are more likely to regret financial products that do not meet their expectations.

To pursue psychological balance, consumers begin to look for profitable information to carry out transactions on the financial products they have purchased. For this kind of purchasing behavior, fake reviews often go through many channels to carry out business activities, and sales behavior in the process provides useful information for the company and product, so that consumers believe that their purchasing decision is correct, resulting in psychological support.

2. The impact of fake news in marketing

Despite all efforts, fake news persists. Fake news is becoming a business and marketing problem (Di Domenico et al., 2021). The relationship between marketing and fake news is how marketing practitioners might use fake news and how fake news affects marketing. In recent years, fake news has had a major impact on advertising and marketing efforts (Kwon et al., 2019). Sometimes, it can be difficult to differentiate between marketing communications and fake news. As Seen In the case of fake news persuasive information, promotional materials disguised as up-to-date information intend to mislead the audience or to gain some benefit. The main problem of fake news for marketing is how misinformation harms brands directly or indirectly. For example, problems arise when online algorithms pop up brand advertisements on pages related to fake news. Consumers evaluate brands based on the pages their ads are available on, and this poses a threat to brand image and integrity (Mills et al., 2019). Marketing managers must be familiar with the different types of fake news and know their characteristics to counter their negative impact. This takes business ethics into consideration and a marketer must think about what the personal ethics would be in that situation.

3. Impact of fake news on Lost Business Opportunities

The power of “fake reviews” alone cannot guarantee that a company can occupy market share for a long time. Even if a company can change spokespeople or hire more spokespeople, funding, energy and communication are all problems especially the loss of credibility. Once the level of trust in the platform decreases, comments are not a desirable standard of measurement and the operating profits that companies gain with fake comments cannot be guaranteed. Loss of company credibility can lead to loss of business opportunities or even partnerships, thereby affecting business growth and profits. Therefore, it is not advisable to rely on lies to gain long-term profits, while the company's short-term profits are only temporary. When consumers feel cheated, they will stop buying and tend to give bad reviews emotionally (Cao, 2023).

CONCLUSION

Fake reviews have potentially devastating consequences for businesses maintaining digital systems, especially FinTechs. For new companies the increased costs of fighting fake reviews can impact their bottom line and raise uncomfortable questions during funding rounds, possibly resulting in fewer investors and lower overall investment. There are three negative impacts of fake reviews, namely first, consumer decision making in choosing a financial product scheme is not optimal. This is because decision makers are limited by information sources and time in the decision making process, and it is impossible to find all the schemes. Fake reviews mislead customers, which is unethical and can cause harm in many ways. Second, the main problem of fake news for marketing is how misinformation harms brands directly or indirectly. Consumers evaluate brands based on the pages their ads are available on, and this poses a threat to brand image and integrity. Marketing managers must be familiar with various types of fake news and know their characteristics to combat their negative impacts. Third, lost business opportunities are caused by the loss of company credibility, thereby affecting growth and profits. Because relying on lies to gain long-term profits, while the company's short-term profits are only temporary. Meanwhile, the positive impact of consumers can save decision-making time before the transaction and they achieve psychological balance when consumers ask for approval after purchasing.

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