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Review Article

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# Evaluating Social Media User Trade-Off Between Free Platform use and Privacy Concerns of AI-Powered Targeted Advertising

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#### ABSTRACT

In today's digital environment, social media platforms offer many free services, which have become an integral part of daily life. This study aims to explore the social perspectives that the use of social media holds within the trade-off between the benefits of using it and the privacy concerns that result from integrating AI into data management. The quick development of AI technology has altered the way social media companies manage, examine, and make use of user data. With tailored information and targeted advertisements, artificial intelligence (AI) improves the user experience, but it also poses potential privacy issues. This study aims to investigate the awareness of social media users' privacy concerns and consequences, as consumers become aware of how AI algorithms track their online behavior, forecast their preferences and learn about how their data is utilized. To achieve this, we will survey internet privacy experts who have relevant knowledge related to current social media activities and trends in their domain. The survey measures their understanding of their clients' awareness of social media and privacy, including their perceived effect of AI technology. The complex interactions between these variables reveal that users appreciate the benefits of free services, however, their growing awareness of data usage practices consumed by AI algorithm adoption increases privacy concerns. This study will provide valuable insights for social media platforms, policymakers, and users, to balance technology benefits while addressing social media user privacy concerns.

**Keywords:** Privacy Concerns, Social Media, Artificial Intelligence, Data Usage, Social Media User Perspectives

#### Introduction

# Research Problem and Scope

Social media platforms are now a necessity in the digital age with many providing services for free [1]. According to Pelletier et al. these platforms attract users by virtue of their easily accessible and rich functionality like communication tools, social networks, and filtered content. However, Saura et al., demonstrate that this free service use has large privacy concerns, especially, as increased platforms employ Artificial intelligence (AI) to control and monetize user data.

Social media platforms gather massive amounts of personal information to serve the user better by providing ads and other content relevant to them [2]. Such data helps AI algorithms to forecast the customers' preferences to enhance their interactions and increase the advertising revenues [3]. Although these

enhancements have made digital communications more relevant and efficient, Quach et al. indicate that the privacy threat has also been amplified. Presently, consumers benefit from free services while being aware of the possible consequences tied to comprehensive data gathering and advanced data processing performed by AI platforms [4].

Specifically, this research will seek to identify the following factors on how users of this medium assess the trade-off: Their perceived privacy concerning the application of AI to manage their data. As such, this research aims at understanding the dynamics of user decision making in the free social media services by assessing their attitude towards privacy as well as the level of awareness concerning AI development. The objectives of this study will therefore involve exploring the level of these users' knowledge on AI technologies, their privacy and reactions towards them and the effects of these factors on their Social Media use. Collectively, these dynamics are helpful to couching interventions that are necessary to help build out the benefits of

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free digital services with the imperatives of defending privacy. This research study will present findings that will benefit the social media platforms, policies for this platform, and users in general from the outcomes of current and potential social media privacy violation.

#### **Motivation Behind the Research**

Thuse of artificial intelligence (AI) in social media has transformed user experiences through personalization and optimization of advertisement placements [5]. Nevertheless, this has led to enhance the level of privacy with the user often being unaware of the extent of the information collected and its ramifications [6]. It is advisable to overcome it since the users are faced with the problem of having to use free services and at the same time protect their privacy. This research is informed by the observation of competing interests regarding AI and particularly the ability of the users to understand where the AI is positioned in the management of data. The research insights will propose to shed light on the behaviors that will encourage the companies to be more transparent and consequently improve the privacy measures to enable users to be more conscious when choosing how and when to engage online.

### **Potential Contributions of the Proposed Research**

This study therefore provides vital information on how the users of social media balance between the advantages of free application and their privacy in the handling of data with the use of AI. The study will reveal the current state of privacy practices and the level of user knowledge of AI technologies through a user perspective analysis. It will enable the social media companies to create clear and efficient privacy policies hence increase users trust and satisfaction. Secondarily, the results will be informative for lawmakers when establishing fair rules that will sufficiently safeguard user data without undermining the benefits of open free-spirited digital platforms. In general, it will help in expanding the knowledge of privacy concerns in the digital world and will aid in developing better and safer contexts within cyberspace.

# **Research Questions**

- 1). What percentage of social media users in your domain consider privacy concerns when using free platforms?
- 2). Among those who are concerned about privacy when using free social media platforms, do they evaluate the risks associated with AI-driven activities on those platforms?
- 3). Among those who are concerned about AI's effect on privacy when using free social media platforms, what are their primary privacy concerns?

#### Literature Review

This literature review focuses on the social media content sharing and privacy issues tied to it especially in the milieu of AI enabled targeted advertising. The social media sites provide free services which keeps the users active but at the same time it collects large amount of data and uses intelligence technology to control users' activities. The review starts with an exploration of the various free features and services obtainable on social media platforms that entice users and then evaluates the conditions of the benefits against the privacy of the users. It then proceeds to discuss the effects of the proliferation of AI technologies on data handling and ownership together with how advances in the

technological front of AI shape the perception and attitude of users to privacy. Lastly, the review will compare the findings from the several studies, the critical discussion of the gaps in the existing literature, and the avenue for the future research directions for filling these gaps.

# **Examining the Trade-off Between Free Platform Use and Privacy Concerns**

### Overview of Free Services on Social Media Platforms

Today, the provision of social media services has been incredibly significant in fulfilling communication needs with different services being offered to users for free. Such platforms rely on a business model whereby user data becomes the major commodity, which allows for offering such services as networking, messaging, and sharing content for free [7]. The question of whether the positive features of such free services are worth sacrificing user's privacy is one of the major questions in digital age [8]. Free services are popular because users prefer services that provide connection without costs which users must pay for [9]. Cheng et al. also point out that this model depends on user data gathering and processing to monetize through advertising and other forms of content targeting. Social media companies independently apply complex mechanisms to monitor the user's activities, inclinations, and engagements, which is rather invasive [10]. Studies reveal that although users consider the fact that they get all sorts of services for free as useful, there are emerging concerns over data collection and its privacy consequences [11,8]. Distler et al. have noted that users are getting increasingly concerned about the convenience of the free platforms for sharing their personal data versus the potential data misuse. This growing concern is in line with what Ayaburi & Treku observed while writing that users have low trust with the social media platforms mainly due to privacy concerns.

# Privacy and the Benefits of Free Services Trade-offs

Social networks offer users networking, communication, and sharing services that are valued by a broad audience and available for free [12,4]. However, free access entails certain costs, especially in the regard to privacy. The main cost-benefit relation relates to the surrender of personal data to endorse these platforms [13]. Social media platforms have access to a massive amount of information from users in terms of their behavior, likes and shares, and communication patterns to profit from advertisements and users' interests [10]. This data collection is a critical component of their business strategy, but it directly threatens users' privacy [4].

Most users of free services focus on attributes such as convenience and connectivity while being oblivious of the perceived privacy threats [14]. People like the incorporation of social media networks into their day-to-day lives but may be unaware of how their data is being gathered and utilized. As Story and others (2021) note, although users are cognizant of some privacy threats, the extent of the consequences of data collection may be underestimated. A few works have emphasized that the choice between using free services and being concerned about privacy threats is one of the main drivers of user behavior [15,16]. Jozani et al. also cited that when users develop awareness on the collection of their data, their privacy concerns are also raised hence affects their usage of such social media platforms. This tradeoff encapsulates the essence of freedom in free digital services that users enjoy in return for

agreeing to relinquish their privacy in other words this trade-off shapes people's interactions online.

# The Impact of AI on User Data Management and Privacy

AI changed user data in social media platforms significantly and gave the ability to platforms to analyze large amount of data and create unique and more precise user experience and ads [17]. With the use of AI algorithms, the user engagement and interaction data are collected and analyzed in order create personalized content and ads and increase traffic and click-through rates [6]. This, however, raises serious privacy concerns due to the easy access to information using these devices and technology. AI effective capabilities in logging and monitoring user behavior are also issues with data gathering and privacy [18]. Social media apps employ artificial intelligence algorithms to develop elaborate user profiles for the purposes of advertisement [19]. This fine-grained data allows constant scrutiny and analysis of users' personal data, and often their control over it is limited [19]. Büchi et al. note that AI algorithms obtain data from various sources without the user's permission, compromising their data's privacy and security. Uniquely, AI user distrust is driven by additional layers of opaqueness since these make privacy issues worse [20]. As Jyothi et al. suggested in 2024, boosting people's privacy, and regulating their advanced personalization with the help of AI technologies are connecting points.

# Perceptions of Privacy Concerns Users' Awareness of Data Gathering, Storage, and Use

Users' perceived level of understanding of the data collection, storage, and use of social media is an important determinant of privacy concerns. Many studies emphasize that people do become more aware of the data collection process, but their knowledge is often limited and precise in terms of scopes [21]. Saura et al. observed that users are mostly aware of how their activities and preferences are being observed by social media companies. However, this awareness often does not include the scope of data collection and storage process. Ribeiro-Navarrete et al. also points out that although users remain aware of data collection exercises, they are almost oblivious of how data collected across the platforms are consolidated and the consequences arising from such data conglomerations. In support of this point of view, Tenopir et al. mention that users are informed about the existence of the collection but do not realize the extent of data storage and the possible dangers of such a practice.

On the other hand, Andrus et al., identified that the users with a higher technical knowledge of data practice bit of a complex understanding of the data collection processes. Albeit counterintuitive, their study suggests that these users are more likely to appreciate the pitfalls and drawbacks linked with the capacity issue of large storages and their privacy consequences. Chua et al., affirm this by indicating that users who are well informed on data handling gain better perception with regards to data security and privacy. However, Shahid et al., point of view that even with the existing awareness, many individuals still do not possess a broad understanding of specifics about data usage and storage, which in essence offer limited protection of individual's privacy. This is in line with Tawalbeh et al., who pointed out that while the ranking might have been accurate; there is still a significant disconnect that requires better information disclosure ad user awareness.

# Attitudes Toward Privacy and How AI Influences These Perceptions

Currently, specific concepts of users' privacy are formed based on their knowledge of AI technologies and data management systems. Cheng and Jiang demonstrated that AI complexities have a significant effect on users' perception of privacy when it comes to processing social media data. Gao et al. noted that as the use of AI technologies increases the level of personalization of the content or ad, users again have increased privacy concerns. The ability of AI to trim and use extensive user data for marketing may cause a feel of overly intrusive data practices based on user's conviction, that their information is closely watched [22]. This increased concern is in line with Puntoni et al.,'s research that established that people with higher awareness of the effectiveness of AI terms consider these practices as invasive.

On the other hand, Willems et al. found out that other users believe that the advantage of being provided with relevant content on the internet and relevant advertisements outweigh the negative impacts of privacy invasion. The scholars note that such users may prefer the convenience that AI offers and the customized experiences that come with it over fear of privacy invasion. This is in contrast with Zhu et al. where they note that while users consider benefits associated with AI systems essential, opacity of the AI systems' functioning fuels users' concern about data exploitation. In addition, Lobera et al. also shows that participants' attitudes to privacy depend on the amount of knowledge about AI systems. Interestingly, higher awareness of AI technology relates to stronger privacy concern; this is maybe because they are more knowledgeable of the threat of data misuse [23]. Besides, AI improves user experience through personalization while at the same time creating profound privacy concerns. The analyzed users' attitudes show the balance between the positive perception of AI and the concerns regarding data protection that must be addressed with enhanced transparency and privacy measures.

# Free Social Media Platform Use Features and Services Offered for Free

Social networks have millions of users due to the variety of available features and services free of charge and are successfully applied in the contemporary digital world. According to Pelletier et al., such platforms offer its users numerous opportunities such as content generation and sharing; connecting with other people and possessing the ability to use messaging and calls options. The ordinary users can post updates, upload, share multimedia files and interact with the entire world with the said social networks without any expense. The temptation with such free services is huge. Current sites such as Facebook, Instagram, and Twitter allow platform users to have an excellent social interaction feature, such as video calling among platform users.

Some of the straightforward features that are found on Facebook consist of events creation, creating the marketplace, and social related groups among others, and all these for free [4]. Likewise, Instagram's photo and video sharing features coupled with additional features that consist of stories and reels are free of cost [24]. These features help in gaining and maintaining a greater number of users frequently on the site.

However, the delivery of all these free services is anchored on some form of revenue structure whose primary sources are the users. The major source of revenue for social media firms is advertising, particularly targeted advertising owing to the vast user information and user behaviors that platforms gather [4]. According to the business model identified by Evan et al., they offer free services, and, in the process, they stand to benefit from advertisers willing to target certain groups. Therefore, behind the abundance of the 'free' services, there are pros and cons. Quach et al. argue that though it affords users meaningful tools and avenues for interconnectedness as well as content sharing, the very setup generates important questions concerning the opportunities and costs associated with the service, especially those to do with data privacy and the commodification of personal information. This dynamic provides the basis of this paper to further analyze the privacy issues that surround the consumption of free social media services.

# User Engagement with Free Services and Perceived Value

Consumers' interaction with the free offerings on the social stage is in proportion with perceived service utility. Lack of monetary cost for subscribing the services leads to high usage of services since the user get benefit from freely available features without spending a dime [25]. This engagement is due to the capacity of the platforms to offer numerous services that people get involved in including social networking, content development and entertainment [25]. Findings by Mäntymäki et al. suggest that users gain many benefits from the consumption of free services such as opportunity to communicate with people, get access to various content, and engaging in the activities of the community. To this, additional aspects of the perceived value such as personalized content curation, as well as selected recommendation lists can be added [26]. It also increases the level of user satisfaction and interest as users are interested with what is related to them.

Nonetheless as Eggers et al. state, there is much an appeal to unlimited services, many users are beginning to realize the costs, especially in terms of user privacy. When users start interacting with these services, they may inadvertently begin to familiarize themselves with other potential costs involved in data gathering as a way of providing targeted advertisements this affects the perception of value among users [27]. Jozani et al. show not only this concern but also demonstrate that the convenience and the availability of numerous free services explain still high user engagement, which demonstrates that there is a rather delicate and still undecided relationship between perceived utility and privacy risks. Similarly, Hamari et al., points out that there are two dimensions of perceived usefulness in social media platforms the scope of functions and freedom from cost in terms of monetary value. However, this engagement is increasingly filtered by concerning the privacy concerns and opportunities that come with the use of data.

# Awareness of AI Advancements Users' Understanding of AI Technologies

The level of knowledge of the AI technologies by the users plays a significant role in the way they engage with the social media platforms and privacy. Machine learning algorithms and other tools are quite an essential constituent of how social media operates especially in terms of recommending content and

advertisements [3]. Despite the increased use of the technology, the understanding of AI among the users is still limited in many aspects. Shin shows that users have a rudimentary understanding of AI, in that they know that algorithms affect the content they encounter, although they may not have an elaborate understanding of how these technologies work. The ability of AI in processing large amounts of data to forecast users' preferences and behavior is not always understood [28]. According to Longo et al., a study on users' knowledge revealed that while users can grasp the concept of AI, they are unfamiliar with its uses and the level of data handling performed.

Schwartz et al. recognize that even those of the users with slightly improved understanding of AI's nature are still uncertain about the different forms of data, collecting, storing, and using. According to Heger et al, similar findings were observed in a similar study carried out where this limited understanding results in poor decisions on privacy settings and sharing of the data. Additionally, like most issues that relate to AI and technology, Indrawan et al. argues that for normal users who do not have adequate knowledge of AI, then it could be difficult to scrutinize the ramifications of individualized AI tailored marketing. Users do know that AI technologies are involved in social media platforms, but they lack the understanding of the details of AI as well as its effects on data processing, hence, cannot grasp the privacies involved fully.

### **How Awareness of AI Affects Privacy Concerns**

Understanding of AI technology affects users' perception of privacy relating to data sharing on social media [29]. However, as users become more informed of AI's data processing, their privacy concern increases [30]. In their study, Araujo et al. showed that awareness of AI usage in general results to higher data risk perception; this is attributed to the knowledge of how AI use data for tracking and advertising. Further, Leschanowsky et al. positively support the idea that the awareness relationship warrants privacy apprehension. However, according to Cloarec et al. awareness also foster control, which involves using the privacy features to address the issues [31]. However, Jozani et al. and Pavone et al. notice that users always face the problem of privacy in exchange for more personalized content, noting that the AI frustrates them. Finally, as with increased security awareness and AI visibility, it creates positive attitudes towards data protection [32].

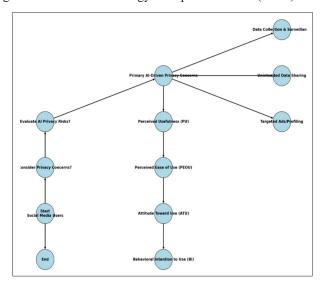
# Proposed Research Methodology Technology Acceptance Model (TAM)

The flowchart below explains the Technology Acceptance Model (TAM) that took into consideration the research questions associated with social media users' privacy concerns in the AI area. The flowchart starts from a node labeled "Start Social Media Users" and splits into two branches on the users measuring privacy concerns while using free social media services. If users do not consider privacy concerns, then the flow ends. But for users who consider privacy, a flow goes to the next node labelled "Evaluate AI Privacy Risks?"

If users do evaluate AI privacy risks, then they proceed to answer the "Primary AI-Driven Privacy Concerns" questions. Some concerns are identified through targeted advertising and social media. "Data Collection & Surveillance," "Unintended Data

Sharing," and "Profiting from Personal Data." comports with AI targeting algorithms designed to maintain purpose compliance of the users if not alter their behavior. The concerns then lead to existing TAM constructs: Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Attitude Toward Use (ATU), which all determine Behavior Intention to Use (BI). This flowchart has been designed to demonstrate how AI privacy concerns impact the experience and decision-making of the users in adopting or continuing to use the social media platforms.

Figure 1 below is Technology Acceptance Model (TAM)



#### **Research Method**

Research methods refer to tactics, procedures, or techniques used in the gathering of data or evidence for analysis to find new knowledge or develop a deeper comprehension of a subject. Research methods could also be referred to techniques for gathering and examining data. Creating the research methodology is a crucial component of this study plan. Two elements influenced the decision on the research methods considered for this study. The first element is the means of collecting data and the second element is how to analyze the collected data to make inferences that foster the achievement of the study objectives. Determining the research method is an important step of the research design.

This study employs the Delphi research method while narrowing down to the collection of primary data in a more structured way to gather opinions from people with experts. The survey must be done and analyzed in accordance with the Delphi research methodology. The Delphi research entails using techniques like questionnaires to get feedback from the team of experts on internet privacy. All the responses from experts will help to get more collective judgment later than just individual opinions.

# **Population and Sampling**

The population or target population in a research study is the group of the group of participants. The people or things with qualities that are interesting and need to be investigated for a research study are the target population, also known as the research population. Another way to think of the group of people who require study is the target population. Finding the intended population's accessibility is a necessary step in doing research. Accessibility makes it more difficult to conduct population-

based research and get definitive results. Time and resource limitations may make studying the entire population unfeasible. Besides, research bias and human error could lead to erroneous results from analyzing the complete population. Consequently, sampling is a workable way to get a figure that is representative of the greater research population. In exploring the population as a research element, several terms come into mind. These terms include the population, target population and accessible population.

Banerjee and Chaudhury define population as an entire group from which certain information needs to be ascertained. The population of interest in this study are the internet privacy experts and it would an added value if they have been using social media platforms of choice to meet their needs and have privacy concerns. However, they are many internet privacy experts globally, making it impossible to study the population in its entirety due to time and resources constraint, and the element of human error and research bias which could influence the findings. As such, target population should be the next point of focus. According to Fetzer, the target population comprises all elements which meets the sampling criteria. The sampling criteria denotes the requirements that individual members of the accessible population need to meet for inclusion in the study sample. The impossibility of using all the internet privacy experts helps reduce the entire population. However, the geographical, and accessibility constraints also reduce the population of focus, narrowing down to the accessible population. Thaker define accessible population as the subset of the target population that the researcher could easily contact and access in undertaking the research processes such as data collection.

Sampling is necessary since the intended audience may be dispersed geographically and challenging to reach. To obtain conclusions that could be applied to the complete research group, sampling entails obtaining a portion of the target population. Sampling is necessary to ensure practical data gathering and analysis, as well as manageability and cost-effectiveness. To streamline the research process, a specific number of elements are selected from the study population by statistical analysis, a process known as sampling. To extrapolate and confirm the results to the full population, sampling also entails choosing a subset of the population. Latpate et al. emphasize that sampling theory include techniques for selecting a sample from either an infinite or finite study population. The result is the derivation of estimations that are essential to the accomplishment of the study's goals. Techniques for probability or non-probability sampling are both possible. This study considers the nonprobabilistic sampling method. While probability sampling provides each member of the target population with a known and nonzero chance of selection, non-probability sampling does not [33]. The population's members are not given an equal chance of being chosen to comprise the study sample when using the non-probability sampling approach. This study opts for a nonprobabilistic sampling technique.

A sample is a comparatively smaller subset of the study population that is chosen to look into the phenomenon under study. A sample, according to Etikan et al., is a portion of the population. As intended by the study, the sample captures the traits of the target population. To enable the generalization of

the sample's results to the complete research population, the sample size in this study must accurately reflect the population. Sampling is the process of drawing a desired sample from the accessible population. Numerous factors impacted the choice of the most appropriate sampling technique. The first concerned money and timing. The research must be completed within a strict budget and a constrained timeline due to the student's budget and other study obligations. The article also discusses the necessity of figuring out the absolute sample size in relation to the total study population. The variance of the population also depends on one's interests; a highly varied population calls for a bigger sample size than one with a less varied population. The purposive sampling would be the non-probabilistic sampling method adopted to determine the impact of machine learningdriven advertising on the privacy rights and concerns of social media users, as emerging on all social media platforms.

Purposive sampling method involves the reliance on the researcher's in selecting the appropriate sample from the accessible population. The researcher considered the goal of the study and the intended research population when choosing this sampling strategy. According to Valerio et al., purposive sampling makes it possible to choose a sampling frame that is most affected by a certain research question. This method entails selecting a sampling frame based on attributes or variables that are relevant to the inquiry. Purposive sampling is frequently chosen by researchers that need to follow a study procedure through a group of participants who were chosen based on predetermined criteria [34]. Purposive sampling, also known as judgmental or purposeful sampling depends on the study's objectives, the comprehension of the study population, and the researcher's judgment. Martínez-Mesa et al. notes the utilization of the purposive sampling method when the researcher needs to capture the diverse characteristics of the accessible population and reflecting the same on the selected sample.

Purposive sampling is the technique of choice for several reasons. According to Palinkas et al., purposive sampling entails the identification and selection of people or a group of people with an adequate understanding of the research phenomenon in question. When it comes to gaining access to and getting in touch with study participants, this method is comparatively simpler than other techniques. Using this method, the researchers first determine a list of people needed to interview before doing any study. However, it would be crucial to get in touch with and persuade study participants to dedicate time to taking part in the data collection procedure. Purposive sampling also involves the researcher's intentional participants of choice due to the quality of participants needed to achieve the study objectives.

Participants would include internet privacy experts (approximately 10 active CISO professionals), who have relevant knowledge related to current social media activities and trends in their domain. The survey measures their understanding of their clients' awareness of social media and privacy, including/especially their perceived effect of AI technology. The rationale of this criteria is that only participants with the right skill set would know the scale of internet privacy concerns on how social media users' online searches and discussions influenced user profiling and targeted advertising. A sample of

10 participants would be required for the study. The researcher would communicate with the potential participants seeking their involvement in the study while promising the upholding of ethical practices associated with human test subjects.

#### **Data Collection**

Data collection refers to the act of gathering and analysing information in a planned and methodical way to help answer the research question and accomplish the goals of the study. Data gathering makes it easier to obtain sufficient knowledge and expresses insights into the research subject, regardless of the research entity and query. The degree of general caution used to maintain the study's integrity determines how credible the study's conclusions are. Paradis et al. outline the importance of data collection methods since the utilization of the collected information and the generated information is dependent on the employed data collection and analytical approaches. The study aims at employing interviews as the data collection methods with questionnaires being the instrument of choice. Jamshed state that interviewing is the most common data collection technique in qualitative research. A qualitative interview is a framework with the recording of practices and standards. Interviews as the data collection technique have been considered as it best meets the study objectives by striving for the description of human experiences as playing out in people's lives. Schellini et al. outline interviews as providing a systematic and objective means of describing the study phenomena for the researcher to better understand of the data.

Interviews could be structured, unstructured and semistructured. This study considers structured interviews as the data collection technique of choice in this study. Structured questionnaires would provide the participants the freedom to extend their contribution through interview approved by IRB. To increase the response rate while considering the comfort of study participants, this study considers generating online Google forms where respondents could fill out at their discretion. Arntson and Yoon note the importance of having an interview guide to direct structured interviews while encouraging participants' perspectives on the study phenomenon. The study considers the general interview guide approach. Ogaard note that this guide allows the change or asking interview questions depending on responses provided in past questions. Google forms would be sent to determined participants followed by zoom interview undertaken during determined timeframe depending on group respondents' schedule.

# **Data Analysis**

Data analysis refers to the technique adopted to derive meaningful information from the raw data collected during the interviews and completed forms. The method of choice would be thematic analysis due to its suitability in Delphi method. Thematic analysis would involve taking a closer look at the massive data to determine repetitive patterns that would narrow down to themes and sub-themes relevant to the study in question. According to Anderson et al., thematic analysis is a qualitative research method associated with the identification, grouping, analysis, and description of patterns/themes emerging in a dataset. Determined patterns would then be consolidated to form themes relevant to the study objectives and re. Roberts

et al. defined thematic analysis as a clear way of undertaking hermeneutic data analysis from other analysis derived from nonnumerical data.

Understanding material is through the study of the parts, which cannot be understood if differentiated from the whole [35]. In this study, the interviews would facilitate the formulation of themes and codes. A demographic table will be included in the analysis. The different codes, depending on their relationship to each other would be combined to from themes. A tabulation would be completed highlighting the identified codes, their respective themes, and the frequency.

#### **Ethical Considerations**

As a result of involving human test subjects, this study purposes to embrace ethical considerations that ensure the dignified treatment of research participants, eliminating possibility of harm and taking requisite precautions when unforeseen negative circumstances arise. This study considers upholding the following ethical principles. The research will be approved by the University of Bridgeport IRB before commencement [36-40].

- Confidentiality. The study participants would be assured of
  the researcher's resolve to uphold confidentiality. It would
  not be necessary for responders to provide their true names.
  The respondents would be identified by pseudonyms created
  by their first letter of their second name. An encryption key
  would be used to secure the data that was recorded and
  kept on a portable device only accessible by the researcher.
  Participants would not be required to provide any identifying
  information Characteristically, the collected data would only
  be used for research purposes and safely discarded after the
  study's completion. Unauthorized individuals would not be
  allowed to access research materials [41-45].
- 2. Right to withdraw from the study. The respondents bear the freedom to leave the study whenever they see fit, and doing so will not result in any consequences. This information would be communicated to the respondents prior to the study. When a respondent wants to stop participating in the study, they should let the researcher know. To enable changes that could enhance the research procedure, the respondents could provide the research team with the explanations for their withdrawal from the study. Nevertheless, giving these explanations is entirely optional. The data submitted by participants who have opted out of the study will be considered for drawing conclusions [46-50].
- 3. Informed consent. Participants need to be adequately briefed on their role in the study. This idea entails explaining to research participants their part in the study and emphasizing important findings. By giving them this information, the respondents will be free to choose whether to take part in the study. According to Vyas et al., a participant actively indicates their readiness to engage in a study after considering the trial's characteristics. Once they have read and understood terms and conditions of the research process, respondents would need to sign informed permission forms. Signed informed consent is proof that the respondents have received the research materials and have agreed to participate in the study (Vyas et al. 2020). It would be important to obtain an oral and written informed consent [51-55].
- 4. Voluntary participation. The study's involvement is entirely

- optional, and participants will not be any way forced to contribute to the research process. The research subjects would not receive any financial incentives or be subjected to coercion in exchange for their participation. Each participant would get a document outlining the rules and the respondent's responsibility in the research. As such, involvement would be purely on a voluntary basis [56-60].
- 5. Reducing the risk of harm. The researcher aims at in the best way possible reduce the occasional of physical or emotional harm that could be imposed on study participants due to any research process. The researcher would avoid in any way possible occurrences that could result in job losses or compromised physical and psychological wellbeing [61-65].

#### Conclusion

#### **Gap Identification**

The research gap is to determine the level of awareness of the user target population with respect to free social media usage versus potential privacy concerns. The provision of services on social networks is often accompanied by no payment [66-70]. Social media users give up rights to their personal data usage for these free services. It is essential to resolve the issue of the limitations of user understanding as to what the consequences of user data distribution are. Striving to fill this gap is vital in understanding what users think, know, and what processes they undergo in their minds when they freely or partly give up their privacy for the sake of ease of use, especially considering today's trends in the development of AI and data caching [71-75].

### **Future Research**

This study should be conducted with a view of investigating how much users understand the trade-offs of sharing information about themselves in exchange for free services provided on social media using the qualitative Delphi surveying. More specifically, it is important to understand why users may agree to compromise their privacy, whether this is a voluntary act or seen as a necessity, as well as the extent to which users are aware of what this may involve, such as targeted advertising, misuse of information and abuse of the actual data. Future research can address user perception and decision-making from a more nuanced perspective enhancing the understanding of the emotions and cognitive processes behind these exchanges [76-80]. Also, in the light of the rapid progress of artificial intelligence and data caching, how such technologies affect the understanding, and the choice of the users should be explored. This study will add to the understanding of user activity and help create a more comprehensive approach to the design of ethical and user-friendly solutions in the digital environment [81-88].

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