Empirical study on Privacy Concerns, Data Sharing Intentions and Gender Differences: An analysis of User Behavior on Instagram.

Puneeth Gowda T N.

ABSTRACT: This empirical study investigates the intricate relationship between privacy concerns, data-sharing intentions, and gender differences among Instagram users. The research aims to measure the extent of privacy concerns users generally experience and how these concerns will influence the willingness of users to share data. A questionnaire was structured and administered to target Instagram active users with a sample size of 100 people, examining demographics, usage of the platform, content-sharing behavior, and privacy perceptions. The findings highlight significant privacy concerns, particularly with respect to data collection and sharing. Users’ trust in Instagram’s privacy measures, past experiences, and perceived benefits of data-sharing have come out as major factors. The regression analysis shows a positive impact of privacy concerns on data-sharing intentions, while gender differences have not exhibited any significant effect. This study gives valuable insights to digital professionals, policymakers, and marketers, stressing the critical role of privacy concerns in forming user behavior on Instagram in this digitally connected age.

Keywords - Privacy Concerns, Data-Sharing Intentions, Gender Differences, Instagram Users, Social Media Behavior, Digital Landscape, Consumer Behavior.

I. INTRODUCTION:

The marketing world has been evolving drastically from the time consumers have gained high disposable incomes, advanced technological access, many sources for accessing information related to products and services, and mainly the evolution of social media that has given immense access to information for consumers to make a well-considered decision related to their buying behavior. It is a modern world of digital landscape and social media platforms are an integral part of every individual now. From making connections, and sharing information to expressing themselves users have made social media an integral part of their lives. Among these platforms of social media, Instagram has been holding onto a prominent position with over 2.35 billion active users every month. Instagram has become a dynamic source for both social interaction and brand management, which is crucial for marketers in today’s world.

This research is based on an empirical study, where the intricate relationship between privacy concerns and data-sharing intentions is explored within the context of Instagram users. The important question that is addressed in the study is, to what extent do users of Instagram struggle with concerns about the privacy and security of their data and information, and how do these concerns shape their influence of willingness to share their data or information?

To address this major concern, this research study adopts a survey approach. this survey is designed to gain insights into users’ perspectives and behaviors. By adopting a structured questionnaire, this research study looks to examine factors like user demographics, platform usage frequency, and the nature and type of content shared.

The study has a twofold objective. First, the study aims to understand to what extent privacy is a concern among Instagram users. This includes understanding the level of anxiety the users would experience when they must contemplate the security of their data and information within the ecosystem of the platform. The second part is, that the study will explore factors that are responsible for influencing users to lean towards sharing their data. This includes factors such as trust in Instagram’s privacy measures, users’ prior experiences with sharing data or information, and the benefits attached to sharing.

Furthermore, this study examines the gender differences in privacy concerns and data-sharing behaviors. Understanding gender will help us know how it could influence these factors and provide a meaningful perspective on the behavior of users within this context. This study aims to provide valuable insights to not just academia but also to digital professionals, policymakers, and marketers. By analyzing Instagram, the study provides a focused yet representative view of social media behavior in this digitally connected age. This study aims to provide enhanced discussions on privacy concerns and data sharing in this digital era.
II. LITERATURE REVIEW:

1) This research study provides information about privacy concerns and cultural differences. It revealed that online privacy concerns decrease with having experience on the Internet, and that cultural values and other regulations have barely any effects on overall privacy concerns. The study suggests that people with similar privacy concerns might have different preferences for regulations. (Bellman et al., 2004)

2) Companies have been using customer information to make plans and products. But customers always worry when it is about sharing their personal information and they prefer them to be kept safe. Some of the bigger companies have had issues with keeping the data safe. A study which asked around 8,500 people in 6 different countries about how they all felt about sharing their data with businesses. It was found that younger people would generally give fake information and they normally try and protect their privacy more. It was also found that people are ok sharing the information if they got something good in return but they would also take actions if its found that the company data has been leaked. This showcases how important it is to maintain the responsibility and trust when it comes to people sharing information with the businesses. (Badiozaman, 2009)

3) This paper examines the loyalty programs and how the online retail impact the willingness of consumers to share their personal data. It also categorizes the consumers into many privacy groups and found out that multiple number of loyalty program enrollments have influenced strongly to some for sharing information. The significant predictor for sharing was found to be male. Age has no effect on one group. The study tells it is better to prioritize consumer commitment for specific groups. (Jai & King, 2016)

4) The privacy concern has a negative effect towards consumer attitude on the ad. However, the impact on clicking behavior reduces when accounting for demographics and control variables. Perceived relevance in Online Behavioral Activity (OBA) refers to consumers perspective of the message’s personal relevance and usefulness in the achieving of the shopping goals. Overall, privacy concerns are an important aspect in forming attitudes of consumer and behavior towards the OBA. (Kim & Huh, 2017)

5) This study looks at previous research about the online privacy and has used a framework which is known as APCO to explain the reason of why people are still using online services even when they are worried about the privacy. The authors of the study also use previous studies on things such as the sharing benefits, how others are influencing us, and the idea which states that our online presence is nothing but an extension of our image. (Lutz et al., 2018)

6) This research study looks at how users behave on the Instagram when it comes to privacy and information sharing. Previous papers have used surveys to ask users about their feelings, these questions were mostly created for them to answer on their own. The study found that 17 privacy topics that were common and added another one which is, looking at other platforms to get more information at a personal level. By looking at all these topics related to privacy together, it was understood how users feel and act about the topics. (Han et al., 2018)

7) Social media, especially the top ones such as Facebook, Twitter, and Instagram, all have major importance in society. The users has been found to be expanding rapidly but with the growing concerns that is related to security and risk of privacy. Features such as tagging and sharing pictures increase the visibility of personal information. User awareness and privacy concerns are important factors that influence data-sharing behaviors, where higher awareness leads to greater reluctance. (Paramarta et al., 2019)

8) People are worried about things like privacy on platforms like Instagram. This has resulted in people trusting these platforms less. By understanding how this lack of trust affects everything that is shared on social media we can see that if people do not trust the platform, they would not trust any messages from brands or even what the regular people post. This shows how important privacy is for users. (Appel et al., 2020)

9) The study highlights the digital technology and its capacity to engage customer with features like brand messaging and improving the efficiency of operations. It shows the need for consideration of customers and their impacts on society. The author shows successful companies like the Microsoft, Apple, Alphabet, Amazon, and Tesla as examples of how companies can take advantage of digital technology to create brand value. (Plangger et al., 2022)

10) Social media concerns over privacy refers to worries of users about how platforms will handle their personal information. It is as basic as people wanting to protect the private data and they being very cautious about whether to share or not to share it. This often results in them being hesitant to allow the platforms to collect, control or use their personal information. (Eng & Tee, 2022)

III. RESEARCH OBJECTIVES:

The study’s objective is to examine the relationship between the Data Sharing Intention (Dependent variable) and the Privacy Concerns (Independent variable) among Instagram Users. Additionally, the study aims to measure if there is any significance role of Gender by using it as a moderating variable. By measuring these variables and their relationship, the study seeks to know how privacy concerns impact the data sharing intentions of users and whether the gender has any role to play in the decision-making process.

IV. SCOPE OF THE STUDY:

The study is limited to focusing on Instagram, to offer valuable insights to digital professionals and marketers. This research focuses on analyzing privacy concerns and data-sharing intentions of users on Instagram and it also explores potential differences in gender in these behaviors.
V. LIMITATIONS:
The study’s findings are based on the self-reported survey data, which might have biases in the responses.

VI. RESEARCH METHODOLOGY
The study has employed a quantitative approach of research with empirical data to investigate the relationship between data sharing intentions and gender differences among the active Instagram users. The design of research is cross-sectional, it utilizes a structured questionnaire for collection of data.

6.1. Population:
The study has targeted sample of diverse active Instagram users. A sampling method arranged in layers will be employed to make sure of representing demographics of various age and gender. The sample size chosen for the study is 100 users.

6.2. Data Collection:
A structured questionnaire is administered through Google Forms, an online survey platform. The questionnaire consists of sections like demographics, Instagram usage behavior, data sharing intentions and privacy concerns.

6.3. Variables:
1. Dependent Variable: Data Sharing Intentions
2. Independent Variable: Privacy Concerns

6.4. Data Analysis:
The data will be analyzed using Microsoft Excel, under the Data section in Excel, the regression analysis will be used to examine the relationship between the variables.

VII. ANALYSIS:

<table>
<thead>
<tr>
<th>TABLE – 7.1: REGRESSION OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>REGRESSION STATISTICS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Multiple R</th>
<th>0.274572807</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R Square</td>
<td>0.075390226</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.056326107</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>1.106781356</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE – 7.2 ANNOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANNOVA</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>9.688397995</td>
<td>4.844198997</td>
<td>3.95461248</td>
<td>0.022335016</td>
</tr>
<tr>
<td>97</td>
<td>118.821602</td>
<td>1.224964969</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>128.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.681131</td>
<td>0.284628</td>
<td>5.906405</td>
<td>5.17E-08</td>
<td>1.116222</td>
<td>1.116222</td>
<td>2.246039</td>
</tr>
<tr>
<td>Privacy</td>
<td>0.230736</td>
<td>0.092715</td>
<td>2.488676</td>
<td>0.014526</td>
<td>0.046724</td>
<td>0.046724</td>
<td>0.414749</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.29122</td>
<td>0.225036</td>
<td>-1.29411</td>
<td>0.198702</td>
<td>-0.73786</td>
<td>-0.73786</td>
<td>0.155414</td>
</tr>
</tbody>
</table>
VIII. HYPOTHESIS

HYPOTHESIS 1 (H1):

Null Hypothesis (H0): “Privacy Concerns have no significant impact on Data Sharing Intentions among Instagram users.”
Alternative Hypothesis (H1): “Privacy Concerns significantly influence Data Sharing Intentions among Instagram users.”

Hypothesis 2 (H2):

Null Hypothesis (H0): “Gender does not moderate the relationship between Privacy Concerns and Data Sharing Intentions.”
Alternative Hypothesis (H1): “Gender moderates the relationship between Privacy Concerns and Data Sharing Intentions.”

IX. DATA INTERPRETATION:

9.1. Regression Model Fit:

The model has a weak positive relationship between the Privacy Concerns and Gender (Independent Variables) and the Data Sharing Intentions (Dependent Variable), and the model has the Multiple R value of 0.275. On an approximate level, 7.5% of the variation of Data Sharing Intentions was explained by the model (R square = 0.075), this shows that there is a limited influence of the predictors. The Adjusted R Square was of value, 0.056 which shows that the fit of the model was modest.

9.2. Model Significance:

The overall model is statistically significant (F=3.955, p=0.022), this indicates that at least one independent variable is contributing significantly to predicting Data Sharing Intentions.

9.3. Privacy Concerns:

The coefficient for the variable was 0.231 (p=0.015), which implies that for every one-unit increase in Privacy concerns, there was an estimation of increase of 0.231 units in Data Sharing Intentions, when Gender remains constant.

9.4. Gender:

The coefficient for this variable was -0.291 (p=0.199), which suggests that while assuming privacy concerns remains constant, the model was not significant statically.

9.5. Hypothesis Testing

H1: “Privacy Concerns significantly influenced Data Sharing Intentions among Instagram users (p = 0.015), providing evidence to reject the null hypothesis.”

H2: “Gender did not significantly moderate the relationship between Privacy Concerns and Data Sharing Intentions (p = 0.199), failing to provide evidence against the null hypothesis.”

X. FINDINGS:

The study provides important insights related to privacy concerns and data-sharing behaviors among the Instagram Users while also focusing on the gender differences. The demographics collected from the respondents through the survey is as follows, majority respondents were Female among the respondents and the rest were Male, the age group was falling within 18-24 years old and a few other age groups. A major portion of users have reported that they have been using the platform for more than 5 years now.

Privacy concerns were evident, mainly regarding the data collection and data sharing. Trust in the Instagram’s policies, past experiences, and user’s perceived benefits of sharing data had played major roles. Respondents reported that using third-party apps has some vulnerabilities regarding privacy and few even said that their personal information was compromised after integrating third party apps to Instagram. Few respondents reported that incidents like stalking and harassment related concerns should be taken seriously and security measures should be enhanced. The participants showed that they were aware about the privacy related prompts, highlighting that account security is important. Location privacy was important to users and they prefer to have control over it. Few respondents had deleted or deactivated their accounts due to multiple reasons, few were due to security and privacy concerns.

The regression analysis revealed a moderate positive impact of privacy concerns on data-sharing intentions. Gender had no significance on this relationship. The overall model showed significance in the statistics, and explained a modest proportion of the variation in data-sharing intentions.

Overall, this study highlights how important role the privacy concerns play in forming the user behavior on Instagram, and offers important insights for marketers, policymakers, and the platform developers.
XI. CONCLUSION:

This empirical research study highlights the relationship between privacy concerns, data-sharing intentions, and gender differences among Instagram users. Through a survey approach which is structured, this study has examined the world of user’s perspectives and behaviors.

The study has revealed that there is a significant degree of privacy concerns, which is particularly related to the data collection and sharing. The influential factors are, trust in Instagram’s privacy measures, previous experiences, and the perceived benefits of data sharing. The third-party apps have been reported as valid concerns related to privacy vulnerabilities. The regression analysis has shown a positive impact of privacy concerns on data-sharing intentions. While gender differences did not show any significant effects on this relationship. The model showed statistical significance and the modest proportion of variation was explained in data-sharing intentions.

In conclusion, this study reveals that, despite the privacy concerns, the users showed a readiness to share their data. This phenomenon shows the interplay between user anxiety and their inherent motivation to engage with the Instagram. This shows that users are ready to share data even with the privacy concerns when there are perceived benefits attached to it including other factors like user experience and trust.

Overall, the study has showed the importance of the privacy concerns and has given good insights for marketers, policy makers and digital professionals to consider these factors to make the platform user-centric and reduce the concerns related to privacy by addressing them.

REFERENCES