Shashwat Mishra and Joonas Uusi-Autti

Security and privacy issues with call applications and browsers

Course: Security and privacy economics

December 9, 2021

Author: Shashwat Mishra and Joonas Uusi-Autti

Contact information: ge58tid@mytum.de, ge58wun@mytum.de

Supervisor: Tibor Posa

Title: Security and privacy issues with call applications and browsers

Project: Course: Security and privacy economics

Page count: 10+0

Abstract: Small research in the field of security and privacy concerning video conference

applications

Keywords: literature review, security, privacy, survey, video conference applications

Contents

1	INTRODUCTION	1
2	RESEARCH AIM AND QUESTION	2
3	LITERATURE REVIEW. 3.1 Privacy of video conference applications 3.2 Security.	3
4	SURVEY	4
5	RESULTS	5
	DISCUSSION	
BIBI	JOGRAPHY	7

1 Introduction

After the COVID-19 pandemic hit hard all over the world, video conference applications (VCA) usage has been increasing a lot in education and work environments and every user is not familiar with applications and their features (Kristóf 2020). Especially education has been affected a lot. Remote-working has been a possibility, although not very common one. Remote-learning has not been common and due to COVID-19 pandemic every student and teacher had to familiarize new techniques. And by rushing into using these applications, it is possible that very rare group of students know what else VCA's do, besides the obvious, giving an opportunity to attend classes and so on. Data collecting is happening nowadays everywhere. It is clear that e.g. Zoom collects data (Dvorak 2020), but do students know what kind of data? And are students even concerned about data collecting?

We conducted a literature review [3] and a questionnaire survey focusing on privacy issues with VCA's [4].

In the results [5] section we open up our findings and (to be continued)

In the end of the research, reader can find discussion about the results and suggestions towards the future [6].

2 Research aim and question

Research aim is to collect and analyze data are students concerned about privacy issues while using video conference applications. Data collecting is done by questionnaire survey.

Research question is Security and privacy issues with call applications and browsers?

3 Literature review

Literature review is a survey of chosen area of study. It synthesizes the information of selected area of literature, critically analyzing the information. Indications of gaps in knowledge, limitations in theories and new points of view may occur in process, which is done in scientific, organized way ("What is a literature review?" 2021).

3.1 Privacy of video conference applications

There has been a great number of articles in the past years concerning about the privacy issues with VCA's ("Using Video Conferencing Platforms for collecting data from Human Participants" 2021). It is clear for every user that these applications are collecting data from the users but the level of understanding what kind of data is collected and for what data is used for, is not as high as it probably should be.

While the Zoom application is the most used VCA there is, other video conference applications are also vulnerable to privacy issues. Every VCA has different privacy policies but they don't differ that much and basically none of these options aren't great (John 2020). And according to these three biggest companies (Zoom, Google, Microsoft) privacy policies, all of the mentioned companies can collect data when using these applications.

Although every one of these companies stated that they respect customers privacy, has Zoom for example faced investigations towards their privacy practices (Goodyear 2020).

3.2 Security

4 Survey

5 Results

- 6 Discussion
- **6.1** Suggestions

Bibliography

Dvorak, Chyelle. 2020. "What Data Does Zoom Collect?", https://www.reviews.org/internet-service/what-data-zoom-collects/.

Goodyear, Michael. 2020. "The dark side of videoconferencing: The privacy tribulations of Zoom and the fragmented state of U.S. data privacy law", https://houstonlawreview.org/article/12850.pdf.

John, Allen St. 2020. "It's Not Just Zoom. Google Meet, Microsoft Teams, and Webex Have Privacy Issues, Too.", https://www.hawaii.edu/its/wp-content/uploads/sites/2/2020/05/Google-Meet-Microsoft-Teams-Webex-Privacy-Issues-Consumer-Reports.pdf.

Kristóf, Zsolt. 2020. "International Trends of Remote Teaching Ordered in Light of the Coronavirus (COVID-19) and its Most Popular Video Conferencing Applications that Implement Communication", https://ojs.lib.unideb.hu/CEJER/article/download/7917/7236.

"Using Video Conferencing Platforms for collecting data from Human Participants". 2021, https://research.mcmaster.ca/ethics/mcmaster-research-ethics-board-mreb/videoconferencing/.

"What is a literature review?" 2021, https://www.rlf.org.uk/resources/what-is-a-literature-review/.