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# Art Institute of Chicago: Visitors' Privacy

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## ABSTRACT

The Art Institute of Chicago is a world-class art museum that receives millions of visitors every year. The museum gathers, stores, and uses data on its visitors from a multitude of places including: the museum website and online store, the museum's mobile app, and the physical museum itself. Each location uses a distinct data-collection method and involves different privacy policies which correlate to the collection method. While the museum does well to follow the basic laws surrounding user information privacy, it can stand to improve its policies and techniques to become a world-class advocate for museum visitor privacy.

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## INTRODUCTION

The Art Institute of Chicago (AIC) is a famous museum located in downtown Chicago, home to over 300,000 remarkable pieces of art. It was named the second-best museum in the world in 2016 and second largest museum in the United States. As a result of its world-class art collection, the prestigious museum receives about 1.6 million visitors a year, not including those who visit the museum digitally or the museums online and on-site store (Bertagnoli, 2018). While the exact demographics of visitors have not been released by the museum, it is a truism that people from various backgrounds, from all around the world, come and visit the museum daily.

As most businesses and organizations do in today's digital world, the museum collects data on many of its worldly visitors. According to Jingwen and Lin (2022), there are four types of data that museums most often collect including: visitor identity data, visitor interaction data, visitor activity data, and visitor feedback data. It turns out that the Art Institute of Chicago is not unlike other businesses; it collects and uses a multitude of data on its visitors from all aspects of the museum's functionality. The aim of this paper is to discuss what kinds of information AIC gathers on its visitors, how and why it does so, what this data collection means for the privacy of its visitors, and suggestions on how to improve privacy within the museum. In the context of this paper, "Privacy includes any situation and matter not meant for the public eye or to be intervened by others" (Zhu, 2011 as cited in Jingwen and Lin, 2022).

## METHODOLOGY

A case study is a form of research which uses real-life examples or circumstances to understand an idea or answer a question. There are a few different versions of case studies including: illustrative, exploratory, narrative, critical instance, prospective, program implementation, program effects, embedded, and cumulative. In the case of this inquiry, the illustrative case study method is most practical. The goal of the research is to "depict one or more circumstances of an event to explain the situation" (Epler, 2019). This method allows for researchers to take a given situation and surmise what is happening in that situation and the reason it is happening (Becker et al., 2005). For the sake of this investigation, both the reader and the researcher strive to understand the Art Institute of Chicago's privacy policies through an exploration of the museum's data collection methods, covering not only the show of the data collection but the why as well. The goal of an illustrative case study is to paint a scene for the reader, which this paper intends to do.

The issue with using an illustrative case study method to conduct research is two-fold: 1. it lacks scientific rigor and 2. the researcher's opinion and subjectivity can influence the research (McLeod, 2019). Most illustrative case studies are qualitative and lack quantitative data, which not only adds to the lack of scientificity but it also means they can also be hard to replicate. To add onto these issues, it is easy for a researcher to omit or miss key information or research due to their inherent biases of the subject at hand. The research conducted in this inquiry is founded on a wide variety of sources from varying points of views in an effort to keep a neutral position.

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## LIMITATIONS

As it was mentioned in the methodology, the case study method innately comes with its own set of limitations and faults like the researcher's bias or a lack of scientific backing. Additionally, the research compiled in this case study was done so by collecting readily-available information. The reason for this was to perceive and interpret the Art Institute's privacy policy as a regular visitor without other privileges. The research is not based on primary source interviews with AIC employees nor were AIC data officers questioned about their privacy approach or strategies.

## RESULTS

There are three places that the Art Institute of Chicago collects data from: the museum website and online store, the museum's mobile app, and the physical museum. Each location uses a distinct data-collection method and involves different privacy policies which correlate to the collection method.

According to the AIC online 'Terms' page, there are various data-collection methods implemented by the museum for visitors of the AIC website and online store. The museum uses tracking tools like cookies to collect information on online visitors, among other tracking technologies. This data includes: IP addresses, "software and hardware attributes, and location information" (Terms, n.d.). The AIC website also lists that any communications sent electronically to the museum will be considered non-confidential, even if that information includes sensitive personal data like membership or subscription details (Terms, n.d.). The information and data collected on its visitors is shared with other organizations and even sold to other businesses. However, the museum does offer visitors the option to opt-out of cookies that are used to advertise products through a NAI Consumer Opt-Out form that is found on their website. The AIC also offers visitors the option to delete any personal data that has already been collected. A data protection officer is the point of contact to exercise this option.

In addition to a website for the museum's digital collection and an online store, the Art Institute of Chicago also offers visitors a free-to-download mobile app. This app offers visitors audio tours of exhibits, musical accompaniment to art works, a digital membership card, and a map that can help you track your physical location in the museum. There is a web page dedicated to describing the functions of the app, including a separate webpage that explains the privacy policy and data collection techniques of the mobile app. The app collects information on users using Google Analytics and Firebase CrashAnalytics including "IP address, device model, operating system and version, and App version" (Mobile App Privacy Policy, n.d.). This data is stored and used by not only the museum, but third-party providers as well, including Google. The app also tracks your physical location, and this data is stored at AIC but not shared with outside parties. Users can elect to disable tracking if they wish. The app also stores the information of a digital membership card including the name and barcode number of the original member ID. The app retains this data "for as long as [users] use the App and for a reasonable time thereafter" (Mobile App Privacy Policy, n.d.). Users do not have an option of opting out of the

analytics data collection when using the app; In fact, users automatically accept and consent to these terms when they use the app.

These policies relating to online data collection and privacy policies are available for anyone to review on the AIC website. What is not explicitly listed on the website is how data is gathered on visitors who visit the museum in person. According to Lisa Bertagnoli (2018) from Chicago Business Magazine who interviewed AIC employees, the museum uses three techniques to amass data on its thousands of daily visitors, including: measuring and tracking Wi-Fi signal, using a newly developed audience analytics program, and collecting biometric information. AIC measures and tracks wi-fi usage by providing all visitors access to a free and unprotected network. When connected, the museum uses a technique termed Wi-Fi-signal triangulation which measures how long visitors spend in each exhibit. The technique also tracks what path visitors take around the museum in a similar, if not identical, method to the mobile app. The audience analytics program is a data model that was launched in 2014 to predict visitor turnout. The model uses visitor zip codes, which are provided by visitors when they purchase tickets, and 10 other “attendance models”. These models “provide a visitor baseline for all sorts of conditions, from the weather and holidays to whether there's a convention in town” (Bertagnoli, 2018). The Art Institute of Chicago hopes to expand their use of tracking software in the physical museum in the near future as it has been successful in providing data on popular and unpopular exhibits. The museum has also been accused of illegally collecting biometric data on visitors, which the museum denies on its ‘Terms’ webpage. In the class action *Jacobs v. The Art Institute of Chicago*, the plaintiff filed charges against the museum for scanning the faces and passes of visitors and students of the School of the Art Institute without their explicit consent, which is required by the Illinois Biometric Information Privacy Act (BIPA). The plaintiff allegedly had their face scanned by an AXIS facial recognition camera and had a photo taken of their ID before their visitor pass was printed (Shaak, 2021).

The museum provides a multitude of reasons for collecting personal information on its visitors. One reason is to predict attendance and calculate which exhibits will be most viewed and in demand. Another is to personalize the museum visitor experience by offering people individualized products, access, and experiences. However, the museum does little to inform their visitors of how their data is collected, used, and stored apart from the blurbs on their website. In all, big data for the Art Institute of Chicago equates to profit which is evident in the interview AIC provided to Chicago Business Magazine.

## DISCUSSIONS AND RECOMMENDATIONS

According to Kinsley and Portenoy (2015), museums are urged to start collecting and using “Big Data” to support and boost museum attendance and profits. The Art Institute of Chicago has jumped aboard that ship by utilizing multiple avenues of data collection, as has been discussed previously. While the Art Institute of Chicago does provide visitors with more privacy-protecting measurements than required by law (like the ability to remove all of their data from the museum's storage and remove tracking on the app), the museum has a distance to go before it can call itself an advocate for user information privacy. For starters, the mobile app collects data for analytics which cannot be disabled by users. To provide users with a larger sense of security, this feature should be optional and it should detail how this data

will be used because “The collection and increasingly sophisticated analysis of data relating to people, often without their explicit consent, has begun to cause deep discomfort [among users]” (Kinsley & Porenoy, 2015). It is an especially disconcerting topic because the analytics created and shared are provided by Google without the complete informed consent of users. AIC can also take ideas from the California privacy law or any international laws which require user permission to access, collect, use, or store personal data. There is also the discrepancy with the biometric incident which was a direct violation of the law and a clear misuse of resources. It is understandable, however, why the museum would want this type of information: “The museum can correlate these data with individual visitors by combining data from the membership system, ticketing system, facial recognition technology, smart tour equipment, and social media” (Jingwen & Lin, 2022). Jingwen and Lin also stated it well by describing how “Turning visitors’ personal information into scientific research data is the process of privacy sharing. If data are collected without visitors’ informed consent, their privacy is violated”. While the matter is still being battled out in court, this can cause massive repercussions for the organization. Visitors to both the museum and its affiliated schools could feel insecure and unprotected from having their personal information taken from them and stored for an unknown amount of time. It is unnerving to be unaware where this information is, how it is being used, and how well it is protected. Users should have a right to know the answer to all these questions before they are asked to divulge pieces of their personhood to organizations or businesses.

Another issue with the Art Institute's privacy policy has to do with their tracking devices. While it is not illegal (yet), the way the museum collects and stores data the visitors that it tracks can be viewed as unethical. According to Lanir et al. (2016), Kinsley and Porenoy (2015), Karimi et al. (2011), Kosmopoulos and Styliaras (2018), and Jingwen and Lin (2022), there are ways of conducting tracking experiments on visitors without having to obtain their personal information whilst also procuring relevant and useful data on exhibition attendance and usability. Kosmopoulos and Styliaras offer the solutions of: providing pseudonym profiles where information does not have to be tied to one specific user, client-side profiles for more personalization options, user controls to make the system more trustworthy, or a Bluetooth-guided system where each visitor is given a unique ID without attaching personal data to avoid a violation of the visitors’ privacy.

As a final suggestion, “Museums must formulate personal information protection policies for data storage by using data confidentiality systems and security protection technologies to de-label private data, isolate and encrypt them from internal and external networks, and clarify relevant responsible persons” (Jingwen & Lin, 2022). Museums, if they are to store visitor and user data, should do so in “proprietary formats” (Kuflik et al., 2011 as cited in Kosmopoulos & Styliaras, 2018). Lastly, data literacy should also be provided to any and all employees at the Art Institute of Chicago who work on, view, or collect the information of visitors or users. With proper training, staff can continue to improve upon the privacy of visitor data and could develop better collection, use, or storage methods.

## CONCLUSION

The Art Institute of Chicago is a world-class art museum that receives millions of eager and excited visitors every year. In its effort to improve already-great attendance and exhibit interaction, the museum has taken it upon itself to collect visitor data through a variety of methods and techniques including Wi-Fi-triangulation, cookies, tracking, and biometric scanning. While the museum's use of "Big Data" has been successful and improved attendance predictions with a 1% error rate, it has placed user privacy at the wayside. There is still time and a large number of resources to improve upon visitor information privacy policies, especially with the constant improvement and creation of museum technologies. By improving the privacy of its visitors and giving autonomy over users' data, the museum can not only become a world-class art museum, but also a world-class advocate for ethics, privacy, and ultimately freedom.

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