USER EXPERIENCE

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The Hacktivist Archive is an open access database. In keeping with the Hacktivist Archive's mandate, "committed to facilitating research," the target audiences are those individuals or organizations, with a professional, scholarly, or general interest in Anonymous, as well as hacktivist activities, cyberterrorism, cybersecurity, and International Cyber-law, etc. Thus, several interest groups have been detailed below: the media, businesses and economists, environmental and other lobby groups, human rights groups, law and policy researchers, educators, and information technology professionals and designers. Practitioners and academics from these streams might find value in the information and data retrieved from the Hacktivist Archive as sources of primary and secondary research. With the intention to neither "condone [nor] demonize the actions of Anonymous," the Archive will ideally provide un-biased information for use by these groups' various perspectives and needs. With an engaging interface, thoughtful organization, and a flexible and tailorable search processes, the Hacktivist Archive will be primed to expand its collection as its target audience grows.

PURPOSE & MOTIVATION

The following have been identified as potential users of the Hacktivist Archive: media, businesses and economists, environmental/lobby groups, human rights groups, law and policy researchers, and information technology professionals and designers, hereon in referred to as 'The Users.' The purpose of the Hacktivist Archive is to meet user needs when they are researching Anonymous Hacks and the outputs from each hack. By providing users with a well-organized archive, they will be able to find material from an individual incident, as well as incidents relating to a particular cases. Users may be motivated to utilize the archive for academic or professional research, education, and/or general interest.

The following report will reference two case studies which will serve as examples as to the reasons and ways in which "The Users" will engage with the archive.

See Appendix 'A' for the summaries of Case 1: #OpSaveTheArctic and Case 2: #OpJustice4Rehtaeh

"THE (INTEREST) GROUPS":

Media:

With respect to the media, many users are interested in Anonymous' virtual activities from an issues, ethics, and social media standpoint. Anonymous acts on behalf of victims and reacts to social concerns, which are already in or, through their actions, brought into the public consciousness. From a journalistic perspective, the ability to track and study Anonymous' actions falls within the public interest. Due to the intricacy and difficulty in tracking social media and Anonymous' sometimes illegal and controversial online activities, a Hactivist archive will be an invaluable resource for journalists in reporting on these incidents and issues.

Anonymous, as its name implies, is a nameless (for the most part) group of activists, who urge the public to action. In the real world, journalists are named, and are held accountable for their reporting. Even a journalist involved in public issues, must have documented evidence before reporting a story, or can be held publicly accountable for misinformation, which can involve criminal proceedings. The anonymous nature of the Anonymous activists means that their integrity cannot be challenged and those being shamed have no real recourse, even if innocent of the accusations. Therefore, the public should be made aware of the activities of these public activists, who work 'underground.'

Citizens today are expected to be multi-literate and interpret not just written text, but images, audio, gesture, and space for social, cultural, political, civic, and economic purposes in socially and culturally diverse contexts (Anstey and Bull, 2006). Anonymous uses a variety of social media, with a combination of images, audio, gesture and written text, which at times are juxtaposed to each other, leaving the viewer to interpret complementary or contrasted meanings. This complexity of meaning is a new emerging form of literacy and needs much more study. Also, the effectiveness of the medium, for example, a tweet versus a YouTube video, has yet to be studied in depth. Since Anonymous is at the forefront of manipulating social media for social, political, and civic purposes, it merits an archive, in which social media can effectively be studied.

Business and economy:

Anonymous, in defence of injustice, often attacks large multinational corporations either to shame key executives within the corporation to change their decisions or to force the corporation to change their way of doing business for fear of consumer reprisals. Hacks can take the form of public shaming on social media, or can be a form of online civic protest, as in the case of Anonymous applying the signatures of oil executives on an environmental petition (see Appendix A). As a result of Anonymous naming corporations publicly for wrongdoing, these corporations risk a loss in revenue, due to the expense in trying to 'repair the damage' to their public reputations or the expense in repairing their computer systems. IT specialists seek to understand Anonymous' hacking pathways in order to protect against attacks by improving weaknesses of existing software and web security systems. Thus, businesses, technology companies and economists (including economic technological facets i.e. online banking) strive to protect and promote public safety and security online. The archive's collection will help companies and economists to gauge public opinion on their company, and online security as a whole. For corporations, profit is the bottom line, and Anonymous skilfully tries to undermine powerful and influential businesses by creating consumer dissatisfaction.

Environmentalism:

Environmental groups may benefit from acts of hacktivism, though the groups are unlikely to be interested in leading or directly associating with these acts as the acts themselves are most often illegal. The Hacktivist Archives allow environmentalist groups to search for hacks that led to a benefit for the environment and/or environmental groups, as well as the information released from the hack, which may be useful to environmental groups when lobbying to protect the environment and raising awareness. The type of information leaked in past hacks, may also contribute to environmental groups being more aware of the types of information they would benefit to have for causes in the future. In addition, lobby groups whose ethics do not align with those espoused by Anonymous may find themselves targets of their actions, and may wish to learn about their actions and

views in attempt to protect against attack, or to influence policy-makers who deal with issues related to internet law.

Human Rights:

Human rights groups have a two-sided interest in hacktivists such as Anonymous. In many cases, Anonymous hackers act to turn the attention of the media, public, and the law to human rights violations. Human rights groups also advocate for freedom of expression, assembly, and association, and may work to protect Anonymous, hacktivists, and leakers. Various groups, particularly the United Nations and Amnesty International, are involved in the development of international internet law as well as global crackdowns on cyberterrorism. The Hacktivist Archives will help researchers from human rights groups cull materials for reports and policies that engage with these two issues directly related to Anonymous' activities, as well as global human rights policies on subjects Anonymous is often fighting against or advocating for. However, human rights groups have also been targets of Anonymous in the past, and may wish to learn more about their actions and how/why they might attack human rights groups.

Law & Politics:

Legal representatives and political actors have an invested interest in what is being revealed by Hacktivist groups such as Anonymous, and the legal and or political ramifications of their actions. Lawmakers are concerned with the ways in which such acts of hacktivism are violations of law. Policy makers attempt to find appropriate means of punishment, as well as to establish laws and policies to control such illegal practices. The case of Rehtaeh Parsons (see Appendix A) is an example of an incident in which law and policy makers were equally involved to protect the rights of those involved, and to readdress and reconstruct the current cyberbullying legislation in Canada. This interest group would particularly benefit from the Hacktivist Archive as a means of research, and collection of documents and cases that will serve as case precedent before the Court and before Parliament.

Education:

Due to the constant need to mediate technology, people are expected to be multi-illiterate, to interpret not just written text, but images, audio, gesture, and space for social, cultural, political, civic, and economic purposes in socially and culturally diverse contexts (Anstey and Bull, 2006). This complexity of meaning is an emerging literacy requiring further attention and study, and is increasingly becoming a vital aspect for education. Anonymous harnesses these multiple literacies for political action, and - whether for good or evil - encourages critical engagement with social issues as mediated through technology. An incident-based Anonymous archive provides information for the development of lesson plans and class discussions that promote media and information literacy, as well as the teaching of political and social issues and current events.

<u>Information Technology:</u>

Technicians and software firms are highly interested in how Anonymous uses the virtual environment for public protest. IT specialists, in both the public and private sector, seek to understand Anonymous's hacking pathways in order to better understand the strengths and weaknesses of existing software and web security systems. Although private firms wish to duplicate hacking pathways in order to merchandise new software security programs, it is in the public interest to understand these hacking pathways, as the identical hacking activity in a public web interface, like Canada Pensions, for example, is in the public interest. By understanding the weaknesses of virtual technology, the public is better able to make informed decisions about technology.

CONCLUSION:

Having identified the above main groups and their purpose and motive for accessing the Archive, particular methods of access have been determined so to address the most effective means of navigating, accessing and obtaining the said documentations. Please see 'Appendix B' for a full description of the proposed 'search methods.'

APPENDIX A

Case 1: #OpSaveTheArctic

In 2012, Anonymous published 1,000 email addresses for accounts belonging to 5 multinational oil companies (Shell Petrochemical Corp., Exxon Mobil Corporation, BP Global, and 2 Russian firms – Gazprom Corporation and Rosneft Petroleum Corp.), along with the password for the account. Anonymous then utilised these email addresses to sign Greenpeace's "Save the Arctic petition." It has been reported that this act of hacktivism against the five oil companies was a digital protest to the Arctic oil drilling.

This was the second phase of an environmental hack performed by Anonymous. The first phase in June of 2012 targeted only the Exxon Mobil Corporation. Anonymous released a few hundred user account details (email address, password and user type) and used these email address to support Greenpeace's initiative, Save the Arctic, by signing the petition with the Exxon email addresses.

In the leak on Pastebin.com, the Operation was claimed by Anonymous, and the authors documented that there was no affiliation with Greenpeace, simply that Anonymous supported the cause. In both leaks, Anonymous Operations Sweden received a ShoutOut, but there were no details as to whether or not Anonymous Operations Sweden led the hacks.

Case 2: #OpJustice4Rehtaeh

On April 14, 2013, protesters gathered to voice their outrage with respect to the suicide death of 17 year old Rehtaeh Parsons, a young adolescent who was maliciously bullied following her rape by four boys, a rape that was photographed and documented. Protesters were outraged, that the four boys involved had not been revealed, let alone discovered. Anonymous then took it upon themselves to identify the rapists. They quote: "We engaged #OpJustice4Rehtaeh in response to her suicide," Anonymous explained in a video broadcast last week. "We want the RCMP [Royal Canadian Mounted Police] to take immediate action against the individuals in question ... We do not approve of vigilante action. The names will be kept until it becomes apparent you have no intention of providing justice. Better act fast."

Holding the opinion that the RCMP were not acting with urgency on this case, Anonymous had taken it upon themselves, in and by their ways, to reveal to the public the names of these boys, an act illegal under the law due to the fact that the boys were by law young offenders whose identities were to remain private. Since, it has become the opinion of many that had it not been for the acts of Anonymous, the case against Parsons would have not received the media and legal attention that is has to this date. Although Anonymous acted outside of the law, their actions had proven to be for the good of some in this case. Anonymous has since continued to do same with regards to similar cases, including: Amanda Todd, the sexual assault at Steubenville High School in Ohio and more.

APPENDIX B

Key Search Methods:

Attack method: Information Theft; Distributed Denial of Service (DDoS); etc.

<u>Target type:</u> public sector; private sector; financial; entertainment; law enforcement; individual accused; etc.

Source: Anonymous-released material; Media; Social media

• These would link to specific materials within each incident record (i.e. a YouTube video; a news article; an Anonymous-released photo; etc.)

Case Law:

• Rather than searching by the whole incident, lawmakers may wish to search by specific case reference (i.e. Smith v. Canada).

Region: Nova Scotia, Canada; British Columbia, Canada

• but consensus on what is the important region might vary by using groups (i.e. where incident took place vs. legal jurisdiction)

Date range: M/D/Y-M/D/Y

• link to incident record(s)

<u>Keywords:</u> most likely to be words most strongly associated with the case (i.e. Rehtaeh Parsons; Amanda Todd)

• link to incident records, but might also link to specific archived material?

Operation name/Twitter hashtag: OpJustice4Rehtaeh; OpRIP; OpAntiBully

- #OpJustice4Rehtaeh; #OpRIP; #OpAntiBully
- Could have this linking to overall incident record OR to specific captured tweets
- If to overall incident record, could provide external link to twitter archive
- Operation Name linking to incident record, and have hashtag link to external twitter database

Key figures: Rehtaeh Parsons; Amanda Todd; Kody Maxon, etc.

<u>Key organizations:</u> RCMP; lobby groups searchable by name, etc.

<u>Motivation:</u> the purpose of Anonymous' actions, i.e. shaming, vigilantism, campaign support, victim solidarity

Attack Output: e-mail leak; document leak; perpetrator naming; website hack

Media type: video; photo; article; essay; legal case

Users will mainly search according to the various search options listed above. However, an advanced search option is listed in Appendix 'C'

APPENDIX C

Figure 1: Advanced Search Option



Figure 2: Chart of Multiple Access Points

