DIGITAL FOOTPRINTS

COMMUNICATION & COLLABORATION > 2.6 MANAGING DIGITAL IDENTITY

TARGET GROUP	AGE GROUP	PROFICIENCY LEVEL	FORMAT	COPYRIGHT	LANGUAGE
All, Job seekers, School drop outs	Adults, Elderly citizens, Teenagers	Level 2	Activity sheet	Creative Commons (BY-SA)	English, French

Did you know that even without the use of cookies, one’s online activity is still traceable? This is due to what is known as a digital footprint. This workshop will help participants to understand that browsers have a unique footprint that allows online services to uniquely identify us.

General Objective	Awareness building
Preparation time for facilitator	less than 1 hour
Competence area	1 - Information and data literacy
Time needed to complete activity (for learner)	0 - 1 hour
Name of author	Nothing 2hide
Support material needed for training	Computers-Smartphones or tablets-An internet connection
Resource originally created in	French

WORKSHOP DIRECTIONS

1 Introduction

Online behaviours are tracked and stored for many reasons, for example increasing ROI (return on investment) of online retail sites, knowing which kinds of articles on a site a user tends to read, or, as is often the case, for generating targeted advertising depending on your internet use habits. Trackers do not only use cookies. We will see how some sites are able, in spite of ad and cookie blockers, to track us owing to our digital footprint.

***Facilitation tips**:* You can follow this complement this with the activity 'Introduction to Cookies' as well as with a moving debate on the subjects of personal data and private life.

2 Technical criteria

To help participants to understand the meaning of a digital footprint, divide them into small groups according to any or all of the following: the specific phone or computer they will use, the size of the screen, the brand of the device and where they will connect. Go through each technical criterion which could lead to identifying users and divide the participants into groups according to these attributes. At the end of this part of the offline workshop, all participants will find themselves no longer in groups, but isolated the more these criteria are distinct and precise. For smartphones, proceed as follows:

- Ask your group which of them has an iPhone and who has an Android. Divide them into groups based on the division.
- Now subdivide into the kinds of operating systems they have (iOS9, iOS7, iOS10, Android 6, Android 7 etc.) To find the OS:
  - Android: settings -> about -> software
  - iPhone : settings -> general -> about
- Subdivide again based on the precise models of their phones:
  - iPhones: 5, 5c, 5s, 6, 7, 8, X, Xs, etc. The list of models is here.
  - Android: start with the manufacturer: Acer, Lenovo, Sony, HTC, etc. This list is here.
- Now separate one more time once the based on the exact Android model (Galaxy, Galaxy note, HTC one, etc.) Again, you will find a list on wikipedia. (You can find pretty much everything on wikipedia).

- If any ‘groups’ of more than one person remain, ask them to point out what connects them. Most in this case will be at least using the same device at home. If no one lives together, there will now only be individuals and no groups remaining.

For computers follow the same instructions with following criteria:

- Find out which OS participants are using: Windows, Mac OS or Linux
- Find which version.
  - Windows: (open the menu, settings, system, about) XP, Windows 8, Windows 10, etc.
  - Mac OS X: (click on the Apple menu at the top left of the screen then ‘About This Mac’) Leopard, Snow Leopard, Mountain Lion, Sierra, Mojave, etc.
  - Find the sizes and aspect rations of their screens (17”, 19”, 4:3, 16:9)
- Which browser
  - Mac: Safari, Firefox or Chrome -> top left -> directly to the right of Apple menu -> browser title menu -> About
  - Windows:
    - Chrome: menu to the right of the address bar at the top of the screen -> Help -> About -> About Google Chrome
    - Firefox: menu to the right of the address bar at the top of the screen -> question mark icon -> About Mozilla Firefox
    - Internet Explorer: Internet Explorer at top of screen -> question mark icon -> About Internet Explorer
    - Edge: in Windows 10 -> top right of screen -> Select and more -> Settings -> About This Application
  - Linux: same instructions as for Microsoft

- Now ask participants to list the plugins installed on their browser. If the lists are identical, separate them into several groups.
- Finally, if groups remain, ask them where they connect physically. Most who remain will be connected at the same living space. If no participants live together, there will remain only individuals and no groups.

Explain that all these technical criteria are sent to visited sites every time there is a connection. The result is that advertisers who have certain scripts installed on sites that display ads using their tools are able to track users and to identify them based on their technical parameters.

3 Amiunique.org

In the second part of the workshop, this time online, the objective is to show a site that will visualise the digital footprint of a phone or a computer. If computers and a connection are available, or if participants have smartphones (which is surely the case, otherwise this exercise would not really work), ask them to go to https://amiunique.org/ . This will tell every individual who connects what the unique nature of their footprint. This tool will also display other technical criteria not mentioned in this activity sheet (e.g. whether a user has flash, has cookie or ad blockers enabled or what local language they are using).

4 Conclusion

We should really understand that, when we use the internet, we leave a digital footprint on every site we visit. This is a little bit like how, if a thief were to rob a house and flee running through a muddy patch, they would leave footprints alerting investigators to a number of elements such as the size of their foot and the brand of their shoe. In a similar way online, some agents and tools knowing how to collect your data can use it in various ways. As explained in the Wikipedia article on digital footprint: 'Internet footprints are used by interested parties (for example, financial) for several reasons; including *cyber-vetting*, where interviewers could research applicants based on their online activities. Internet footprints are also used by law enforcement agencies, to provide information that would be unavailable otherwise due to a lack of probable cause. In addition, digital footprints are used by marketers in order to find what products a user is interested in, or to inspire ones' interest in a certain product based on similar interests. *Social networking systems* may record activities of individuals, with data becoming a *life stream*. Such usage of social media and roaming services allow digital tracing data to include individual interests, social groups, behaviours, and location. Such data is gathered from sensors within devices, and collected and analyzed without user awareness. Many social media sites, like Facebook, collect an extensive amount of information that can be used to piece together a user's personality. Information gathered from social media, such as the number of friends a user has, can predict whether or not the user has an introverted or extroverted personality.' The participants can judge for themselves whether they wish to leave digital traces or not. For those wishing to erase their digital footprint and preserve their anonymity as they use the internet, they can use a tool such as Tor which now only changes your IP address but also assigns you a generic and blank identity so that you blend into the crowd and become difficult to identify.