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@sonaarproject

SONAAR is a project funded by the European Commission under Application of web accessibility requirements in web-authoring tools and platforms by default (web access by default)

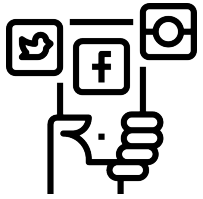
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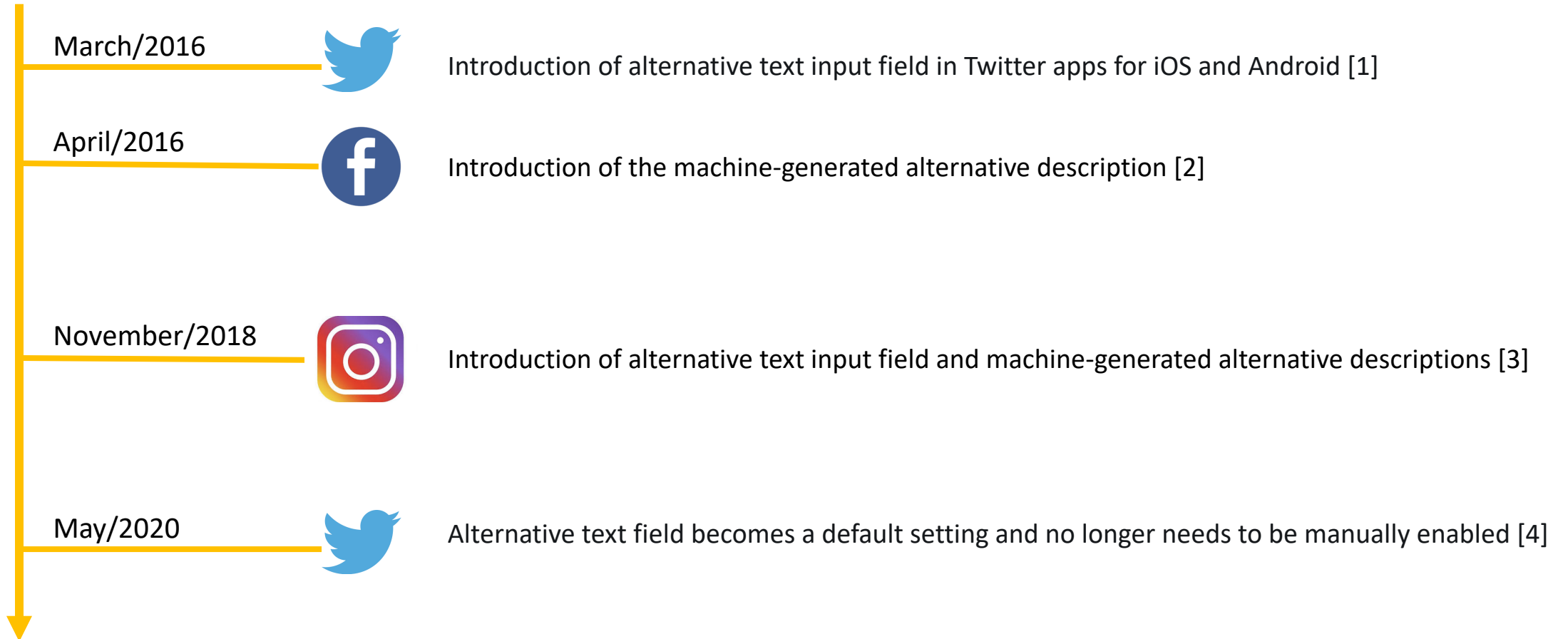
# Context - Overview



- With the proliferation of mobile devices equipped with cameras, the amount of images and videos posted online is increasing.
- Social networks enables users to create and upload their own content.
- Although their current interfaces are somewhat accessible, these platforms must ensure that the content generated by their users is also accessible.



# Context - Timeline



1. [https://blog.twitter.com/official/en\\_us/a/2016/accessible-images-for-everyone.html](https://blog.twitter.com/official/en_us/a/2016/accessible-images-for-everyone.html)
2. <https://about.fb.com/news/2016/04/using-artificial-intelligence-to-help-blind-people-see-facebook/>
3. <https://about.instagram.com/blog/announcements/improved-accessibility-through-alternative-text-support>
4. <https://twitter.com/TwitterA11y/status/1265689579371323392?s=20>



# Context - Problematic



- Problem 1: Social media users are not aware of the possibility and the benefits of creating text alternatives for their visual content – and even if they are aware, that does not mean that they know how to do it.
- Problem 2: Resharing content across platforms may result in losing text alternatives.



# Project goals

**SONAAR's overall goal is to prototype a mechanism capable of increasing the amount of accessible user-generated content available on social networks on mobile and desktop platforms**

- Obj1: Facilitate authoring of WAD (Web Accessibility Directives)-compliant content
- Obj2: Deploy user-generated accessible content on mobile and web platforms
- Obj3: Ensure an accessible content authoring process
- Obj4: Engage users in the production of accessible content



# Research questions

- RQ1: Which **barriers** do users of social network services encounter when sharing and authoring accessible media content?
- RQ2: What are the **requirements** for users of social networks to create accessible media content?
- RQ3: What are the **motivations** for users of social networks to create accessible media content?
- RQ4: How can we **motivate** users of social networks to create accessible media content?



# Research design



- Online survey

- 259 participants : 64 self-reported having a disability
- Demographic + Social media usage + Accessible practices



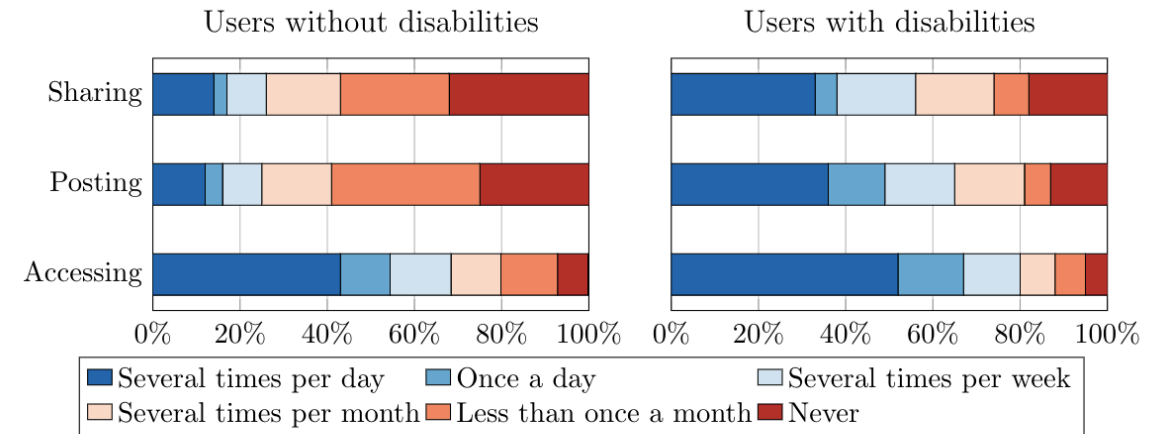
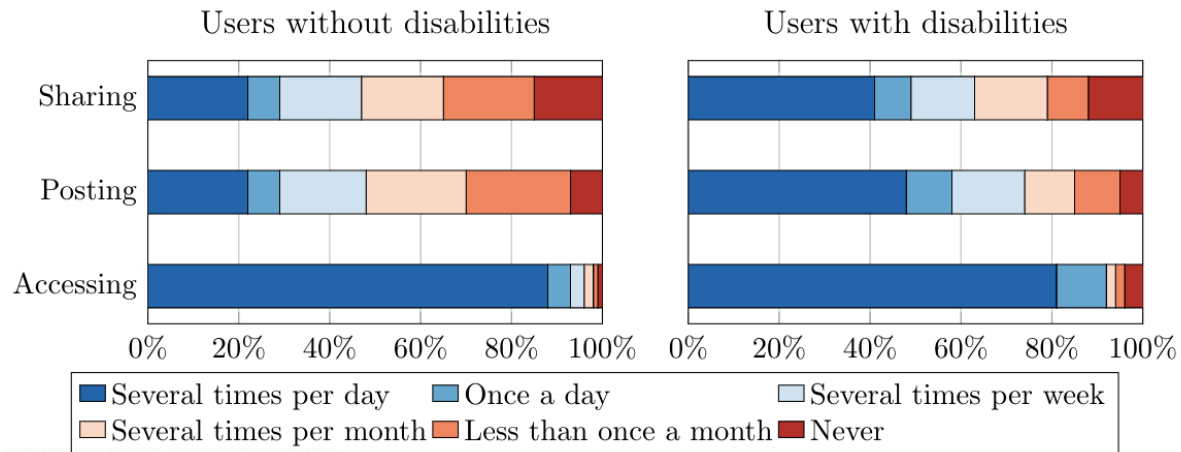
- Follow up interview with 20 of them

- 20 participants: 7 self-reported having a disability
- Diary study for participants not used to share accessible media content



# Key findings – Frequency of access

- Mobile devices x Desktop/Laptop devices
  - Users with disabilities tend to interact with social networks more often than users without disabilities

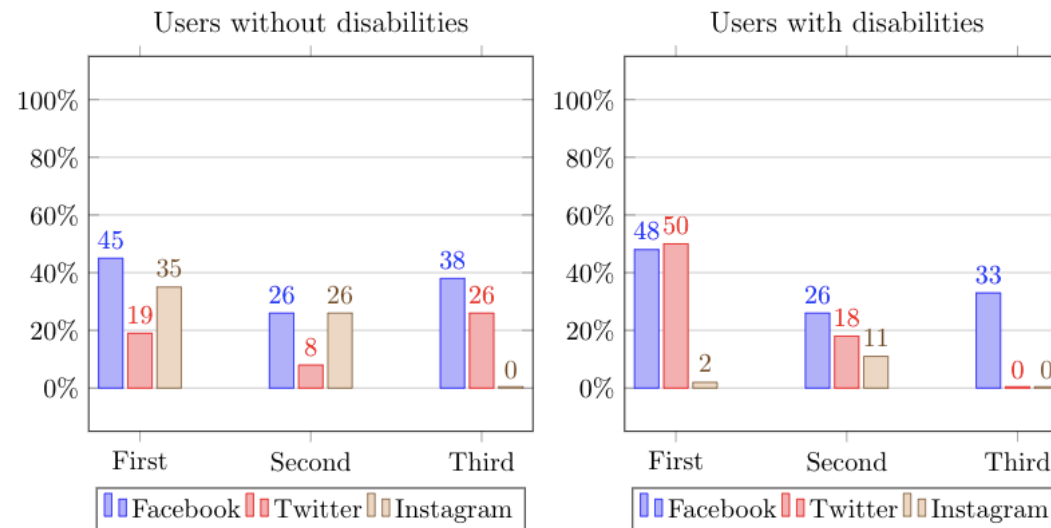






# Key findings – Most accessed social networks

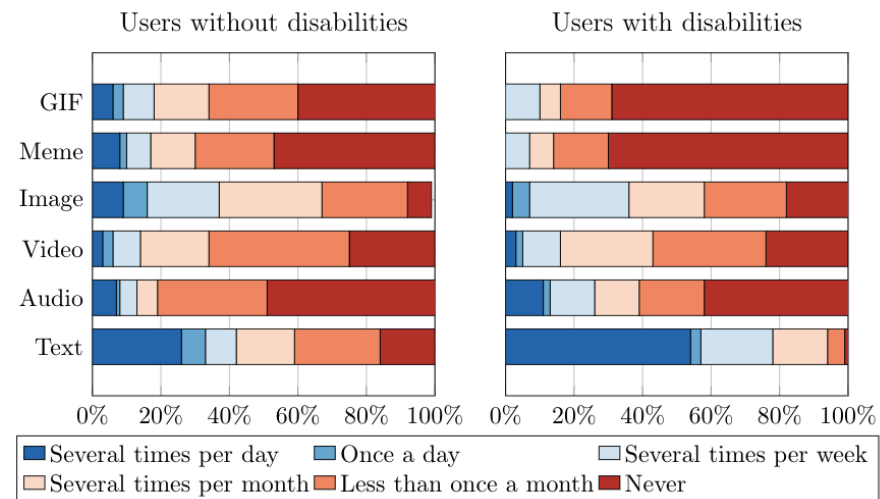
- Facebook is the most accessed social network by users without disabilities, followed by Instagram and Twitter. Among users with disabilities, Twitter is the most popular one, followed by Facebook. Only one of them reported accessing Instagram as main social network.





# Key findings – Type of content

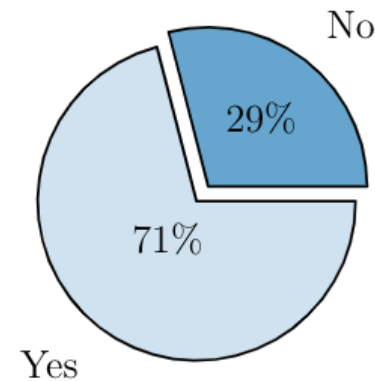
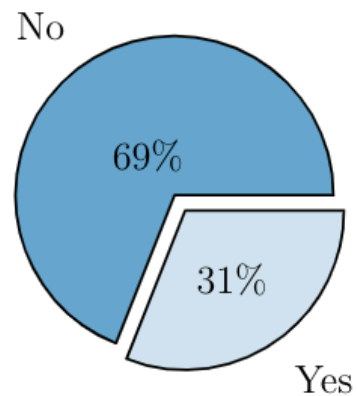
- Users with disabilities tend to post more text content than users without disabilities.
- While around 40% of users without disabilities are not used to post GIFs and Memes on their social networks, this percentage goes up to 70% among users with disabilities.





# Key findings – Accessible practices

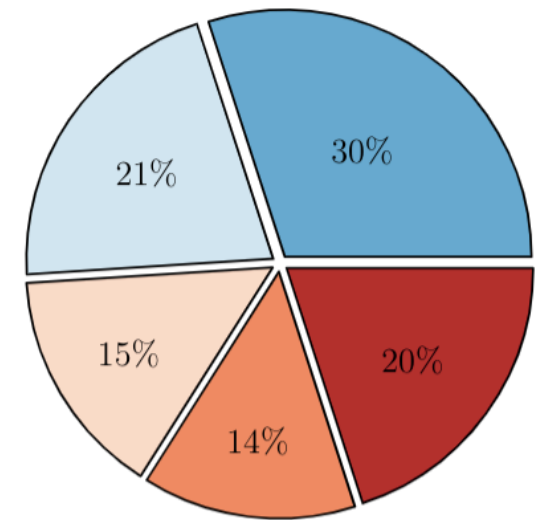
- 69% of users without disabilities didn't provide an alternative description for their last three posts containing a media content.
- 71% of users with disabilities provided an alternative description for their last three posts containing a media content.





# Key findings – Accessible practices

- 30% of users did not know it was possible;
- 21% don't know where to write an alternative text description;
- 15% thinks it's too time consuming;
- 14% don't know how to write a suitable alternative description;
- 20% provided other reasons.





# Research questions

- RQ1: Which **barriers** do users of social network services encounter when sharing and authoring accessible media content?
  - Users are not **aware** of approaches that can be taken to make their content more accessible;
  - Users feel that accessibility features may represent a **setback** on their current navigability;
  - Users feel that accessible practices are **unnecessary** in their social network context;
  - Platforms **not making it a requirement** or not providing a prompt warning may contribute to this line of thought;
  - Users have **low information** what is considered an appropriate alternative description;
  - Users struggle with **hard-to-find** and **not user-friendly** accessibility features provided by platforms.



# Research questions

- RQ2: What are the **requirements** for users of social networks to create accessible media content?
  - Create awareness by **emphasizing accessibility features** and making it a part of authoring and sharing process;
  - Alternative descriptions must be a **balance** of exploring the benefits of **technological advances** in automatic recognition and generated descriptions, and **involving users** to fill the gap concerning context details and, in particular, their own intention and purpose in sharing a certain media content.



# Research questions

- RQ3: What are the **motivations** for users of social networks to create accessible media content?
  - Users are mainly motivated in **doing the right thing** and promoting **inclusion** for people with disabilities;
  - Accessibility practices also have an impact in **improving search engines results** and current **AI solutions**.
  - Alternative access options are also useful when users are experiencing **other limitations** such as device or internet network constraints;
  - Alternative access options are also useful for **language learners** or when accessing content in **other languages**.



# Research questions

- RQ4: How can we **motivate** users of social networks to create accessible media content?
  - People tend to be more **aware** when in contact with a person with disability but also when is confronted with current accessibility approaches;
  - Users are motivated in **understanding** how their content are being consumed by people with disabilities;
  - Making them part of this process as well as **educate** them about accessibility practices and alternative access may contribute to **engaging** them more frequently in such practices.





# Next steps

- Design, prototype and validate a new interaction flow for accessible content authoring;
- Design, prototype and validate the accessible content deployment feature.



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