The A-SPARC model of online platforms

Contents

Section

1. Introduction

In early September 2020 Ofcom commissioned PA Consulting to deliver a project to model the functional and architectural structures, workflows and evolution of online platforms. This model will help Ofcom by providing a consistent view of the structure of platforms and language to describe their functionality.

The primary deliverables of this work were a confidential report and a corresponding generic model, depicting the key steps in the functional journey of users (and the content they produce and consume) and the architecture that supports this activity on the variety of platforms where content is hosted online. The final model was developed from basic maps of the end-to-end processes, developed from desk research. These basic maps were then used to explore the processes and capture detail (and any diversity of local implementation) through interviews with key employees of several platforms that host user generated content (UGC). These maps were subsequently refined and developed, based on the research findings, by applying design principles to create a model that can be used to explain, clearly and consistently, the systems to which regulation can be applied.

The model was developed primarily to support internal work in Ofcom, but we believe that aspects of the work might be more widely usable because it provides:

- An **industry validated reference** for internal and external engagements about online platform user and content journeys;
- An **industry validated use of reserved terms,** enabling a consistent use of language;
- A description of the **underlying architectural processes** which support the user journeys; and
- Indication of **regulatory touch points** during user/content journeys and in the architectural structures.

Insights gleaned from a number of individual platforms were given and treated in confidence, but we have also produced a redacted version of the model which shows a stylised view of a generic platform, the journey of content, and interactions with users. It is this redacted model, excluding all confidential and sensitive information, that we are publishing today.
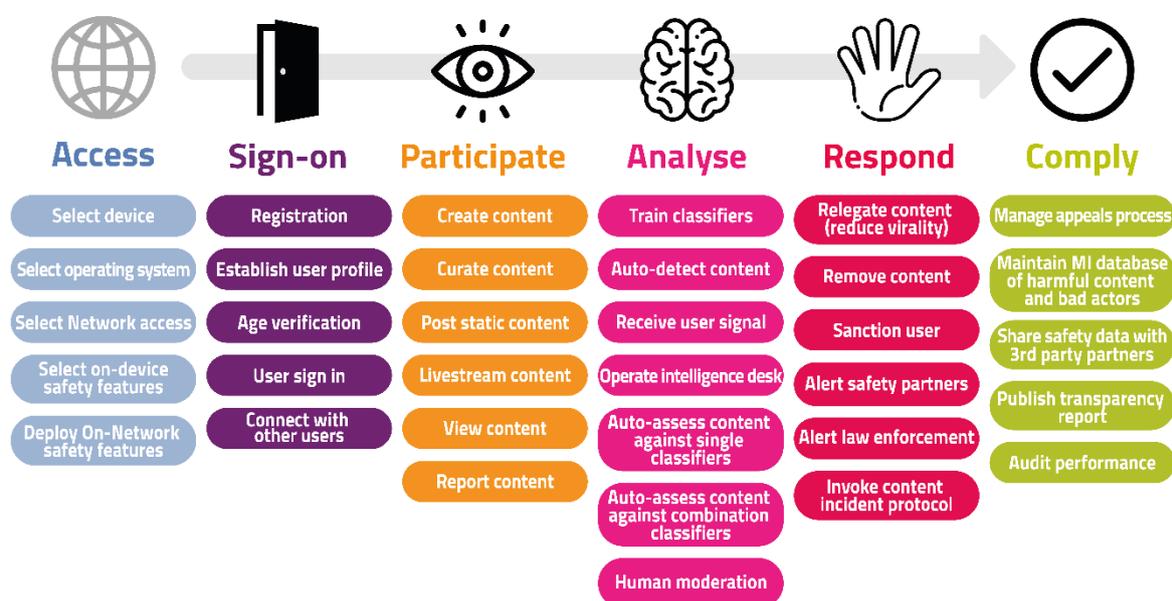
2. The Redacted Model

During the course of our research we settled upon six primary phases in the end-to-end journey of users and content on online platforms. These are: Access, Sign-on,

Participate, Analyse, Respond and Comply (see Fig 3 below). The initial phase 'Access', which describes a user's precursor activities to access the internet (before selecting a specific service) was out of scope for this research but is included for completeness. It's important to note that the redacted model is generic in nature.

We refer collectively to the six phases as the 'A-SPARC' model.

Figure 1: The core phases of the generic/reference model

A brief description of each of these phases is shown below:

The 'Access' phase describes the role that access to the internet plays in the creation and dissemination of online harm.

Sign-On

The 'Sign-on' phase represents the process by which a user signs up and establishes their account and covers user registration, age verification, sign-in and the generation of connection requests for other users.

Participate

The 'Participate' phase details a user's engagement with content on a platform. It covers the processes of creating, uploading and curating content, the various methods of discovering content to view and interact with, and the processes by which users report objectionable content.

Analyse

The 'Analyse' phase details the measures put in place to analyse content and user behaviour in order to determine whether there has been harm. These measures include the operation of an intelligence desk, the receipt of user signals, the application of single and combination classifiers and the triage processes to prioritise content for human review.

Respond

The 'Respond' phase provides detail on how platforms respond to the finding of harmful content. It covers the process of content removal and the application of user sanctions. It also covers the outsourced or internal procedures in place to ensure that the relevant authorities are alerted and details of the harm shared to prevent proliferation online.

Comply

The 'Comply' phase covers the processes the platform will undertake to fulfil its auditing and reporting responsibilities, and covers the management of appeal processes, maintenance of databases of harmful content and activity, management information capture and the publication of transparency reports.

The redacted model has been built with the option of viewing the underlying stylised architecture to support each of the 'ASPARC' phases.

3. Future work

Ofcom intends to review this model in time as we expect that the range of processes and tools used by online platforms will continue to evolve.