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Directorate-General for Communications Networks, Content and Technology

Digital Single Market
E-Commerce and Platforms

Business-to-business relationships in the online platforms environment - algorithms, ranking and transparency

Report of an engagement workshop hosted by the European Commission

16 March 2017, 9:30 - 14:00

Venue: [41 Avenue de Tervueren, 1040 Brussels](#)

Report on the workshop “Business-to-business relationships in the online platforms environment – algorithms, ranking and transparency in the platforms' ecosystem”

On 16 March 2017, a European Commission workshop on algorithms, ranking and transparency in online platform ecosystems took place. The workshop aimed at gaining a better understanding of the challenges that algorithmic practices of online platforms may pose for their business users, as well as at putting the algorithmic selection in the context of various business models and industry sectors. Finally, it aimed at collecting views of business users about what would constitute desirable outcomes for them.

The workshop brought together individual business users of different online platforms, associations representing such business users as well as private users, and academics. The workshop took place subject to Chatham House rules, and this report gives a high-level overview of the questions raised during the discussion.

The discussion was structured around the following set of questions:

- What types of practices related to algorithmic selection do business users encounter?
- How are business users impacted by them? What is the impact of these practices on the other players, (e.g. platforms, end-users)?
- What changes in the use of algorithmic selection, if any, are desirable for business users?
- What objectives would such changes pursue?

The discussion revealed a common set of issues appearing across the industry 'sectors' involved (e-commerce for goods, e-commerce for services such as online hotel booking, online advertising, software application development & distribution and social media), but with each sector emphasising different issues as being most important. The solutions proposed varied from light touch approaches (e.g. industry-driven transparency, memoranda of understanding) to more structural solutions such as the separation of platforms' intermediation activities from (vertically and horizontally) related businesses.

As regards common findings, participants first identified that while the exact criteria used by algorithms are not known to businesses, they do not consider the use of algorithms in itself to be the main problem. The issue of bigger concern is how algorithms are employed. Second, participants mentioned that a better enforcement of existing legal and regulatory frameworks could already go some way in

addressing certain algorithm-related trading practices – although facing limitations in the online platform environment. Important in this respect would be that the adoption of any new regulatory rules should ideally not happen without fully enforcing the existent ones (e.g. consumer protection). Third, the various solutions proposed by participants pursue common objectives, in particular increased transparency and accountability/auditability of online platforms, the creation of a level playing field for competition within each platform and prevention of (increased) fragmentation of the EU's internal market as a result of diverging national regulation.

Types of practices related to search and ranking algorithms

The main challenge experienced by business users of app stores is discrimination facilitated by a lack of transparency including around the use of data as well as around the organisation of search and ranking results. Discrimination refers to different practices: (i) a differentiated treatment of different apps, both proprietary apps of the platform and apps of different third-party business users of the platform, and; (ii) the favouring of platforms' auxiliary services, including proprietary payment services or advertising. Differently from search engines, ranking in app stores is presented in such a way that there is no distinction between paid and non-paid results or organic and individualised ranking. Some apps appear higher in the ranking based not on their popularity (number of downloads), consumer reviews or other criteria, but because they are sponsored. This, however, is not disclosed when the ranking is shown to consumers. App stores indeed actively promote certain apps (including their own) while pushing down other apps, but the criteria for being promoted are not known to business users. Some app developers are also offered special deals, for example in the form of access to additional app store-features in their beta-version.

The lack of transparency around access to data (by the app store and by different business users) as well as around search and ranking criteria, combined with the perceived lack of consistency in application of the ranking criteria (discrimination), would lead to significant uncertainty as well as self-censorship. The latter would entail app developers and publishers creating and promoting apps that could meet the criteria of the algorithm and become successful. Meeting consumer demand comes second. Such situations would distort competition between app businesses and is detrimental for consumer welfare.

Challenges experienced by business users in the e-commerce sector vary for trade in goods and trade in services.

Business users offering goods via online platforms note a difference in the role that search and ranking practices (should) play depending on whether the online platform itself also acts as a retailer (vertically integrated platforms). In both situations, however, algorithms appear to be applied in the same way to all competitors. If the platform-retailer is using the algorithm to favour its own product, this was not immediately obvious to participants. What was clearer was that in many cases, when the platform competes with other retailers, it leverages its sheer market power to source popular items from existing sellers and floods the market with cheaper products. When the platform is only a marketplace, competition dynamics are similar to the offline world. By using sales promotions and market analysis, e-commerce retailers can improve their search and ranking results, similarly to brick and mortar stores.

Users offering services via online platforms experience much more difficulties with ranking algorithms, and the algorithm usage has a more profound impact on their businesses. One challenging issue is that ranking changes very fast, sometimes even within an hour, without any evident reason.

A practice specific to e-commerce for services is the display by the platform of messages pushing the consumer to book as soon as possible ("only X rooms at this price still available", "prices will increase for this service in X hours", etc.). This pressure leads to a high amount of place-holding bookings which are cancelled at a later date. This causes a "chicken-and-egg-dilemma": besides price, the ranking algorithm takes the number of cancellations into account as a negative criterion, and business users with many cancellations drop down in the ranking. As cancellations cannot be controlled by the business, this means that, in order to move back up in the rankings businesses are nudged towards payment.

Another general challenge is the lack of transparency of criteria to both business users and consumers. Ranking (for instance, on online travel agencies) is paid, and the ranking fee is one of the criteria used by the algorithm, even though the precise weight of this criterion in relation to others is unknown. The aspect of payment and its influence on the ranking is also not transparent to the consumer. There are also such criteria as "popularity", the meaning of which is not clear to business users.

Business users note that the lowering in ranking results can be used to punish suppliers for what platforms would perceive as various transgressions, or whichever actions that online platforms disagree with. To business users it is not clear when their ranking drops due to their mistakes and transgressions and when it drops due to the proper functioning of the ranking algorithm.

For the advertising industry, the main challenge is the lack of possibility to audit or verify algorithmically managed advertising impressions by third parties. Advertisers cannot make sure that they get what they pay for. The lack of transparency of algorithms also poses a problem of undesirable placement of advertisement. The classification of content by platforms, which is one of the factors used in algorithms to decide what ads to place next to what content, is not done accurately enough. For example, an ad of a competitor may be placed in the product of another competitor, or next to undesirable content.

Publishers relying on platforms for the findability of their content have concerns that algorithms may be biased in favour of the content of the platform operator, without the users being aware. They are also concerned about paid placement practices becoming increasingly common as more devices (TV's, media boxes, etc.) have operating systems with pre-installed apps and recommendation engines which guide users to certain content.

Changes necessary from the business users' perspective

Business users across all sectors wish for more transparency with regard to search and ranking related practices of online platforms, i.e. the use of algorithms by platforms. Some business users called for a differentiated transparency, i.e. different degrees of information provided to different actors (including business users, third-party trust agents such as auditors and government). Closely related to enhanced transparency was the supposed need for auditability/verifiability, in particular of platforms' algorithmic decision-making.

In cases where an online platform also acts as a competitor to its business users, it is desirable that the platform is clear about the role that it is playing and what business proposition it makes to its business users (e.g. competition on equal terms). The said propositions to business users should be made in such a form that platforms can be held against them either to a third party by way of auditing or monitoring or some other form of oversight.

Participants also flagged that platform 'markets' are tending towards further consolidation, concentration of data sources, vertical integration and increased bargaining power for the intermediary

platforms. Seen in that light, unfair competition by online platforms (for example the favouring of proprietary apps, products or services such as advertising) would possibly require some structural measures that intervene in the operations of platforms, similar to functional or structural unbundling imposed in the telecoms sector under competition law principles.

Retailers active in the e-commerce space consider that platforms that are only marketplaces should provide more information about the functioning of algorithms and changes made thereto to business users. This would help establish a level playing field, businesses will be able to use this information for their business models, and effective competition would increase. When a platform that is also retailer shares information about its algorithms with competitors, this will help to deal with the market power of the platform.

All business users wish for a more effective enforcement of the current legislative and regulatory framework, both at the EU and national level. They argue that such more effective enforcement would be capable of resolving some of the issues they identify with algorithms used in search and ranking.

Business users active in trade in services and goods would welcome an independent, external redress mechanism for resolution of problems and conflicts between platforms and their business users. Such redress mechanism should be confidential and anonymous (although the design of such a mechanism seemed difficult to conceive). It should be accessible, also for micro and small enterprises, and quick. The redress mechanism should be able to use records of platform's ranking and search practices with regard to business users, and platforms should be obliged to keep such records for such purposes. There should be a possibility of effective sanctions, meaning that sanctions should be proportionate, but sufficiently strong even for a big player.

As the service industry is more location-dependent, the businesses active on OTAs argued for the algorithm to take into account local regulation (for instance, on pricing). To be fair and more viable, the algorithm also needs to use more objective parameters (for instance geographic location instead of popularity, on OTAs). A feedback mechanism between business users and platform could be introduced that allows reporting on the performance of the algorithm and inform business users what they do wrong.

Besides the fuller and more effective application of the existing legislation including consumer protection regulation, business users consider self-regulation, codes of conduct and other soft law as potentially useful instruments. Market forces (for instance, emergence of new market players) will also encourage platforms to become more transparent.

Objectives of changes in search and ranking practices

From the business users' perspective, fairer and more transparent search and ranking practices will create a level playing field and strengthen effective competition on the market. For content providers (for example, app developers and advertisers) this would also enhance the freedom of expression, i.e. prevent that only specific content is privileged.

Improved search and ranking practices would positively impact consumer welfare as it would allow taking into greater account the demand side. Due to a greater transparency, the consumer would also learn about the underlying drivers determining the combination of search results and their hierarchy or why a particular advertisement appears at a specific place, and consumers could thus make a more informed choice. On OTAs, some businesses also mentioned that there could be scope to reduce the

importance of paid results, the cost of which is eventually always paid by the end consumer. This could in turn reduce prices overall. In these ways, the use of algorithms would become more efficient both for business users and for consumers.