

DATACTIVE

Spotting Sharks

ALEX's Competitor analysis

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Readers are encouraged to provide the authors with feedback and/or questions.

Spotting Sharks: ALEX's competitor analysis

Abstract

This paper summarizes the output of the competitor analysis for fbTREX conducted as part of the market research for the project Algorithms Exposed. fbTREX is a browser plugin that allows harvesting publicly available data on the users Facebook timeline, and its development is currently hosted by the Algorithms Exposed initiative - an effort to facilitate repurposing personal social media data to allow the scaling of systematic empirical inquiry for academic, educational or journalistic purposes. The desk research is enhanced by several interviews and aims to: 1) create initial insights into existing potentially competing organisations; 2) analyse market potential present in a specific field; 3) situate the current understanding of fbTREX in the context of bringing a product to market; and 4) and help prioritize the next step. This research should be read as an intermediate product, which can provide valuable insights to both partners and competitors. Algorithm Exposed is funded by the ERC Proof of Concept grant [grant agreement number 825974].

Keywords: competitor analysis, market research, lean startup,

Introduction

Under the header of valorisation, the exchange between knowledge and private or public institutions becomes increasingly important, in view of ensuring that research conducted within academia matters for society as well. Market research is of crucial importance when attempting to bring to market academic knowledge, skills or tools. Nevertheless aligning the product-market fit (Blank & Dorf 2012, Osterwalder, A. et al. 2014) - that is, the supposed match between 'what you offer as a company' with a sufficiently scalable 'demand from the market' is not self-evident. In spirit of the Lean Startup market research methodology¹ (Ries 2011), this competitor analysis offers an early initial insight in the market as it exists at time of business development - it would ideally inform the product or service one is creating with the knowledge of the market situation in mind.

This working paper is produced in light of a proof of concept trajectory, which means that insights represented in this document are based on exploratory research. This working paper should be considered as a presentation of the intermediate results of one part of the market research which is

¹ The Lean Startup method draws on early lean manufacturing logics as developed by vehicle producer Toyota translated to startup needs, to help them design their market research and product development as efficient as possible. It draws on a build-measure-learn iteration to quickly pivot ideas through interviews and mock-up models before and during actual product development. Key principles in this method concern empirical market research to quickly get to know what wouldn't work (by 'failing fast'), in order to continue pivoting what might work. These 'validated learnings' aim to ultimately eliminate uncertainty inherent to entrepreneurship as much as possible.

currently in development for Algorithms Exposed. Lastly, it is not common practice to make a competitor analysis public due to the sensitive information it usually contains - nevertheless we are publishing this report knowing that both ‘competitors’ with similar agendas, or humanities scholars looking into Proof of Concept opportunities, might benefit from the insights produced.

A competitor analysis is part of a market research strategy, showcasing what type of reliable organisations and products already exist, together with a brief evaluation of their market viability. These competitors are operationalized here using the following categories: 1) Commercial social media analytics; 2) User-centric Educational tools; 3) Academic research tools; 4) Journalist research tools; and 5) Political advertisement analytics. The paper will conclude with a brief discussion of the findings and an overview of next steps.

About ALEX

ALEX, a short-cut for “Algorithms Exposed. Investigating Automated Personalization and Filtering for Research and Activism”, aims at unmasking the functioning of personalization algorithms on social media platforms. From an original idea of lead developer Claudio Agosti, ALEX marks the engagement of DATACTIVE with “data activism in practice”—that is to say, turning data into a point of intervention in society. Hosted by the University of Amsterdam’s Department of Media Studies, ALEX is funded by a Proof of Concept grant of the European Research Council (grant agreement no. 825974), awarded to Stefania Milan as Principal Investigator. ALEX is meant to provide researchers, advocates, policymakers and journalists with reliable and accessible algorithmic auditing methods and data. It empowers users to independently monitor, compare, and reflect upon their information diets².

Methods

The methodology used for this market research includes both desk research, a series of in-depth interviews with competitors and a focus group organised at the University of Amsterdam. The desk research is used to explore potential sustainable futures for ALEX; by asking the question ‘which organisations are doing similar things’, you ignite a series of iterations that will tell you more about how to understand what you are developing in the context of the market. Based on these findings, the author reached out to several supposed competitors to collect ‘best practices’; this competitor analysis includes interviews with 1) a journalist from ProPublica who maintains the Facebook political ad collector and 2) two independent academic tools that offer comparable social media repurposing tools, being FbForschung (University of Munchen) and Gobo.Social (MIT).

Red and blue oceans: Our competitors

The next section showcases some of the organisations, together with an indication of the ‘health’ of the field in market research terms - usually expressed with the terms ‘blue’ and ‘red’ oceans (Chan Kim & Mauborgne 2005). In this metaphor, a blue ocean represents few competitors (sharks) present, while a red ocean represents many competitors. By extension, in a red ocean, one knows there is prey (customers) and there is competition. In a blue sea however, there is the fundamental uncertainty

² Find this description and more background information on the project website, <https://algorithms.exposed>.

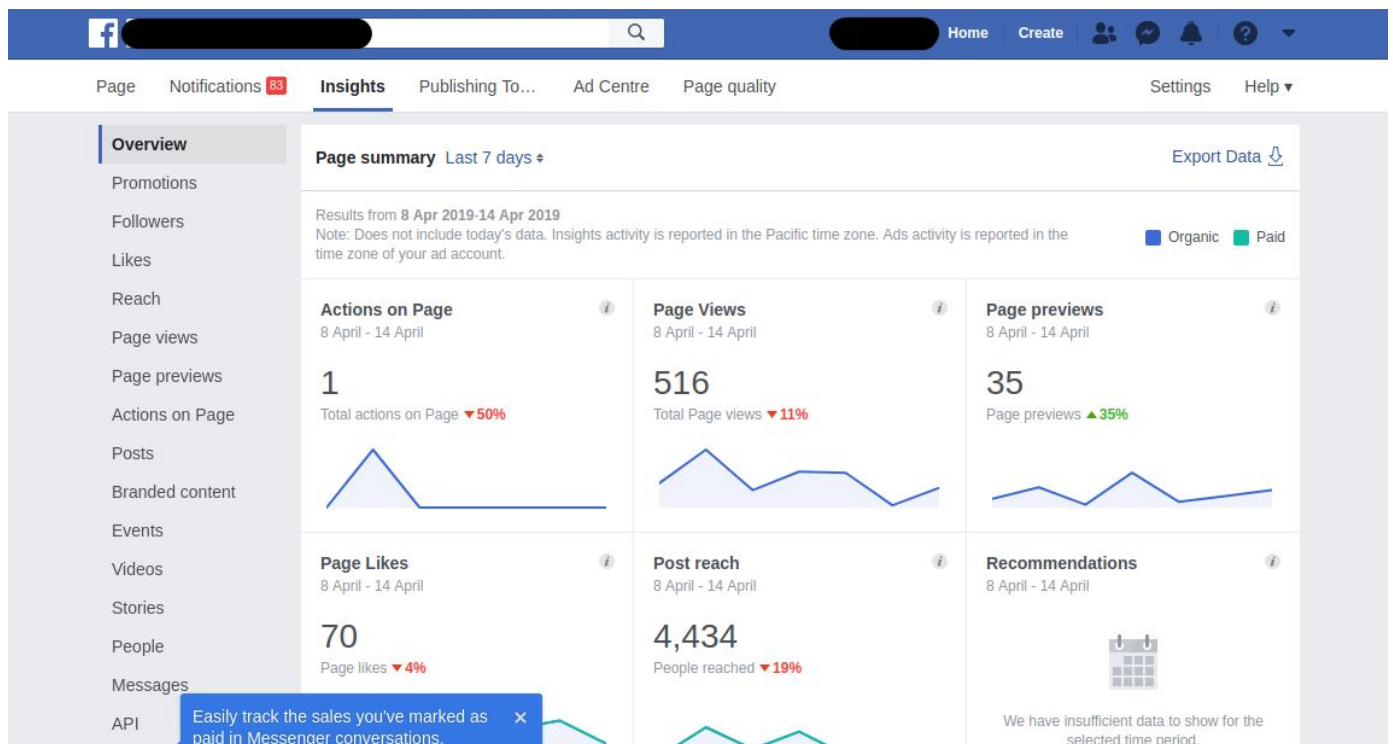
whether or not there are any fish at all and a market only exists to the extent it can be created. In other words, the continuum represents on the one extreme an intensive existing market with high turnover and many competitors - in which niche marketing becomes most important. The other extreme means that you are venturing new spaces -in which the main question will be whether there are actually customers for the product or service you envision. The alignment of the envisioned product and the actual market need is called the product-market fit, the holy grail within market research.

The operationalisation of the competitor categories is an exercise to situate the development of fbTREX in existing commercial and non-commercial initiatives. It forces to relate to existing industries, scalable organisations and quite some unsustainable initiatives, an early indication for potential dead ends. fbTREX mostly operates in-between social media analytics industry, public organisations and NGOs, and educational actors. Secondly, it should not be forgotten that ALEX has a particular agenda aiming for the development of a not-for-profit organisation³ dedicated to raise specific attentiveness for data politics.

The following section will briefly skim over the main categories of competitors with a short description, some examples to illustrate, and some bullet pointed findings. 1) Commercial social media analytics; 2) User-centric Educational tools; 3) Academic research tools; 4) Journalist research tools; and 5) Political advertisement analytics. Finally, in an attempt to reach out to you, reader - if any questions or comments emerge when reading this early inventory, please feel welcome to get in touch with the author at any time.

³ Or a social enterprise which values impact over profit.

Commercial social media analytics



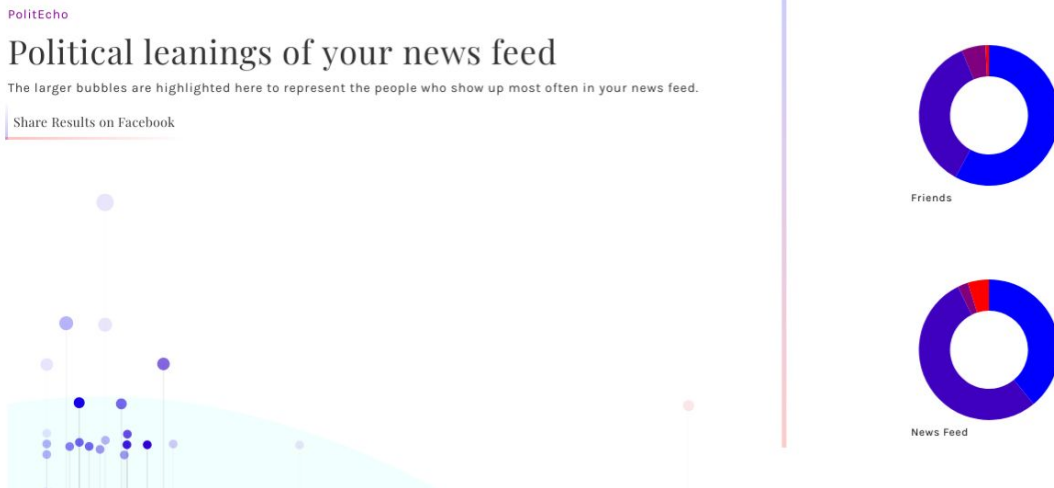
Context: Valued at 3.07 billion in 2017, Social Media analytics is a market segment which has settled itself firmly, and is expected to grow over the coming years. Unsurprisingly, this market is highly saturated and fragmented, with many corporations offering highly specialized services. Besides the larger infrastructural or - back-end corporations present in this space (think of IBM Corporation, SAS Institute Inc. or Adobe Systems Incorporated) our main competitors are more analytics and front-end oriented. Just to name a few large tools for social media analytics: [Google analytics](#), [Facebook analytics](#), [Keyhole](#), [Crowdtangle](#), [Talkwalker](#), [Alto Analytics](#).

Insights:

1. Social media analytics is highly specialized and commercialized
2. Should be considered a 'Red Sea'
3. Many address corporate clients
4. Tools are issued by:
 - a. infrastructural back-end partners.
 - b. Social Media corporations
 - c. Third-party developers
5. The products of the more relatable corporations focus of:
 - a. Advertisement performance analytics

- b. Brand management on social media
- c. Community management on social media
- d. Issue tracking

User-centric educational social media tools



Context: The following section highlights a series of comparable self-insight tools. Note that these tools often do not represent a company, but are maintained by either knowledge institutes, not-for-profit organisations or hobbyists. Examples [Dataselfie](#)[†], [Fuzzify.me](#), [Me-and-my-fb-data](#), [PolitEcho](#), [Noisy Flipfeed](#)[†], [ReadAcrossTheAisle](#), [Gobo.Social](#).

Insights:

1. Many tools are either academic research - or personal projects
 - a. They highly rely on personal contribution
 - b. And have no business model in place
 - c. Some have the mere intention to frustrate data collection practices
2. They focus on:
 - a. User empowerment,
 - b. Awareness raising
 - c. Self-education
3. They create empirical evidence for:
 - a. Filter bubble in practice
 - b. Media consumption
 - c. Quantified self insights
 - d. Political media analysis
4. Non have a working business model in place
 - a. Thus, this is considered a blue sea: no market, no competitors

Academic research tools

Netlytic
Making sense of public discourse online

Netlytic is a community-supported text and social networks analyzer for social media researchers and educators to study public discourse on social media sites. It is made by researchers for researchers, no programming/API skills required.

Import data from social media

Category	Percentage
hniman	18.3%
Crof	17.3%
BaronianCo...	13.3%
Seuchen_Ko...	9.9%
H5N1_AGATA	8.5%
Info_CA	7.7%
JATetro	7.3%
FluTrackers	6.3%
Ironorehopper	6%
Josefinajami	6%

There are several tools available for social media research aimed at academic researchers. All of them should be considered by academia for academia. They presuppose an educated audience who have no problem with a steep learning curve. In addition, few of these tools have services in place like customer service, hosting services or guaranteed 24/7 uptime for instance. Examples are: [fbTREX](#), [Netlytic](#), [Netvizz](#), [FbForschung](#)

1. These are tools for academics by academics
 - a. Netlytic and Netvizz can be used by a larger audience
 - b. FbForschung is only developed to accommodate research by developers
2. They allow repurposing Social Media data for academic research
3. Only Netlytic has some funding options integrate
 - a. Through TIERS system
 - b. Meant for academic and not-for-profit research only
4. All but fbTREX rely on developer API's
5. Only Netlytic has a very limited business model in place
6. This is very close to a blue market

Journalist research tools

The screenshot shows the Chrome Web Store page for the extension 'Verzameltool voor politieke advertenties op Facebook'. The page includes the Chrome Web Store logo, the extension name, a 'Toev. aan Chrome' button, the developer name 'Aangeboden door: Tom Cardoso', a 26-star rating, the category 'Sociaal en communicatie', and the number of users '9.376 gebruikers'. Below the header are navigation tabs: 'Overzicht' (selected), 'Recensies', 'Ondersteuning', and 'Gerelateerd'. The main content area displays a comparison of ads: 'ADS I'M SEEING' and 'ADS OTHERS ARE SEEING'. The 'ADS I'M SEEING' column shows a realtor.com ad and a ParkWhiz ad. The 'ADS OTHERS ARE SEEING' column shows a 'Download the List Today' ad. Below the ads are two dropdown menus asking 'What type of ad is this?' with options for 'Normal Ad' and 'Political Ad'.

Although journalists mostly rely on more generic social media analytical tools mentioned above, there are several tools tailored to journalists in specific. The largest of these initiatives is the ProPublica born 'political ad collector' tool eventually forked and used by major newspapers worldwide - who have the capacity to implement and analyse themselves. Newspapers include: - Openpolis (Italy), Republik (Switzerland), The Guardian Australia, Der Spiegel (Germany), Süddeutsche Zeitung (Germany), Tagesschau (Germany), Dutch Public Broadcasting (Netherlands), the Information (Denmark), VRT NWS (Belgium), De Tijd (Belgium), The Globe and Mail (Canada), the CBC (Canada), Animal Político (Mexico) and The Baltic Center for Investigative Journalism Re:Baltica.

Insights:

1. These tools can be used for collecting, archiving and analysing political advertisement
2. The Facebook Political Ad Collector in specific:
 - a. Has been open sourced
 - b. Has been forked by other newsrooms
 - c. Has no business model involved
3. It does showcase the journalist needs for social media analysis tools
4. Whereas they currently rely mostly on corporate tools like Crowdtangle & Alto Analytics
5. Tools and services are professionally maintained, and not monetized
 - a. But they are currently dependent on host organisations.
6. This might be in-between the red and blue market, urgency is indicated and tools are professionalized

Political advertisement Analytics

There is a dedicated niche market for political advertisement analytics. After recent controversies around microtargeting, political advertisement and the spread of disinformation there is an increasing call for more transparency in online advertisement space. Advertisement corporates are making an effort to increase advertisement transparency in general and political advertisement in specific. Well-known recent examples which are currently being rolled out are [Google transparency report](#), [Facebook ads library](#).

The screenshot shows the Facebook Ad Library interface. At the top, there is a search bar containing 'd66' and a search icon. Below the search bar, it indicates '12 results' and provides a brief explanation of the search criteria. There are filter options for 'Netherlands', 'Active and inactive', and 'All Pages'. A section titled 'Launched in April 2019' displays three ad cards. Each card includes a status indicator (Inactive or Active), a date, a 'Related to politics or issues of importance' label, a D66 logo, and a 'Sponsored - Paid for by D66' label. The first two cards are for video ads featuring a woman with glasses, with subtitles in Italian and French. The third card is for a static ad with the text 'Voor vaccineren' and 'D66'.

Insights:

1. Both Facebook & Google are building advertisement archives
2. In an effort to make political advertising more transparent
3. However:
 - a. At time of writing, the Google report covers the US, EU and India
 - b. In both cases, we are dependent on self-reporting of these corporates
4. These platforms are in development phase, and might be useful in future
5. It should be assessed to what extent the respective API's could be of use
6. They do not currently include more advanced analysis, and are rather result of CSR policy
7. Impact should be further assessed in a future SWOT (Strength, Weakness, Opportunities and Threats) analysis

Discussion

This competitor analysis is part of the ALEX market research and aims to explore competitors and their respective market competences. This allows for early indication of both market potential and dead ends. The analysis showed that for the fbTREX use case there are five different categories of competition to be distinguished: commercial social media analytics, user-centric educational tools, academic research tools, journalist research tools and political advertisement analytics. In these categories, only the social media analytics show healthy and stable competitors which operate in a large and highly competitive market - a red sea. Most academic and political tools are self-catered - meaning that the producers and the audience of the tools are supposedly the same. These tools often have no business model in place, but instead depend on the resources of a host institute to exist and survive. The user-centric educational tools are often born out of personal interest and with only scattered resources available, they are very unstable in their existence -they never managed to grow into a self-sufficient organisation.

Does this imply a dead end? It needs saying that the academic and journalist markets do look a bit grim, but the very existence of these 'competitors' does indicate at least minimal potential interest. First of all, there is a clear push towards more transparency in advertisement in general and in political advertising practices in specific. It is clearly visible in the facebook political ads collector run by ProPublica and forked by many news agencies, that journalists are in need of insights into Facebook's space. At the same time, some of the social media corporates slowly disclose the political advertisement activities hosted on their platforms. Lastly, the amount of effort put into the variety of self-educational tools indicates that there is at least some need for the ability to repurpose and analyse social media data on a personal level; but would this be scalable to appeal to a specific private or public interest?

Moving forward

It needs mentioning that ALEX represents quite a special case, with its aim to put users (or customers) in the driver's seat, support data sovereignty, raise self-awareness and allow reuse through open-sourcing. Nevertheless this early competitor research shows these aims do not constitute a value proposition yet⁴. Ultimately, the goal for the coming months will be to further explore the possible product-market fits without losing the larger picture out of sight. This will require us to 'get out of the building' as they say, learn about possibilities and impossibilities and above all - cultivate the flexibility needed to move forward within the proof of concept trajectory.

Thus, more market research is needed to explore potential market niches -and I am saying niches here. If we want to skip the social media analytics or advertisement industry due to our academic agenda, we have to be

⁴ As the name suggests, a value proposition is a statement in which the added value of product or service is defined and tailored to a particular customer segment (Osterwalder, A. et al. 2014), if verified this implies a good product-market fit.

very keen on what steps to take next. To what extent would newsrooms be able to pay to give insights into 'public' Facebook content that would otherwise not be accessible? What type of educators and trainers would be interested in an educational module which allows playing with empirical evidence of information diet, advertisement practices, and algorithmic mechanisms at work? In the following months we will enquire with newsrooms about their current usage of tools for social media analysis, and later this year we will engage in market research for educational products with our medialab partner SETUP utrecht. For more information on the progress, keep an eye on <https://algorithms.exposed>

References

Blank, S., & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company*. BookBaby.

Chan Kim, W., & Mauborgne, R. (2005). Value innovation: a leap into the blue ocean. *Journal of business strategy*, 26(4), 22-28.

Osterwalder, A. et al. (2014). *Value proposition design: How to create products and services customers want*. John Wiley & Sons.

Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Crown Books.

About the Author

Jeroen de Vos is internet and market researcher specialized in both online and offline research. He has a background in media studies & cultural anthropology and is currently working on impact driven projects both inside and outside University walls. Moreover, he is project manager within DATACTIVE.

