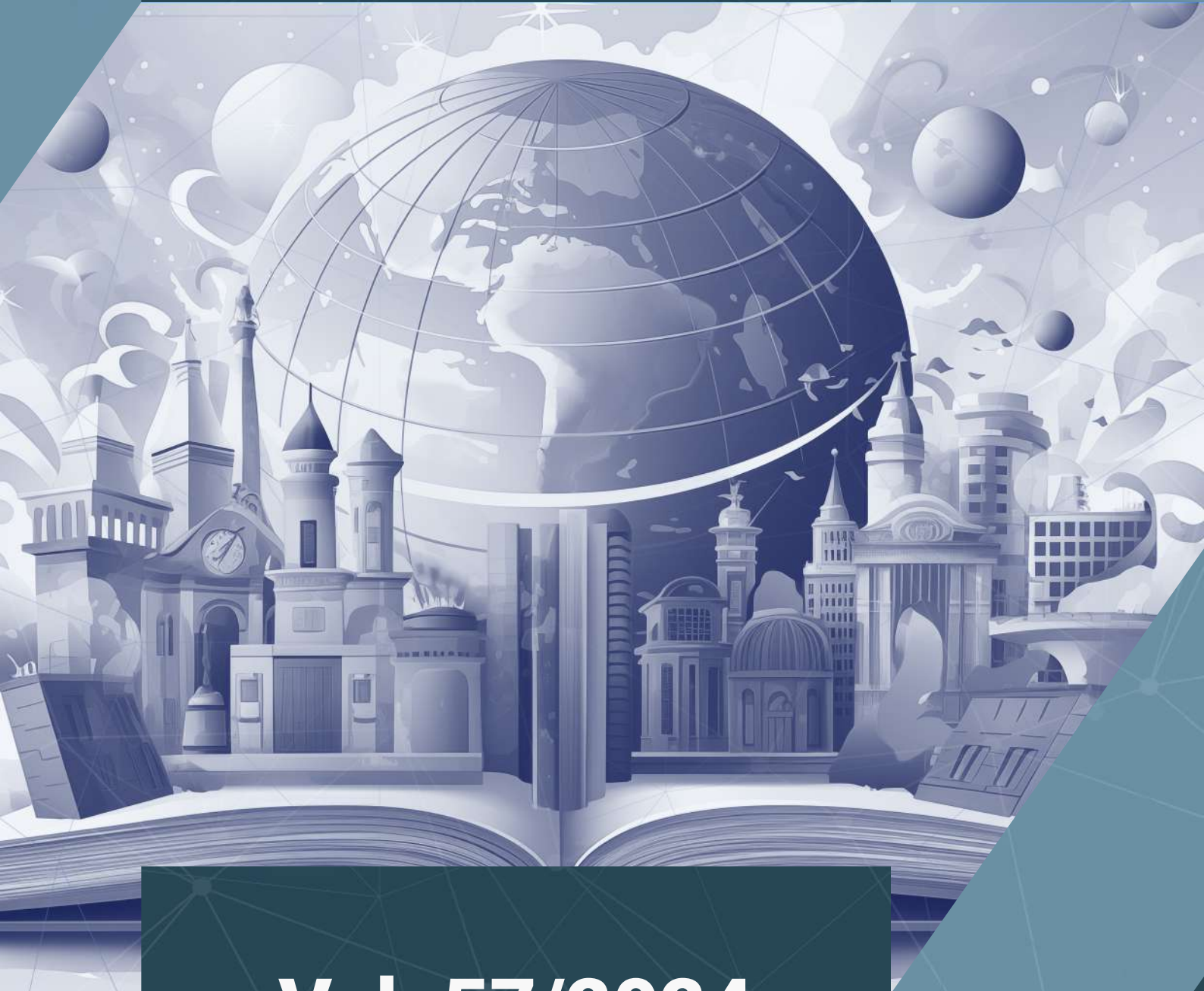




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How social media algorithms influence the way users decide – Perspectives of social media users and practitioners

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Abstract. This study dives into the perspectives of social media users and practitioners on the impact of social media algorithms, with a focus on data curation, real-time personalization, and FOMO (fear of missing out). This research, which was conducted through two exploratory focus groups, uncovered the nuanced dynamics underlying users' engagement with algorithms. The study of the literature emphasizes the importance of algorithms as gatekeepers in affecting online interactions, decision-making, and information intake. Our work, which is based on information foraging theory, reveals how algorithms, through characteristics such as FOMO, personalized content distribution, and the appearance of choice, profoundly shape users' decision-making processes in the digital arena. Understanding these distinguishing characteristics reveals the psychological and behavioral elements that contribute to consumers' continuous reliance on social media platforms. This study adds to the larger conversation about the societal implications of algorithmic influence and provides useful insights for researchers, practitioners, and policymakers navigating the ever-evolving landscape of digital interactions.

Keywords. Information Foraging Theory; Social Media Algorithms; Digital Influence; Decision-making Processes; Fear of missing out

Introduction

There is no doubt that social media platforms are a key element in the digitalization of society. People's decision-making abilities, and formation of beliefs, attitudes, and behaviors are all affected by these new means of communication. As a result, social media is responsible for the large-scale impact on social groups, financial institutions, and political communication. Social networking sites, such as Facebook, Instagram, and TikTok, are only a few examples of platforms that give users a space to disseminate content to a broad or specific audience as they see fit.

These social media platforms have become tainted over time with algorithms that can hijack conversations, influence other users' decisions, and manipulate the distribution of content. Thus, the reliability of electronic information is gaining more and more attention in modern discourse [1], so the present study will examine various facets of Web credibility and the perspectives of social media users and practitioners concerning their decision-making abilities in the online environment. An individual's knowledge and capacity to select reliable information sources will determine their ability to deal with problems caused by their physical

and social environment [2]. Nowadays, the development of social media platforms has profoundly changed how people access and engage with information. The social media algorithms' widespread effect, which consists of sophisticated algorithms built to curate and present material to users, is at the core of this revolution. These algorithms have taken on the role of the gatekeepers for our online interactions and have had a significant impact on how users make decisions, consume information, and interact with each other and with the information available online.

Literature review

As Rieh and Danielson [2] note, choosing trustworthy information sources has significant implications for people interacting with digital information systems. The theory of information foraging offers a useful framework for comprehending users' activities as they explore the ocean of online information. According to the theory of information foraging proposed by Pirolli and Card [3], people act like foragers in search of food in a resource-rich ecosystem by engaging in a dynamic process of exploration and exploitation to meet their informational demands. Based on this idea, users constantly modify their information-seeking tactics to maximize the acquisition of useful information while reducing cognitive effort, precisely mimicking the way decisions are made in digital environments. This paradigm was created initially to comprehend internet information searches, but it has since been used to analyze social media usage and decision-making [4]. This hypothesis says that users behave like creatures searching for food in the wilderness. They must choose whether to stop looking for new information or to keep looking and base their decision on the information they have already found because they only have a finite amount of time and energy to devote to the hunt for knowledge.

Social media algorithms can affect this process by changing the information users see and how they perceive it. For instance, algorithms may give preference to certain types of information over others, such as postings from friends or content that is particularly compelling. The material that consumers see in their digital environments is largely determined by social media algorithms [5]. Users adjust their information-seeking tactics in response to these algorithms, according to the theory of information foraging, to increase their access to useful content. Thus, users may alter their choices by interacting with such content to ensure a more prominent spot in their feeds, for example, when algorithms emphasize content with high engagement metrics (likes, shares, and comments). This adaptation supports the theory's central idea that people change their tactics to speed up the rate at which they learn new information. Thus, people tend to minimize the time and effort they put into choosing the information that seems to be more valuable because they may have the illusion they put enough effort into the outcome.

The theory of information foraging lays the groundwork for a deeper investigation of how algorithms work by encompassing aspects like the fear of missing out effect, online personalization particularity, and subjects such as the illusion of choice which collectively influence users' decision-making processes in the digital environment. The following section will shortly describe these characterizing traits of the online algorithms.

How algorithms work: data curation and real-time personalization

Advanced AI technology capable of processing large amounts of data in real-time serves as the basis of algorithmic content personalization. According to information obtained from data professionals from the Pulp Strategy Agency [6], machine learning algorithms

examine user behavior, such as browsing history, search queries, clicks, and even data related to demographics. Thus, AI algorithms are able to predict user preferences and interests with surprising accuracy by recognizing patterns and correlations within this data. This enables marketers to recommend appropriate articles, goods, movies, and other information, resulting in an engaging and smooth user experience. For instance, if algorithms endorse highly enticing information, individuals may be more likely to continue browsing and completing additional research, even if it costs more effort and time. In contrast, if algorithms prioritize a certain set of data over other information, users may be more likely to abandon their search and base their decision on previously encountered facts. Once more, one can observe how information foraging theory can be useful in clarifying how social media algorithms influence user decision-making by altering the information users are exposed to as well as the perceived cost and return of additional information searching.

Another relevant concept regarding the efficiency of algorithms is the idea of psychological hedonism. Algorithms gather data in order to understand people's interests and habits, with the goal of providing information that matches their desires and offers them joy. In this manner, algorithms strive to maximize the hedonic aspects of user experiences by evaluating user interactions. The process of *collection and processing of user data* is the first step towards algorithmic personalization, as the practitioners of Pulp Strategy Agency [6] observe. This can include explicit information like user preferences and demographic information, as well as implicit data obtained through platform interactions. A study on YouTube's recommendation system by Nguyen et al. [7], for example, emphasizes the relevance of user data, such as search history, watch history, and user engagement indicators, in developing user profiles.

Once a sufficient amount of data has been gathered, algorithms generate user profiles and *group individuals into clusters* with comparable tastes and habits. In a recent study, Zhang et al. [8] used profiling of individuals and clustering approaches to divide users into various groups based on their interests and demographic details in their research on a novel movie recommendation system called *MovieWatch*. In the study, we can observe the importance of clustering individuals based on their online activity history. However, these clusters used by algorithms are problematic in many areas. One such problem arises from the significant privacy issues that are brought up when internet activity information is gathered and analyzed for clustering. Users might feel uneasy about the extent of the monitoring and data collecting, particularly if their information is utilized without their knowledge or for purposes, they are unaware of. Another drawback takes into account the filter bubbles and echo chambers that are reinforced by algorithmic clustering: users might only be exposed to information and ideas that support their current values and preferences, restricting their exposure to other points of view and possibly promoting polarization.

Another key component of algorithmic curation is *personalization*, which adjusts content recommendations to users' interests and makes the online experience highly customized [9]. Algorithmic personalization is a complex endeavor that entails adjusting content and information delivery to individual users depending on their choices, activities, and previous interactions. By displaying material that is relevant and entertaining to each user, this approach strives to increase user engagement and satisfaction. Besides demographic recommendation, several other techniques, including collaborative filtering and content-based filtering are used by algorithms to assess and recommend information to users [10]. According to Koren et al. [11], collaborative filtering comprises creating recommendations based on the interests and

behaviors of similar users. On the other hand, content-based filtering suggests products that are similar to those that the consumer has already interacted with.

Finally, *real-time adaptation* is a subset of algorithmic customization that goes beyond content recommendations [12]. The real-time feedback loop of algorithmic personalization ensures that user preferences are satisfied consistently, which is consistent with the psychological hedonism we have mentioned above. Algorithms adjust to the changing preferences and tastes of users, emphasizing the hedonistic quest for both happiness and fulfillment.

In order to provide customized content to the appropriate audience, the recommendation algorithm process includes data collecting, user profiling, content screening, and real-time adaptation. Studies on platforms like YouTube, Netflix, and recommendation systems in general offer useful information about how these procedures are actually implemented and how they affect user engagement and satisfaction.

Leading the decision-making process

In the context of user engagement on social media platforms, individuals are routinely confronted with a plethora of decisions, ranging from the choice to peruse additional content by scrolling, clicking on hyperlinks embedded within posts, expressing approval through likes, disseminating favored articles, endorsing political figures, to the potential acquisition of long-considered products. The act of navigating life on social media necessitates a continual exercise of decision-making. These decisions are often influenced by algorithms, which intervene throughout the cognitive-perceptual process, encompassing the stages of selection, organization, and interpretation [13].

At the *selection* stage, the brain filters the vast amount of sensory information to focus on relevant stimuli. On social media platforms, algorithms act as gatekeepers, curating the content that users see based on factors such as personalization, engagement, and virality. This filtering process applies to posts, comments, and even the list of visible contacts, shaping the information landscape that users encounter.

The next stage in the perception process is *organization*, where individuals classify and categorize the selected information to make sense of it. Social media algorithms also influence this stage by prioritizing and classifying content based on their assessment of user preferences. This algorithmic curation guides users' understanding of the information they encounter, shaping their cognitive frameworks.

Finally, at the *interpretation* stage, individuals assign meaning to the organized information, constructing their understanding of the world. Algorithms continue to exert their influence by making associations between concepts, subtly nudging users' interpretations of online content. This algorithmic influence can have significant implications for user behavior, potentially shaping attitudes, opinions, and even purchasing decisions.

Consequently, a reason why the algorithms influence human decisions is that they work fast at every level of perception within our brains. In other words, they may "think" for us without us being very aware of it. Another reason why algorithms are responsible for affecting how people make decisions is by choosing when and how often information is exposed to them. For instance, Kramer and collaborators [14], changed the emotional content of Facebook users' News Feeds in a study that proved the importance of content recommendation. In their study, social media users who were exposed to more positive content tended to post more positive updates themselves, whereas people who were exposed to more negative content submitted more negative updates. This study emphasizes how users' emotional reactions and

expressions can be influenced by the emotional tone of social media material. These results imply that social media algorithms can have a considerable influence on users' well-being, as well as their decision-making abilities.

Fear of Missing Out

Within the digital environment, algorithms have a big impact on how consumers gather information and make decisions. By choosing, organizing, and interpreting content, algorithms, as complex decision-making processes, are created to enhance the user experience. Notably, algorithms exploit the *Fear of Missing Out* (FOMO) as a key psychological factor to maintain consumers' involvement [15]. Users' fears of missing out on important content are highlighted by FOMO, which encourages them to stay absorbed in the digital world. FOMO is frequently used by algorithmic recommendation systems to promote user engagement. In order to induce fear of missing out and drive users to click, like, comment or share, platforms may utilize methods such as sending notifications about others' activity or emphasizing trending material. These notifications were proven to effectively push users to interact with content, fueled in part by FOMO-related reasons [16].

Another aspect central to FOMO is that algorithms frequently highlight information that is currently popular or trendy, which might exacerbate consumers' social anxiety. The great urge to obtain information that indicates one's position in the social hierarchy was used to explain hours spent on social media, especially for teenagers and young adults in the study conducted by Whiting and Williams [17]. Information gathering, according to Trepas [18], "can be considered a rational and goal-driven activity at all levels of granularity". In fact, the rise of social media has made it possible to access a variety of behaviors and personal data on others that were before mostly unreachable. Based on their examination of these variables, Roberts and David [19] claim that FOMO is positively connected with the intensity of social media use. As a result, increased social media usage involves additional information that empowers the algorithms. As a result, FOMO affects people's decision-making abilities as well as their engagement with algorithm-recommended content. FOMO can influence how consumers consume content, how frequently they check their accounts, and whether they take part in trending or popular content, according to several studies [14, 9, 5]. Algorithmic recommendation systems leverage FOMO cues to boost user engagement and keep people actively participating on online platforms.

Illusion of Choice – methodological framework

The presence of algorithms in our lives gives us a sense of comfort that easily tricks us into thinking that we are still the single owners of choices. It is convenient to use technology for gathering information, organizing it, and weighing the pros and cons when making decisions. However, the majority of the information that influences our decisions is filtered by algorithms that determine which options we should choose. As a matter of adaptation, "tech companies use technology as a vehicle to construct individual subjective reality, the internal space that frames our decision-making" [20]. This raises the question: do people believe they possess their own decision process or are they aware they have an illusion of choice? To answer this question, we will embark on an exploratory journey where the main goal is to capture the perspectives of both regular social media users and digital marketing practitioners regarding how algorithms work and what are the effects of social media algorithms on their decision-making abilities.

The study addresses the following research questions:

Q1. What do social media users and practitioners have to say about the impact of algorithms on their decision-making processes on online platforms?

Q2. How do practitioners relate to their social media activity, knowing how algorithms work?

Q3. What are the obvious benefits and drawbacks of algorithmic content recommendations, as viewed by social media users and practitioners?

Q4. What suggestions do social media users and practitioners have for increasing the effect and ethical usage of algorithms in online decision-making?

This study adopts a qualitative research approach to investigate the impact of social media algorithms on the decision-making processes of both social media practitioners and regular users of social media. The primary data collection method consists of two independent focus group discussions: one with digital marketing practitioners and a different one with daily social media users. A focus group, also known as an in-depth group interview, is a qualitative research technique that focuses on gathering data through the interaction of group members, data connected to a predetermined problem by the researcher [21]. Focus groups allow for significant data collecting by allowing participants to contribute their thoughts, experiences, and perceptions about social media algorithms and their impact on decision-making. The practitioner focus group consisted of experts with knowledge in digital marketing and social media management, whereas the user focus group consisted of regular social media users from various age groups and online behaviors. To discover recurring themes and patterns in focus group conversations, qualitative data analysis methodologies such as thematic analysis were used. Qualitative research is appropriate for the in-depth exploration of complex phenomena, providing a nuanced knowledge of participants' viewpoints, experiences, and attitudes.

Appreciating how social media algorithms influence decision-making, user behavior, and online experiences is critical for influencing digital-era arguments about algorithmic transparency, ethics, and user autonomy. The intended effect of this research is to contribute to a better understanding of the influence of algorithms on online decision-making given real user perspectives.

Results

The viewpoints of practitioners in relation to the first research question, *what do social media users and practitioners have to say about the impact of algorithms on their decision-making processes on online platforms?*, demonstrate a complex grasp of the interaction between social media algorithms and user decision-making. While there are concerns about the power of algorithms, there is also recognition of the value of trust, the changing nature of traditional media, and the dynamic interaction between user behavior and algorithms. The variety in impact across various target audiences, as well as the evolution of user responsiveness over time, offer richness to the entire analysis. Respondent R.M, for example, believes that social media practitioners have excessive influence, implying that their influence is not always evident but is nonetheless used. There is pressure for platforms and algorithms to operate differently, particularly in topics of societal importance, such as political beliefs:

I somehow go against the grain of the profession and the industry I belong to. I think we have way too much power. [...] When it comes to things that are really important to society, I think social media platforms and algorithms should work a little differently. There should somehow be, I don't know some measures taken, I don't know what measures, I have no idea, but some measures in the sense that the things that are really important to society can no longer

be influenced only by a marketing campaign. It is quite simple if you sell cucumbers to be able to influence people to buy cucumbers. If you sell some political ideas, don't make it so easy to influence people for some political ideas.

(Respondent R.M)

Social media users who participated in this exploratory study revealed a certain amount of awareness of the illusion of choice prevalent in social media environments. While a majority of participants initially asserted their rational decision-making processes when engaging in online purchases, emphasizing cost-benefit analyses and financial self-control strategies, further probing revealed a growing recognition of algorithmic manipulation. This recognition was particularly evident among more experienced social media users, who acknowledged their susceptibility to targeted advertising techniques. One participant, J.C., aptly captured this sentiment: "I'm much more cautious about what I see online. I can often detect when manipulative tactics are being employed. When I encounter ads or promotions, I make a conscious effort to rationalize the purchase rather than succumb to impulsive buying".

Social media user respondents also stated that social media algorithms influence their need to go online in order "not to miss something". They are aware of FOMO particularly related to social connections and social conversations online. They experience a strong, lingering sensation of falling behind in group conversations. A very compelling insight is that FOMO in social media may be correlated to building a routine of SM consumption. A routine that can be very hard to break off. Respondent L.M. stated:

When I open my phone and want to browse social media for a bit, I have a very clear order: Facebook, Instagram, TikTok. After finishing with Facebook, I move on to Instagram, and after finishing there, I go to TikTok. But I always do this in the same order.

We can conclude that FOMO is amplified by the tailored recommendations of SM algorithms which in turn make SM users go online much more often and increase the chance of their decisions being influenced by them.

For the *second research question*, practitioners revealed that they perform rigorous ad analysis, emphasizing ethical factors and avoiding campaigns that are contradictory to their ideals. For example, M.N. declared:

I like this part of the analysis, to follow both small brands and big brands, to see what they are doing. Most of the time, for me, as a source of inspiration are the biggest brands because there I realize that there is a lot of analysis. There's maybe some research that leads to some marketing conclusions, and I really enjoy watching what they're doing online.

A.C. continued:

There are some brands that I find abusive in their online ads that use targeting algorithms. And I consider myself a little cop, in the sense that if they don't have an unsubscribe button and they keep spamming me and they don't stop and I haven't given them consent for that data, then I tell them I haven't seen anything about GDPR, I ask them not to send otherwise, I make complaints and after that, I don't send anymore. Because, on the one hand, I know that it is important for me, as a specialist, to have that data, but on the other hand, I know that [...] the area of ethics is very important.

Moreover, it can be observed that whilst recognizing algorithmic challenges, practitioners take an analytical approach, grasping the manipulative nature of targeted marketing and remaining attentive in the digital realm. For instance, I.Z. revealed:

I find it very annoying what happens with this algorithm and many times I end up falling into these traps. I mean, it targets me very well sometimes, I mean, it's like it actually

creates the need for me. Not the need, creates the problem, and then they come up with the answer to the problem I have.

Participants agree that algorithms play a big part in predicting success on social media networks. Even professionals in digital marketing, nevertheless, acknowledge that they do not fully comprehend the intricate workings of algorithms, underscoring the lack of control and ongoing need for adaptation. Although many acknowledge that they still are unfamiliar with algorithms, digital marketing practitioners stress how important they are to their plans. This fact highlights the intricacy of the algorithms and the requirement for ongoing modification. While practitioners employ certain strategies for controlling algorithms, their expertise is more concerned with outcomes and usability than with a thorough comprehension of algorithms' inner workings. Even for industry experts, this indicates a certain opacity in algorithmic operations.

Practitioners emphasized the advantages of effective personalization and customization in their response to *Q3 related to the benefits and drawbacks of algorithms*. By tailoring content according to user behavior, algorithms enhance the user experience. Additionally, they support accurate audience targeting, which affects consumer behavior. One practitioner even highlighted the importance of user behavior in the interaction with algorithms:

I don't think we are controlled by algorithms, but by the behaviors we have online, because that algorithm works on some data that users provide. Yes, it can also come into play in the area of predictability, but also as a result of some previous behaviors that the users had. So, I think it is a mutual thing and the algorithm influences the user's behavior, but the user also influences the user's behavior"

(Declaration of S.S.)

Potential misuse of platforms and algorithms has been recognized as one of the drawbacks; these can be used to promote ideas or sway opinions, particularly in a political setting. Moreover, practitioners have noted that algorithms have an impact on user behavior: user behavior online can be used to manipulate and influence users without their knowledge. Finally, the advantages of algorithms for content suggestions are emphasized, but issues with possible misuse and user behavior implications suggest that using these algorithms in the digital sphere requires a responsible and ethical approach.

All social media users expressed that they feel that algorithms have become quite advanced in recent years and favor tailored content that fits the users' preferences. They are aware that the scope of the algorithms is to keep users online as long as they can. Respondent E.Z. stated that algorithms "tend to keep me locked in a cage of personal choices". However, the content based only on the preferences of users is not appreciated all the time. Sometimes, lack of diversity can become frustrating and can make some users decrease their usage of certain apps like YouTube. On the other hand, algorithms on TikTok have an interesting pattern found by users. From time to time, they favor different content that has no connection to users' preferences. Some respondents highlighted that algorithms are based on Machine Learning meaning that they learn our online behavior and then they give us what we might like. This confirms that there is a two-way relationship, a dynamic interaction between user behavior and algorithms.

The *final study topic* raises considerations regarding algorithm-based platforms that empower users: in order to help practitioners by customizing their feeds, platforms are being asked to give users greater power and to actively teach them about the features available on the platform. Stronger guidelines for advertising are also recommended. As A.C. puts it: "I think that maybe some tougher sanctions would work...". More restrictions on advertisements are

demanded, and it is suggested that platforms verify items and companies before permitting advertising.

The report of the practitioners additionally calls for government participation in this area, highlights the significance of user education, and suggests harsher consequences for disobeying the regulations. It was stated that ad-free premium versions would be preferred, as this might enhance the user experience, as F.B. expressed:

The developers of YouTube Premium have done a good job with the paid versions and you are no longer targeted by so many ads and are able to watch nice videos. Maybe we can add this to social media platforms as well... This is because the original purpose of Instagram and the feed—which was to allow users to connect with friends and communicate—was somewhat lost. It is truly now a place that is overrun by advertisements. I'd include a payment program.

The most common suggestion of the social media users' respondents was that real people should intervene more in moderating content and in mediating discussions on important topics such as politics or governance. They feel that algorithms either abuse terms and conditions and limit freedom of speech in cases that they should not, or they lack control and favor harmful content such as hate speech. However, respondents understand the complexity and the difficulty of deciding who should have the role of the "referee" in online public discourse. It is interesting that the suggestion of social media users for increasing the effect and ethical usage of algorithms in online decision-making concerns the need for human intervention.

Users expressed a pessimistic opinion on the accountability of social media platforms. They feel that there is no hope that social media platforms can and will do something. This is based mainly on the economic factor: SM platforms are companies that have the main focus on profit and not on carefully and objectively curating public discourse that can influence people's lives. They will not focus on ethical procedures until they are legally forced to. Users feel that responsibility is on them and that users should take care of how they consume SM: what platforms they choose to use, how much time they spend online, what data they accept to give, and so on.

Discussions

Understanding the influence

The findings of this research highlight a significant gap in users' and practitioners' understanding of data in digital marketing. It was startling to learn that even professionals who are heavily involved in the field of digital marketing do not have in-depth knowledge of algorithmic features. Their attention is mostly directed toward e-commerce targeting technologies, and they do not fully comprehend the more expansive organic algorithms that are included in social media platforms. As pointed out by Head, Fister and MacMillan [22], understanding algorithmic curation and knowing how to manage it is critical to critically and thoughtfully navigating today's increasingly personalized media landscape. Online marketers run the risk of unintentionally creating echo chambers [23] and disseminating false information if they are not aware of how the algorithms they employ in their campaigns operate. This highlights how important social media literacy [24] is for responsible digital engagement and decision-making.

Additionally, the study showed that practitioners generally lacked prudence when it came to the information they disclosed online. Users and practitioners alike are unaware of this, which causes misinterpretations of the personal information disclosed on digital platforms.

These results underscore the critical need for additional research and instruction in this field, as well as stressing how important it is for both practitioners and users to get a deeper comprehension of algorithms and take more care when sharing data online. Subsequent research efforts ought to conduct more comprehensive examinations of the particular facets of algorithmic operation that pose difficulties for practitioners and users, with the ultimate goal of enhancing digital literacy and protecting data in the dynamic sphere of online interactions.

Ethical Consideration

The results of the study show that users and digital marketing professionals alike agree that tighter regulations on adverts are essential. Participants voice concerns over dishonest business methods, especially when they come across products that are not validated or are subjected to misleading information. This is consistent with a study by Pangrazio and Selwyn [25], which found that although people are worried about the personal data they have shared, they frequently feel helpless due to the complexity of digital data assemblages, privacy settings, and different “terms and conditions” agreements.

The answers that demand for legislative action are in line with a general consensus that platforms need to be required to impose strict regulations on the types of advertisements that are allowed and the reliability of the businesses that are authorized to run advertising [26]. These steps are considered necessary to stop unethical behavior and guarantee the legitimacy of products that are advertised online.

Algorithm literacy

One promising approach to enhancing algorithm literacy is the implementation of onboarding tutorials that introduce users to the fundamental principles of algorithms and their role in shaping online interactions. These tutorials can provide a structured introduction to concepts such as data collection, personalization, and algorithmic bias, empowering users to make more informed choices regarding their online activities. The potential impact of onboarding tutorials on algorithm literacy is particularly significant for middle-aged users, who may not have grown up with digital technologies. By providing these users with a foundational understanding of algorithms, tutorials can help bridge the digital divide and foster a more equitable online experience that evolved from social media literacy.

Media literacy enables people to distinguish between false information and reliable sources while analyzing online content [27]. It promotes appropriate sharing behaviors, which lessens the spread of misinformation and improves the state of the digital ecosystem. Besides, social media literacy promotes informed citizenship and active involvement in forming digital culture at a time when social media interactions have a substantial impact on public discourse and perceptions [24].

While practitioners have highlighted the existence of user controls, such as the ability to customize ad preferences or opt for ad-free versions of services, these options primarily address the issue of advertising. The broader impact of algorithms extends beyond advertising, influencing aspects such as search results, social media feeds, and even e-commerce recommendations [28].

Content moderation

The focus group results highlighted room for exploring methods to improve content moderation on social media platforms. Similarly, Ganesh and Bright [29] point out that the increased dependence on new technology highlights the need for strict content monitoring on

social media platforms. It is worth noting that the suggestion of social media users for increasing the effect and ethical usage of algorithms in online decision-making concerns the need for human intervention. Incorporating human review into the content moderation process can help ensure that algorithmic decisions are fair and unbiased. This opens up other directions for discussion such as: who should fulfil the role of moderators? What abilities and competencies are required? Who should they work for? How can we keep a moderated balance between upholding platform standards, respecting user rights, and avoiding censorship?

Conclusion

According to the Information Foraging Theory, users will decide whether to keep looking for information based on the perceived cost and value of doing so. Users will search longer if they believe that obtaining additional information will be beneficial to them; otherwise, they will stop and base their decisions on the information they have already obtained. Users' adaptive actions highlight the dynamic interplay between algorithmic decision-making and information-foraging tactics in the digital realm as social media algorithms continuously evolve and improve their content recommendations.

The exploratory study highlights the viewpoints of practitioners and everyday users in the context of constantly changing social media algorithms. It also demonstrates the complexity and diversity of these algorithms and their influence on decision-making processes. This work provides a solid basis for future research that can examine in more detail the particular features of the algorithms and the most plausible causal relationships, given the dynamic nature of these algorithms and their varied influence. As a result, this preliminary method assists in the creation of an extensive framework to comprehend the impact of algorithms on user choices and behavior in online environments.

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