



Best Practices of Programmatic Advertising: A Narrative Analysis

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ABSTRACT

Purpose: This study presents the theoretical and conceptual foundation for programmatic advertising (PA) and explores how PA, as a key tool, can assist advertisers and agencies in developing effective digital advertising strategies.

Methodology: The study employs a conceptual framework—a visual representation of expected relationships and connections between various concepts, drawn from the theoretical framework.

Findings: The application of PA typically begins with a customer's explicit request for a product or service. PA helps us understand how many online portals our customers visited during a given time period.

Research Limitations/Implications: The primary challenge to advanced marketing is self-delusion. Agencies and clients often focus on attracting the right number of users and making appropriate ad choices, rendering ad testing unnecessary.

Practical Implications: In the current landscape, where marketing and spending have become more relevant and dependable, the automation of digital advertising, particularly through the effective implementation of programmatic advertising, plays a crucial role in supporting online marketing growth.

Originality/Value: Digital advertising automation serves as a crucial tool for enabling processes that are more efficient and effective than manual methods. The transformation of early advertising observation processes has contributed to the gradual decline of traditional advertising methods, leading to decreased profit margins and increased costs for advertising companies. In response, enterprises have innovated within the advertising industry.

Keywords: Real-time bidding, Digital marketing tactics, Programmatic advertising, Online advertising market

INTRODUCTION

With the continued growth of digital media technology and smartphones, online advertising is becoming more personal and interaction-oriented. Trends in digital marketing systems are compelling advertisers (The Privacy Paradox) to develop systems that can support automated advertising (Ad Exchanger, 2015). With the advent of exponentially improvised and advanced systems, the field is becoming more innovative, competitive, and challenging (Ad Exchanger, 2015). This change is also evident in the modern media landscape after the introduction of marketing automation. Digital automation technology involves a type of automated process (programmed using machines and algorithms) that buys advertising space

in real-time. The competitive technological development of digital advertising has become increasingly successful. Strategies and frameworks that can be used by many ad agencies to obtain accurate output and gains from connected methods

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and internet advertisements, such as advances in artificial intelligence (AI) and machine learning, along with the abundance of personal data accessible on the internet, have made it possible to offer targeted advertising at a low cost at scale. This type of advertising is exchanged electronically in real-time among multiple actors in a convoluted supply chain (A Goal Hierarchy Approach). The digital online industry currently offers the most reasonably priced method for customers, ad agencies, and advertisers around the globe to accomplish everyday tasks, purchase items, and make investments in these purchases.

It is now more convenient for businesses all over the world to employ financial innovation payment through partnerships with well-known banks (Keith *et al.*, 2013). The speed at which digital marketing is evolving, helping to convert true information through different modes of systems that can support digital users' information, has made companies constantly enhance their productivity and earnings from internet techniques, raising the marginal return on investment of automatic promotion media.

As reported by emarketer.com, "Programmatic advertising can be explained as the tool which can be used for channeling the buyers and sellers through automation. Further, statista.com reports that in the digital advertising business, programmatic advertising will account for 46% of display advertising revenue in 2023. Programmatic advertising is projected to account for over a quarter of all electronic media advertising transactions in India and could grow in the coming years.

Advertisers using the traditional method of manual intervention try to reserve advertising space. The whole process involves many tedious meetings and negotiations. The proliferation of publishers with the advent of digital marketing has made it increasingly difficult for advertisers and ad agencies to manage their chain of supply and demand. In the current situation, automation helped control the entire

workflow (Hoelzel, 2015, August 22, BI Intelligence Report).

Programmatic advertising has empowered advertisers to adopt a more customer-centric approach, facilitating real-time buying and transforming their advertising processes to align with specific needs through targeted campaigns. Consequently, advertisers have experienced increased revenue from advertising. Systematic advertising enables brands to offer better and clearer insights into the needs of their target audience. While programmatic advertising is still in its infancy in the country, this trend unmistakably demonstrates the evolution of advertising (Hoelzel, 2015, August 22, BI Intelligence Report). Figure 1 illustrates how programmatic advertising has contributed to the growth of digital revenue share over the past few years (The 'Privacy Paradox', 16).

Publishers distribute advertising to end-users using programmatic by displaying appropriate adverts based on the advertiser's budget. Because the adverts in this technique are tailored to the user's interests rather than being generic, conversion rates are high (Hoelzel, 2015, August 22). You may also optimize your marketing and expenditures with programmatic buying. The whole point of programmatic advertising is to bid on more effective ads. In real time, ad impressions might rise or fall. The introduction of smart technology devices, such as smartphones, smart speakers, and desktop computers, has altered people's ideas about how to utilize the Internet. Product development processes have evolved, yet purchasing strategies are now more effective than ever. Using programmatic advertising, the company's brands saw a huge shift in conversions at a greatly reduced cost. Programmatic advertising relies on public supply and demand since real-time bidding determines inventory value (Hoelzel, 2015, August 22).

We present a theoretical and conceptual framework that explains how improved advertising strategies can be designed with the aid of programmatic advertising. To better design strategies

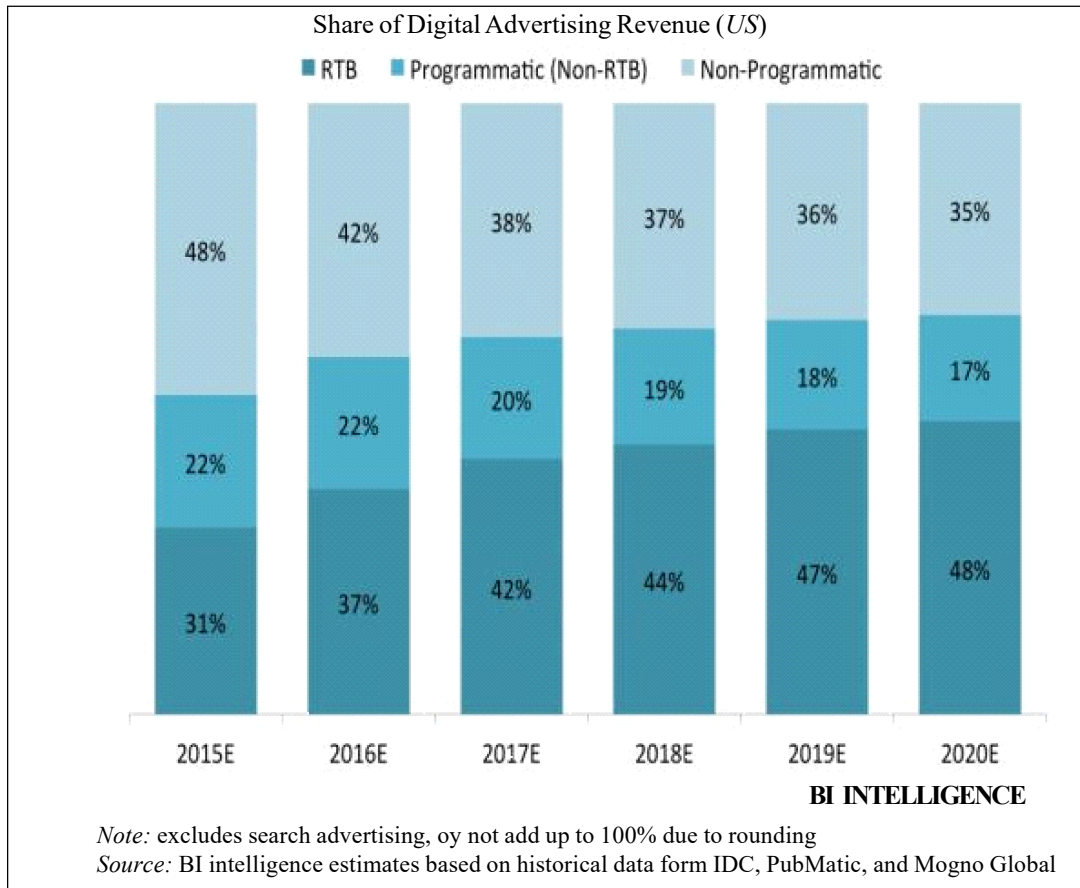


Figure 1: BI Intelligence Report (Hoelzel, 2015, August 22)

in complex environments, a conceptual framework for identifying information related to need satisfaction has been developed. This paper follows the steps listed below. First, we present pertinent background research on ethics in the opening session. Second, a conceptual framework has been demonstrated via careful research. The research will elucidate the noteworthy function of programmatic advertising in formulating efficacious digital marketing tactics. Lastly, we make a few deductions.

THEORETICAL BACKGROUND

Programmatic Advertising

Programmatic advertising has a more nuanced definition. The majority of the writers' descriptions

are deceptive about their applicability because there aren't enough applied scientific research investigations (Whitmer, 2018, Programmatic Mistakes). According to the data gathered, the idea of an advertising space bidding system can offer a structured tool for personal marketing and is also made feasible by drawing in potential clients (Benady, 2015). The way advertising is carried out has changed due to programmatic advertising, which permits lower expenditure and more thought to be given to the risk that comes with advertising (Seitz and Zorn, 2016). This technique has assisted publishers in disseminating up-to-date material that is closely related to each person's comprehension of specifications, transforming them into target audiences. With the use of programmatic advertising, better campaigns that

focus on who, where, and when to interact personally have been developed (Lambrecht and Tucker, 2013). Real information, according to economists, improves information utilization and opens up chances for purchasing advertisements on online media platforms, providing buyers and sellers with the ideal advertisements at the most negotiable price at the appropriate time and location (Benady, 2015).

The automated advertising system has a number of uses. By learning about a customer's behaviors, interests, and recurrent purchases, information data management platforms (DMPs) build customer profiles using data cookies. Additionally, a variety of data can be utilized to ascertain geography, present activities, and GPS location. This example helps one to grasp the reasoning above. Motels near airports can assist travelers stuck at airports by providing lodging through their cellphones if flight delay information is available (Gertz and McGlashan, 2016).

The supply-side application system aids in managing the optimal inventory that is displayed on the billboard on the other side of the application. The client's channel usually determines how much online browser space is available. A demand-side platform (DSP) ascertains the precise cost of its browser space and auctions, as well as the advertising agency's bid, by evaluating accurate information between the customer and the advertising agency whose customer database is involved in sales and purchases (Gertz and McGlashan, 2016; Seitz and Zorn, 2016).

Programmatic advertising automation has the ability to minimize costs and help employees make the right decisions in the process, resulting in the right ads being served (Benady, 2015). There have been several situations in which companies have been forced to withdraw from using automation after their ads have been placed alongside their competitors. This emphasizes how important it is for marketers to exercise caution and protection when utilizing programmatic advertising applications. Because of their lack of technical understanding of the application,

marketers may find the situation even more challenging (Gertz, and McGlashan, 2016).

Digital Promotional Strategies

Digital advertising leverages social media, smartphones, and other electronic devices to promote and endorse products and services. This encompasses advanced electronic billboards positioned along highways and in urban areas. Digital marketing involves the strategic planning and overall approach to acquiring and retaining customers. Digital marketers must take into account various platforms and device types, including desktops, mobile devices, and tablets. Some may specialize in a particular segment, such as a local cable channel, while others adopt a broader approach. A digital component should be integrated into a comprehensive marketing strategy that encompasses events like open houses, outdoor advertising, print media, and more. The primary aim of this endeavor is to boost brand recognition, foster preference, and increase revenue through diverse digital advertising methods (Taiminen Karjaluo, 2015).

Various forms of digital marketing activities encompass search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, content automation, advertising campaigns, e-commerce marketing, affiliate media marketing, social media optimization, and e-commerce. Email marketing, programmatic advertising, e-books, optical discs, games, and various digital media formats are also pertinent. These elements are interconnected and should be addressed alongside the incorporation of extended non-internet channels, particularly through mobile phones, digital media applications (SMS or MMS), and social media.

Digital Promotion can be categorized based on the advantages or applications within the digital marketing and advertising sectors. To enhance the management of marketing and advertising in digital markets, marketers should concentrate on fostering

customer relationships based on engagement (Tiago Veríssimo, 2014). The evolution of marketing and advertising has introduced the concept of Integrated Marketing Communication (IMC). Integrated Marketing Communications (IMC) is a strategy in marketing communications designed to ensure the consistency and customer-centric nature of messages and communication strategies delivered through all channels. IMC integrates various facets of marketing and advertising communication, such as public relations, advertising, direct sales, sales promotions, and interactive advertising, to deliver clarity, consistency, and maximum impact in communication. The goal of IMC is to influence audiences through promotional elements, creating awareness, favorability, and compliance.

Digital merchandising harnesses local media, smartphones, and various electronic gadgets to promote and sponsor products and services. This encompasses digital billboards strategically placed on highways and in high-traffic zones. Digital advertising involves meticulous planning and an encompassing framework to attract and retain customers. Digital marketers need to take into consideration various specialized systems and devices, including personal computers, mobile phones, and tablets. Sometimes the focus may be on a narrower segment, such as a local cable network, while in other cases, the approach may be more comprehensive. Sustainability within the digital landscape should transcend conventional advertising strategies to meet the expectations of startups, outsourced advertising, branded materials, and more.

Digital advertising and marketing encompass all forms of visual, written, and video advertising commonly seen on the internet. This includes pop-up advertisements that appear each time you log in, as well as sponsored posts that populate your Facebook feed. Occasionally, live broadcasts may necessitate the viewing of advertisements. Resilience is somewhat unpredictable in smaller niches, as

indicated by “Ad.” Advertising is an integral facet of common applications within the digital marketing field. A digital advertising strategy serves as a well-defined and strategic approach to achieve established advertising objectives. Goals are formulated based on the priority rules of your organization. Once goals are established, options for digital advertising and marketing campaigns are expanded or pursued based on goal attainment. A digital marketing strategy extends beyond individual advertising campaigns. When we refer to digital advertising strategies, we allude to comprehensive plans and schemes with long-term and overarching objectives. Mid-level campaigns represent a distinctive approach to attaining smaller, short-term goals within your digital marketing strategy.

Having a strategy is as essential as having a plan for attaining each objective. It substantially streamlines the implementation of workflows, facilitating increased functionality while overseeing and executing multiple areas through data analysis. This allows for a seamless transition between various digital marketing strategies, including SEO/SEM, conversion rate optimization (customer experience), email marketing, and social media marketing. The overarching business objective is to attract new customers and cultivate deeper relationships with existing ones. Your business should also incorporate a proactive and sustained effort to draw in or engage more customers by managing your online content and integrating proprietary digital advertising and marketing channels with traditional media. Additionally, an effective content promotion strategy is imperative.

Barriers in Digital Promotional Strategies

Digital advertising strategy must deliver much better advertising with credible feedback loops, but deep limitations prevent it. Self-delusion is the largest obstacle to advanced marketing. Most of us hold heartfelt beliefs until we realize that, due to a lack of impartial, independent assessment, this place doesn't require as much effective marketing and promotion.

Both agencies and clients are constantly considering the number of users they need to attract and selecting the best ads. Additionally, groups and clients quickly lose interest in goal evaluation as they become interested in working with new creators. Ad testing is not necessary.

The notion that revenue trends only show up when advertising is effective is the next obstacle to more effective advertising. Unless the sales response to your ad is immediately overwhelming, it's nearly impossible to use statistics to determine the usefulness of the advertisement. As mentioned earlier, there are so many variables beyond our control that it is impossible to replicate or isolate the effects of media marketing alone. Additionally, an incomplete marketing workshop can take weeks, while other marketing efforts can take months to see positive results. However, this delay in announcement may invalidate the efforts to comply with income data. Additionally, rapid marketing has short-term results that can be reflected in revenue statistics but also long-term results that can easily be overlooked when tracking sales data. Due to these limitations, income data typically remains a difficult or poor indicator of marketing effectiveness.

Sophisticated Marketing Mix Modeling

Sophisticated marketing mix modeling comes naturally after comparing advertising and marketing results and sales but often requires hundreds of thousands of rupees and years of effort afterward. Building an old database with all the prior marketing and relevant variable inputs is necessary. Few agencies possess the resources-budget, perseverance, suitable database, and seasoned expertise-needed to be successful in advertising mix modeling. Nevertheless, advertising composition modeling is more useful in evaluating the cumulative effect of dense and distinctive advertising than it is in evaluating the contribution to a single commercial.

Furthermore, marketing mix and advertising blend modeling do not explain the success or failure of marketing and advertising. What aspects of your marketing strategy worked well, such as the message, media weight, or media mix? Marketing mix modeling, in general, is unable to respond to queries of this nature. Again, sales numbers are of limited value when it comes to making important advertising decisions.

The third obstacle is the enormous creative ego that surrounds quality advertising. One of the biggest obstacles is the perception that gendered advertising is the exclusive domain of “creatives” within the company. Effective advertising frequently needs a lot of work and fine-tuning, mostly based on unbiased audience feedback. Great creative egos are usually faced with some evolutionary enhancements. Since the group would not receive smaller improvements as part of the promotion, larger campaigns are likely abandoned. Big egos aren't just found in agency compliance, to be fair. A patron's big ego can also be an obstacle to good advertising. A big ego creates obstacles because emotions rely on logic, reason, and customer feedback to make decisions.

The fourth roadblock to better marketing is the huge assumption that major competitors know where they stand. Simply replicating the propaganda techniques of the opposition truly reflects the general intent. Some buyers have recently imitated or copied the marketing strategies of their major competitors, prompting consumers to try all of their major competitors' advertisements as a safeguard before mindlessly copying the marketing strategies of their rivals. The tryouts are also so good that, in contrast, all the other competitors unnecessarily made news, which waned the customer's desire to imitate the market leader.

The fifth block, which aligns with better marketing, is strategy; less than scarcity, and lowlife is a bad strategy. Every hour, users here make

mistakes. Consumers aren't doing their research, aren't looking for alternatives, aren't thriving yet, and don't know how much they value the manufacturer and their business's future. Consumers inform businesses that publicity alone, without disclosing the guidelines, is sufficient. The employer decides whether or not to take this stance. Effective marketing seldom occurs in a strategy-void environment. The company cannot produce widespread advertising if the client cannot specify a noise strategy.

The sixth barrier to more effective advertising is incompetent customers. Large-scale advertising launches are frequently thwarted by the procedures, guidelines, and staff of some clients. Haughtiness, ambiguity, frustration, ignorance, risk aversion, and dissonance are still the hallmarks of "agent killer" clients. Bad buyers are unlikely to attract full-size advertising.

The seventh and final limit after increasing advertising is a terrible reproductive test by research firms. Many advertising testing systems are limited to mimicking temperate markets (thus failing to provide a representative sample). Some structures are so expensive that the cost of trying outweighs the benefits of the result. Research groups have been guilty of relying on two specific but simple measures of advertising effectiveness while completely ignoring a number of uncomfortable and very important variables. To judge the usefulness of the display, many specific variables must be displayed simultaneously.

PROGRAMMATIC ADVERTISING'S ROLE IN SUCCESSFUL DIGITAL MARKETING STRATEGIES

For advertising agencies, programmatic advertising is a sales automation method. Access to efficient Premium Ideal inventory helped both the client and the agency, and it also improved advertising campaigns, program management, and reserved

inventory frequency (Rask, 2020, June 23). Advertisers can also proactively automatically update their forecasts to reap the benefits of advance advertising bookings and make greater use of electronic invoicing, electronic collections, and programmed reporting.

The industry also thinks that the advent of programmatic advertising will accelerate the current ad sales revolution in programmatic. In the total auto ad market, the traditional system's share of direct booking sales is predicted to drop from 48% (\$22 billion) in 2018 to 34% (\$18 billion) in 2020 (IAB, 2018).

Programmatic advertising has been enhanced by supporting both traditional reservation and automated systems, allowing users to interact with advertising transactions. By offering improved future forecasting and space allocation, it covers a wide range of system formats and offers a guaranteed ad inventory and revenue stream. This promotes greater levels of creativity while having a detrimental effect on brand safety. By creating more effective strategies, automated advertising provides more advantages. Through audience lists, programmatic advertising can also apply more potent campaign advertising strategies that are better suited to the targeted future customer goals (Rask, 2020, June 23). PA is able to better track ads across a variety of products, target and optimize advertising campaigns, and optimize high-frequency systems across all output formats. In order to create plans that increase productivity, decrease worker errors, free up more time, and make efficient use of financial resources through centralized trading systems, programmatic advertising is essential (Role of Programmatic Advertising, 13). By taking into account a number of important factors, programmatic advertising can significantly contribute to improving the efficacy of modern online marketing campaigns (Role of Programmatic Advertising, 13).

The process work system figure below helps to understand the function of programmatic advertising.

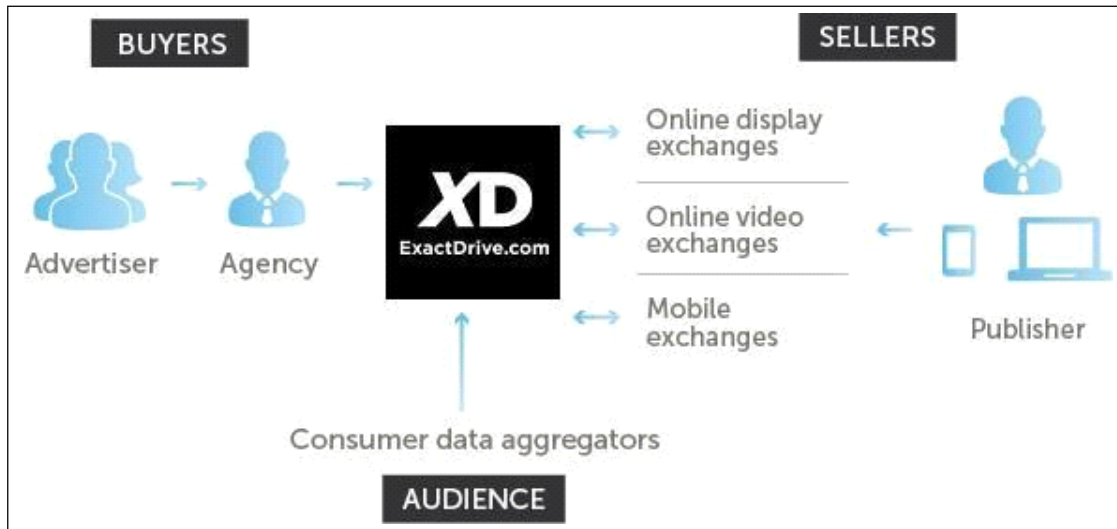


Figure 2: The Key Role of Programmatic Advertising in Automation (Role of Programmatic Advertising, 13)

Enhanced Performance: The advertisement agency only evaluates the last interaction, even before the conversion takes place. Functional marketing has a big impact on the last step of the buying decision, and this is where it's most effective. This will create a feedback system for increasing investment in the area of digital systems. With the right sources, programmatic advertising can target undiscovered customers and drive enough new customers to your portal to achieve better and sustained lift and growth.

Actionable Data

By leveraging existing customer information, advertisers can understand how challenging it is to attract customers with strategy and viability. Therefore, to make the programmatic advertising application more distinctive and suited to each company's brand, the advertising agency gathers the customer information that was initially collected. Automated systems put information to good use by providing tremendous opportunities to retain and upsell existing customers.

Enhanced Recognition of the Brand

Reaching current clients at the appropriate time and location boosts advertising productivity through digital

programmatic advertising automation. This system performs better where prominent and high-quality advertisements are present, and all of this is a result of private marketplace services becoming more widely available. By using programmatic advertising automation to increase the number of advertisers, advertising companies are able to maintain their creative edge.

Relevant Creative

For programmatic advertising campaigns, it's easier to craft messages that are more relevant to the end-users, using the enhanced context of your advertisements. The creative process can be hampered by rival competitors engaging in creative battles centered on pertinent information. You can find advertisers who are optimistic about the creative industry by getting in touch with a creative agency. Every time Dynamic Creativity displays options for an advertisement, it does so by utilizing end-user data.

Integrated Client Experience

Through the use of an application system for digital automation, retailers can take part in customer experience chat points. An information-driven

framework allows both clients to be more targeted and advertisers to identify the right mix of processes, applications, environments, and sources for better messaging to help them achieve better advertising campaign goals. This platform application will bring together better insights to understand and apply different strategies, reducing friction between advertising campaigns by connecting them to the customer experience and developing more effective advertising campaigns.

Transparent System

Never before has the data generated by programmatic advertising allowed agencies to link their advertising efforts. Most businesses use this straightforward procedure to programmatically deliver better service. Access to this data, therefore, raised the likelihood of deriving more insightful conclusions from advertising than previously.

Assessing Actual Worth

The various core actions that occur after verifying the advertisement's conversion rate are the primary source of digital automation's success. Instead of focusing on incremental measurement, the top advertisers now employ an improved cost-per-acquisition (CPA) that tracks when the advertisement was actually viewed. This metric is used as a customer reference point to quantify the number of actions linked to online advertising campaigns.

THE IMPLICATION OF PROGRAMMATIC ADVERTISING FOR MANAGERS

When examining Figure 3, which depicts the general procedure for implementing programmatic advertising in an enterprise, one can comprehend a conceptual framework. Programmatic advertising always begins with a customer's direct request for a good or service. We can determine how many online portals our customers visited during that time by looking at the number of online searches that reflect this. This

procedure adds to the customer's history recorded on the web portal by enabling the advertising agency to estimate the total number of times a client has viewed the various advertisements displayed on the portal. Customers like to have the option to buy, so the ads they see will prioritize the product over their options (White and Samuel, 2019). Any advertisement seen will be registered as an active option in your customer profile, and any advertisement that is not even registered will be ignored. Trip Agent provides information based on its own experience that influences the attitudes and mentalities of shoppers when they look for advertisements for products to buy. This mechanism determines positive effectiveness and creates customer trust in the product and trust in the agency, which, in turn, influences customer habits.

This produces information that can be used for analysis and also provides an effective potential contribution to better understanding the effectiveness, preferences, and caliber of advertising reports and web portals. This will make it possible to generate fresh customer demand. The option to click and buy raises demand. This option is referred to as a selling point that boosts the agency's earnings and provides businesses with additional opportunities to raise their bids and make more competitive offers. In this best-of-breed process, when the advertisement filter column is used, the winner becomes the primary feature provider and sets the bid price that allows the client to see the best advertisers on her web portal (White and Samuel, 2019).

Portal owners and advertisers can access web information through the main menu of customer dashboards, which is provided by this application software. The money obtained from successful bids will enable application platforms to increase their expenditures on the creation of sophisticated algorithms that increase accuracy and enhance web portal systems. This ongoing bidding process increases the portal's revenue, helps invest in the

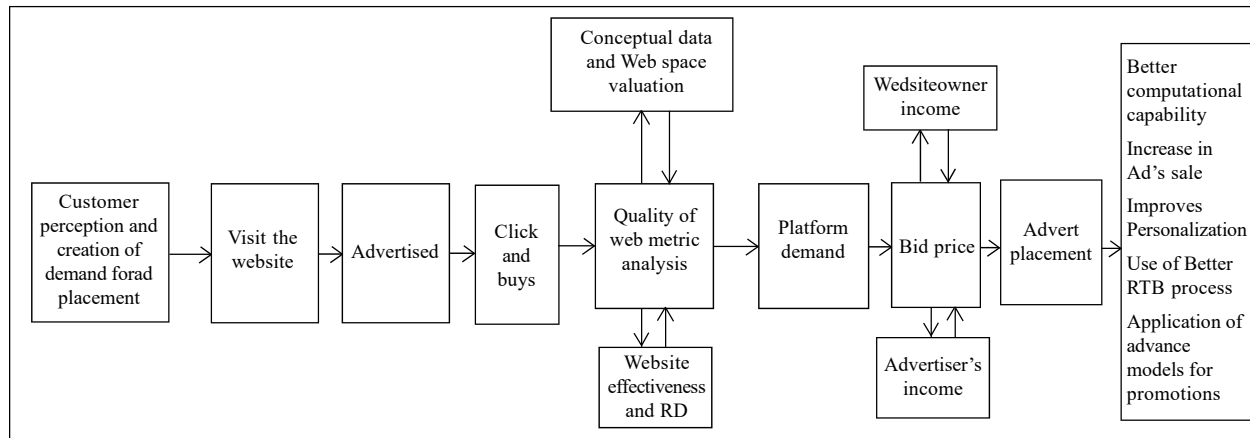


Figure 3: Conceptual Framework of Process Design for PA Application (White and Samuel, 2019)

promotion of expenditure, and drives more brokerages on the dashboard of the client portal (White and Samuel, 2019).

CONCLUSION

The advancement of the digital industry is increasingly evident. Despite the reluctance of ad agencies and customers to fully embrace automated systems, considering them a waste of time and an ineffective platform, it is crucial to recognize the growing sophistication and technology-driven nature of the digital online media industry. Programmatic automated advertising could serve as the foundation for connectivity in a massive and emerging market within the global media industry. However, successful implementation and implications of this technology may face challenges, as there is limited research to understand the impacts of digital media on both publishers and strategies. This paper has detailed the theoretical and conceptual framework of programmatic advertising, highlighting its various key roles as a supportive tool for advertising companies in shaping digital promotion strategies.

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