

Industry perspectives on digital out-of-home advertising in South Africa

ABSTRACT

Digital out-of-home (DOOH) advertising, the so-called “new kid on the block”, is not exactly a child any more. DOOH advertising has become one of the most promising marketing communication platforms. Remarkable growth rates are projected in both developed and emerging markets. Studies on DOOH advertising are generally limited to a few leading authors from developed markets. However, practitioners’ perceptions and practices remain unknown. Understanding professionals’ views of DOOH advertising is important for anyone considering this promising marketing communication platform. Using qualitative interviews with 18 practitioners, this study discovered six themes concerning DOOH advertising in South Africa: its development, barriers, the share of DOOH advertising in various environments, the quality and quantity of exposure, and point-of-transit, point-of-purchase and point-of-wait DOOH advertising. The findings were used to highlight some focus areas for practitioners to develop and overcome obstacles in the South African DOOH advertising landscape. This study is the first of its kind on DOOH advertising and helps to fill a gap in the existing literature on out-of-home advertising and advertising practitioners’ research in an emerging market.

INTRODUCTION

Digital out-of-home (DOOH) advertising media, the so-called “new kid on the block” (Dennis, Michon & Newman, 2008), has become one of the most promising marketing communication platforms, with prominent technology companies such as Apple, Google, Snapchat and Facebook being among the top spenders (Frank, 2017). Out-of-home (OOH) advertising accounted for 14% of the overall global advertising revenue in 2017, but is expected to grow to 24% by 2021 (Nicklin, 2017). Investment in DOOH advertising is the main driver behind this performance. The global DOOH advertising inventory has increased by 30% in the past two years (PQ Media, 2017), with the current DOOH advertising share of total OOH revenues already substantial in developed markets such as the UK, Australia and China (Nicklin, 2017). South Africa is the largest OOH

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market on the African continent. DOOH advertising represented a quarter of OOH advertising revenue in the country in 2017, but is predicted to increase to R5 billion or 41% in 2021 (PwC, 2017). The modern OOH advertising industry is thus evolving from static traditional OOH advertising to DOOH advertising.

OOH advertising encompasses digital and static displays that reach people when they are outside of their homes, such as advertising on roadside billboards, inside and outside of buses and taxis, and on bus benches (Roux, Van der Waldt & Ehlers, 2013). Despite being one of the oldest forms of advertising, OOH advertising seems to be the stepchild in scholarly literature. Khang, Han, Shin, Jung and Kim (2016) explored advertising research published in major journals over four decades and found that OOH advertising was examined in only 2% of these studies, making it one of the least frequently investigated media. International and South African studies focused predominantly on consumers' perspectives and views of static outdoor advertising boards next to the road (e.g. Bhargava & Donthu, 1999; Bhargava, Donthu & Caron, 1994; Donthu, Cherian & Bhargava, 1993; Nagel & Louw, 2004; Pauwels, 2005; Wilson, Baack & Till, 2015; Wilson & Till, 2011). Some scholars have examined alternative OOH advertising media formats in other environments (Chan & Fung, 2013; Lehmann & Shemwell, 2011; Veloutsou & O'Donnell, 2005; Roux, 2015; Wilson & Till, 2008).

Some prominent international scholars have examined DOOH advertising used inside stores to increase behavioural responses (Burke, 2009; Roggeveen, Nordfält & Grewal, 2016; Willems, Brengman & Van de Sanden, 2017) or in shopping malls to enhance the retail aesthetics and atmosphere (Dennis, Newman, Michon, Brakus & Wright, 2011; Dennis, Michon, Brakus, Newman & Alamanos, 2012; Dennis, Brakus & Alamanos, 2013; Dennis, Brakus, Gupta & Alamanos, 2014). However, very few studies have been published on practitioners' perspectives and practices in OOH advertising. These studies only consider the application of static traditional OOH advertising types (Roux & Van der Waldt, 2016; Taylor & Franke, 2003; Taylor, Franke & Bang, 2006), but do not offer any insight into contemporary usage of DOOH advertising from an industry perspective. To understand how to apply DOOH media effectively, researchers must first understand the marketplace and how DOOH advertising is used and implemented by practitioners in the industry. Understanding this perspective is essential, since practitioners are responsible for selecting advertising media, developing advertising media strategies and executing effective campaigns. In the light of this important knowledge lacuna, the research questions to be answered in this article are twofold. 1) *What are the industry's perspectives on the current South African DOOH advertising landscape?* 2) *How do practitioners target consumers with DOOH advertising across environments?* Insights derived from the practitioners' perspectives will be used to propose some guidelines for DOOH advertising development and adoption in South Africa.

1. LITERATURE REVIEW

1.1 Comparing traditional OOH advertising media with DOOH advertising media

The key dimensions of traditional OOH advertising media and DOOH media are compared in Table 1 below.

Table 1: Comparing traditional OOH advertising media with DOOH advertising media

Dimensions	Traditional OOH advertising media	DOOH advertising media
Reach	Mass communication	Targeted communication
Content	Static content	Digital location-based content
Communication	Monologue one-way communication targeting consumers with predominantly branding messages	Two-way communication with customers allowing communication and brand engagement
User interaction	Not possible	Possible
Audience measurement	Basic measurement of traffic numbers	Advanced technology

Each of the key dimensions is discussed in the following paragraphs.

Reach: Traditional OOH advertising boards are positioned next to roads for broad market reach, but this often leads to media waste when the message is delivered and then ignored by those who are not part of the intended audience (Roux, 2015). The advanced placement of DOOH advertisements in niche environments, taking the context into account, allows for more accurate targeting while reaching previously unreachable audiences (Kelsen, 2012). Some examples of advanced DOOH media placement through targeting and dynamic execution include Jaguar’s “Feel Wimbledon” campaign, in which technology was used to deliver live match scores to the public, and British Airways’ “Lookup” campaign using General Packet Radio Service (GPRS) technology on DOOH with a little boy looking up every time a BA plane flew overhead (Webner, 2017).

Content: In the outside environment, DOOH advertising has become a more efficient form of communication than traditional OOH advertising (Taylor, 2015). The features of DOOH media allow advertisers to make appropriate time-based adjustments to the digital content instantaneously, based on the audience or location, and to rotate multiple messages in the same location (Lasinger & Bauer, 2013). DOOH media can display customised communication with multimedia content in the form of advertisements, community information, entertainment and news (Taylor, 2015). Dennis et al. (2014) found that DOOH media displaying content with sensory cues can evoke affective experiences; however, informational content focusing on features and benefits can also evoke intellectual experiences. Since DOOH advertising

content can be changed rapidly and effortlessly, marketers can test how to introduce new products and incentivise sales. Burke (2009) proposed that when an advertised product becomes unavailable, the message could immediately be removed from the display. The content design and distribution of traditional OOH advertising campaigns are far more laborious and expensive than DOOH advertising campaigns (Roux et al., 2013).

Type and purpose of communication: DOOH media displays can be used to provide real-time community information, news, advertising and other specialised content (Dennis et al., 2012), while traditional OOH is predominantly used for commercial purposes (Lasinger & Bauer, 2013). Localities could capitalise on real-time messaging capabilities by broadcasting critical public safety and emergency information. According to US law-enforcement agencies, public alerts placed on DOOH media and regularly updated in cooperation with local and federal law enforcement have led directly to the apprehension of numerous dangerous fugitives (Taylor, 2015). Furthermore correlation between sales and DOOH advertising can guide brands to create customised effective content at specific places (Burke, 2009). Roggeveen et al. (2016) found that DOOH advertising enhances sales in hypermarkets, but has minimal effect on sales in supercentres and supermarkets, and can even have a negative effect in smaller convenience stores.

User interaction: DOOH media location-based technologies and the increased adoption of technological devices (e.g. smart phones and tablets) enable consumer interaction and engagement. Some examples of these technologies include Bluetooth device detection systems and reflective signs systems that use cameras and image processing to detect audiences' reactions and characteristics to automatically adjust DOOH advertising content (Bauer, Kryvinska & Strauss, 2016). Some DOOH media displays integrate near-field communication (NFC) technology that enable content to be shared with viewers when they touch an NFC tag on the DOOH media display with their mobile phone (Lasinger & Bauer, 2013). Traditional OOH advertising does not integrate this kind of technology, and it is thus not possible to convey an engaging message as a way to begin a conversation with consumers (Roux et al., 2013).

Audience measurement: It is often problematic to systematically measure actual exposure to OOH campaigns (Jun, Bae, Ju & Chung, 2016). In developing countries, OOH media attract a relatively small share of the overall advertising expenditure, from which those who own or rent the media space have to find the money needed to fund this research (PwC, 2017). This means that the funds available for costly and technologically advanced research are rather limited. Some media providers just keep manual records of the available boards per city, leaving advertisers without robust audience figures (Bloom, 2000). A significant issue with these methods is that viewership is measured in terms of people passing a board as opposed to measuring people who actually have an opportunity to see the content on the screen. In developed countries audience measurement systems are becoming increasingly sophisticated (e.g. Route in the UK, ma Plakat in Germany, Geopath in the USA, MOVE in Australia), with more resources to incorporate the latest technologies (e.g. video simulation,

GPS, location data, Wi-Fi and eye tracking) to ensure the accuracy of audience data used to plan DOOH (Magna, 2017a). The audience measurements in these markets are sophisticated and take into account several parameters such as the display (e.g. positioning, location and size) and content (e.g. format and dynamics) (Nicklin, 2017). The effectiveness of interactive dynamic DOOH media content could be measured across three stages of consumer behaviour: 1) *Attraction* (i.e. awareness and actions performed in preparation to engage with interactive DOOH); 2) *Interaction* (i.e. actions to explore and access the DOOH content); and 3) *Conation* (i.e. influence on behaviour after interaction with DOOH) (She, Crowcroft, Fu & Li, 2014). Technology is increasingly used to monitor consumers' movements and behavioural responses to personalised dynamic content on DOOH displays. Some retailers utilise data from smart beacons detecting shoppers' mobility patterns to deliver customised content at relevant locations, while others are trialling content that is triggered by customers' interaction with virtually displayed products or social media sites (Bauer et al., 2016; Wilson-Dewitt, 2018).

1.2 The DOOH media landscape in developed and developing markets

The DOOH industry is growing at an accelerating rate due to advertisers using the opportunities for customised and interactive content, integration with mobile, digital and social media campaigns and accurate audience targeting based on robust behavioural and geo-location data (Frank, 2017; Murphy, 2016; Nicklin, 2017). In 2017, DOOH media providers reported annual global growth of 13%, reaching \$13.4 billion (PQ Media, 2017). The USA remains the world's largest individual DOOH media market (\$3.2 billion), followed by China, Japan, the UK and Australia. Australia was the fastest-growing DOOH media market in 2017, followed by India, South Korea, Taiwan and Argentina (PQ Media, 2017).

High DOOH media growth rates are projected in emerging markets (Nicklin, 2017). DOOH advertising already represents 32% of Brazil's OOH share; 33% in Peru and 20% in Chile (Magna, 2017a). The DOOH advertising share of OOH advertising is expected to grow considerably across the African continent within the next five years (e.g. Kenya from 17% to 34%; Ghana from 17% to 36%; Tanzania from 6% to 15%; Nigeria from 7% to 23%) (PwC, 2017). DOOH advertising represented 25% of South Africa's OOH advertising income in 2016 and is anticipated to capture more than 40% by 2021, making the country the most digitised market in the region (PwC, 2017).

The planning and implementation of DOOH advertising campaigns typically involve three key market players (Bauer, Dohmen & Strauss, 2011). 1) *Advertisers* whose products or services are being advertised on DOOH media networks. 2) *OOH media owners* that provide DOOH networks comprising infrastructure, software, user rights management and content management systems. The main OOH media owners in South Africa include a large international company (JCDecaux who acquired Outdoor Continental outdoor media), and a few local media companies (e.g. Primedia outdoor, Provantage media group and Outdoor network). These companies are rapidly expanding DOOH media networks locally

as well as across Africa (Nevill, 2018). 3) *Space providers* are the owners of indoor venues and properties where the DOOH media networks are installed. South Africa is presently experiencing extensive upgrading of existing static boards to DOOH screens and rapid expansion of DOOH media in alternative spaces (e.g. malls, stores, bus and mini-bus taxi ranks, stations, bars, gymnasiums, and salons) (Nevill, 2018).

1.3 DOOH media across environments

DOOH media can be categorised according to two broad media platforms: 1) place-based networks and interactive screens in indoor venues such as cinemas, malls and healthcare providers, and 2) digital billboards and signage placed outdoors in roadside and transit environments (PQ Media, 2017). These major platforms can be used by advertisers to reach targeted audiences (e.g. vehicular traffic, commuters, pedestrians and shoppers) across three OOH environments: Point of transit (POT), Point of purchase (POP), and Point of wait (POW) (Roux et al., 2013).

DOOH media at POT involve digital signage aimed at fast-moving vehicle traffic on roads and signage inside transit hubs, and exterior-facing retail signage where people are passing more slowly. Most DOOH media applications in Western Europe occur at POT locations (Bauer et al., 2016). The DOOH media content can be customised to match the time of day or the context at POT, while motion can be used effectively to attract an otherwise inattentive eye (Bauer et al., 2011). However, limited dwelling times in these environments require brief content with thought-provoking brand impressions rather than attempting to deliver detailed offers (Van Meurs & Aristoff, 2009). Advertising at POT is typically used in the form of mass media to reach a broad market of motorists and commuters who spend long periods in traffic every weekday (Roux & Van der Waladt, 2014). It offers high-frequency viewing, recall by consumers living or working in the area where the advertisements are placed (Bhargava, Donthu & Caron, 1994), and geographic flexibility that is not attainable through other media (Taylor & Franke, 2003).

DOOH media at POP is placed inside stores and public areas of shopping malls. This is currently the largest application area for DOOH advertising in the USA (Nicklin, 2017). Retailers in the USA (e.g. Albertson's, Target, Kroger), the UK (e.g. Tesco, Asda, Sainsbury) and China (e.g. Carrefour) have already launched extensive digital signage networks (Willems et al., 2017). Video walls, large format light-emitting diode (LED) displays and interactive touchscreens are also now available in stores in South Africa (e.g. Woolworths, Food Lovers' Market, Country Road and Spar), as well a number of upmarket shopping malls (Meletakos, 2015). Studies on DOOH media at POP found beneficial effects for retailers and malls displaying the advertisements as well as for the brands displayed (Dennis et al., 2013). The impact depends on the content of the message as well as the context and quality of exposure (Dennis et al., 2011; Dennis et al., 2012, Dennis et al., 2014). Consumers at POP were found to be most responsive to messages related to their current tasks and need states, and least responsive to traditional brand messages (Burke, 2009). The impact on sales was found to differ across retail store formats. Roggeveen et al. (2016) conducted field experiments for

a large Swedish grocery conglomerate by installing DOOH advertising inside four different retail formats (hypermarkets, supercentres, supermarkets and smaller convenience stores), and then experimentally manipulated it by turning the displays on and off. They found that sales increased in larger store formats when the DOOH media were on. The effects lasted five months after their initial installation, although the rate of increase gradually diminished over the period. They also tested the type of content and found that for the DOOH to result in a sales increase, the content must promote the price.

DOOH media at POW are located in environments with a captive audience of people waiting or participating in an activity at a location such as a restaurant, event, doctor's room, bank, post office or gymnasium. In this kind of environment, people have more time available to notice and be discerning about their surroundings (Roux & Van der Waldt, 2014). Longer waiting times at the POW allow advertisers to show lengthier messages and additional repetitions. Typically, consumers are more deeply involved with the content shown, and the advertising benefits might be more long-term oriented, which differentiates advertising at such locations clearly from that at the POS (Bauer et al., 2011). POW networks can provide relevant messages on the brands and products related to the service provider, increase customers' satisfaction by altering their perception of how long they are actually waiting, and provide daily news updates, weather forecasts and relevant information to stimulate audience interest (Kelsen, 2012). Information-based content related directly to the situation in health-care settings is preferred in medical rooms, for example, while light-hearted entertainment is favoured in mall settings (Loeb, 2008).

2. METHODOLOGY

Qualitative exploratory research was applied as design in the current study. Qualitative methods may stand alone, or be combined with quantitative methods in mixed methods designs (Levitt, Creswell, Frost, Josselson, & Suárez-Orozco, 2018). The current study chose to rely on qualitative methods because it allowed deeper understanding of the South African DOOH landscape and environments than purely quantitative data would deliver. Qualitative data provided an exploration of a business perspective and in-depth understanding of participants' perspectives in their own words (Tesch, 2013). Qualitative research is increasingly prevalent in marketing communication and it has been used to explore the perceptions of practitioners in a variety of industries similar to the current study, including those of advertising, media and marketing (Rodny-Gumede, 2014; Khang et al., 2016).

Data for this study were collected by means of in-depth personal interviews with practitioners. The participants in the study were selected using purposive sampling based on their expertise in application of DOOH campaigns in the South African context. The researcher consulted with specialists in this field on the suitability of participants for the project, as recommended by Tesch (2013). Well-known industry experts (from the *Financial Mail*, *AdFocus Magazine*, *Bizcommunity* and Advertising Media Association of South Africa) were approached and consulted with to identify companies that met the following criteria: 10 or more employees, R1 million or more in

annual revenue, extensive expertise in DOOH application in South Africa, and within two hours' flying distance from where the researcher was based. These criteria allowed the researcher to identify companies with ample experience in national DOOH advertising campaigns. Twenty-five companies with head offices situated across South Africa met these criteria. The respective managers were then contacted and asked to suggest the most suitable participants in the company based on the purpose of the study. Of those, 18 practitioners agreed to allow interviews (as shown in Table 2). The participants represented companies who utilised DOOH media for local campaigns in specific towns or geographical areas as well as for nationwide campaigns across South Africa. Half of the participants had more than 10 years of relevant industry experience, while the rest had at least five years' experience. In order to establish rapport with the participants, the researcher personally interviewed them in their own space about their views and practices regarding DOOH advertising in the South African context.

Table 2: Profile of participants

Participant	Application of DOOH		Experience in media/advertising/marketing	
	Localised DOOH campaign	Nationwide DOOH campaigns	5–10 years	10 years +
Participant A	X	X		X
Participant B	X			X
Participant C	X	X	X	
Participant D	X	X	X	
Participant E	X	X	X	
Participant F	X	X		X
Participant G	X			X
Participant H	X	X		X
Participant I	X	X	X	
Participant J	X		X	
Participant K	X	X	X	
Participant L	X	X	X	
Participant M	X		X	
Participant N	X	X		X
Participant O	X	X		X
Participant P	X	X	X	
Participant Q	X	X		X
Participant R	X			X

The interviews were digitally recorded and transcribed verbatim. The interviews were analysed in the tradition of interpretive empirical research with the aim of understanding the experiences and

meanings of participants (Tesch, 2013). The data were analysed and separated into categories that developed organically based on the coherent meaning of each chunk of data, as suggested by Merriam (2015). Qualitative studies should be evaluated by considering the trustworthiness and utility in achieving research goals (Lincoln & Guba; 1985, Levitt et al., 2018). In the current study, interviewing purposively selected participants, with relevant and adequate expertise to answer the specific research questions, enhanced adequacy. The findings were rooted in the data, supported with direct quotations from the interviews and conceptualised within a systematic review of relevant literature to ensure groundedness. Utility in achieving research goals was strengthened by considering findings in the context of the DOOH advertising industry in South Africa. The analyses resulted in findings that meaningfully addressed the specific research questions. Differences within the findings were explained and compared to the literature to ensure coherence among the findings.

3. RESULTS AND DISCUSSION

The interviews revealed some key themes related to the research questions that businesses should consider when using DOOH to communicate with consumers across environments.

3.1 Development of DOOH in South Africa

DOOH advertising is the second-fastest growing medium globally after mobile internet, accounting for over 30% of advertising revenue in some mature markets such as the UK and Australia (Magna, 2017b). However, the interviews reveal that DOOH advertising is still in a developing phase and is experiencing some obstacles in South Africa. Attitudes towards DOOH advertising therefore seem to be somewhat divided. Some participants were very optimistic about the future, basing their expectations on the success of DOOH advertising in more developed countries. Responses such as the following, reproduced verbatim, were expressed.

“I think the quality of digital media has been challenged in recent years. Ten years ago the quality was shocking. Media owners weren’t really willing to spend money or invest with a lot of effort and money supporting it. With the effort of better-quality screens, the appearance has become a lot better. I believe as the technology becomes more economical, we will see better digital screens going up. I think digital has a firm place in the future, but it is a case of getting the right positioning. Digital indoor is the same story, you know” (Participant D).

However, others were rather sceptical about the cost and current application of DOOH advertising in a developing context. The following comment reflects this perspective:

“It is here [in Africa] and developing, but the market is slow. It is mostly good in terms of indoor products. Some just do not understand it yet ... the digital media that we currently have in South Africa is not working 100%. I do not think people invest in it properly; it

is not the best quality; and that does often ruin the confidence of advertisers. Digital billboards are a lot more expensive at the moment” (Participant E).

3.2 Barriers in the DOOH media landscape

A number of unique challenges experienced in South African market could be identified in the current study, specifically: technological limitations, high costs due to initial investment and potential vandalism, product orientation by media owners, and inadequate creative executions by advertisers. Participant B complained about some *“digital advertising screens in Johannesburg that are not good quality”*. Participant I voiced dissatisfaction about technological limitations and noted, *“There have been digital campaigns rolled out overseas where you walk past a shop front window or bus shelter and it changes depending on who walks past or what they do in reaction. But we don’t have all that advanced technology here”*. These technological restraints are in strong contrast to the developments and advanced technology implemented across DOOH environments in the USA (Frank, 2017) and Western Europe (Bauer et al., 2016).

Participant A suggested that the introduction of new DOOH media types is sometimes driven by the supply of the *“media owners who attempt unusual angles to get sales. Because they work with the same products, day in and day out, so they get bored with them, and feel that they must change it ... to offer new options to the advertisers and media agencies”*. Similarly, Participant Q objected to using DOOH advertising as a stunt to attract clients: *“It is not the kind of thing which will inspire advertisers to invest, because it is seen as a gimmick, and just is not scalable”*. It seems that some of the media owners are product driven in an attempt to sell their DOOH media inventory, rather than following a marketing-oriented approach and focusing on what is needed in the South African context. Numerous remarks were made about *“the digital stuff in airports and the Gautrain, that are rather ‘high-priced”* (Participant O), and digital networks were perceived to be the *“costliest media types compared to static”* (Participant G). Participant F condemned the *“vandalism of digital screens affecting investment ... most likely cost truckloads, but the people drive past as if it is a shooting range. And there are bullet holes in it, every weekend. So when we have a safer country we will find more digital screens. Digital will take off in the more secure areas, away from destruction, while static will still remain dominant in remote areas with lack of electricity supply”*.

Another issue raised was that early adopters are not driving the technological innovation and creative potential. Innovative practitioners would like advertisers to become more adventurous in terms of the creative content produced, and develop an appetite to create more engagement with their audiences. Participant G provided arguments in favour of interactive campaigns and commented, *“overseas they even use things such as 3D digital light projections and virtual reality. Digital media provide far better creative possibilities, but often clients or their agencies don’t appreciate the importance of relevant engaging content placed in the right context at the right time”*. Participant H argued that creative agencies are eager to innovate, using *“the DOOH media as creative canvas, but need to remain abreast*

of what the technological capabilities are as they evolve. You can even work with innovators in the media space to drive technology. I know as a client I always have to work to overcome the knowledge gap that exists between the creative and media agencies". The potential user interaction of DOOH media as applied in developed markets (Bauer et al., 2016; Lasinger & Bauer, 2013; She et al., 2014) is thus not yet optimised and developed in South Africa.

3.3 Share of DOOH media in various environments

DOOH media at POT is the dominant application area in Western Europe (Bauer et al., 2016), while DOOH at POS in shopping malls and inside stores is the prevalent application area in the USA (Nicklin, 2017). That is due to the fact that quality DOOH advertising screens used indoors are easier, cheaper and faster to manufacture compared to those designed for outdoor settings. However this is changing as the production costs for light-emitting diode (LED) screens are decreasing worldwide and new displays can be designed to maintain visibility and contrast when exposed to sunlight. The interviews revealed dominant share of DOOH media at POP in South Africa, which is thus similar to USA (Nicklin, 2017). It became evident that the bulk of DOOH advertising screens are concentrated in the *"retail environment, in stores and major malls"* (Participant J), *specifically in major cities such as "Johannesburg and Pretoria, where the biggest population density is"* (Participant E). Some relevant quotes that characterise the current availability of DOOH media follow:

"We cannot get such a wide coverage with digital roadside across South Africa" (Participant N).

"Digital is typically in enclosed spaces like concentrated in stores and malls to be in close proximity to the target shopper where they make decisions. All stores and malls across the country still don't have this available" (Participant H).

The interviews suggest that DOOH advertising is merely applied by the practitioners in South Africa as one-way communication to obtain brand awareness. This is contrast to previous research suggesting that DOOH media at POS can effectively be used for increasing sales (Burke; 2009), enhancing shopping mall atmosphere and enjoyment (Dennis et al. 2012), and evoking affective and intellectual experience for the brands displayed (Dennis et al., 2013).

3.4 Quantity and quality of exposure in the OOH zone through daily routines

The participants design DOOH advertising campaigns to intercept specific consumer segments when they enter the OOH zone and deliver relevant customised messages throughout their daily routines. Morning and afternoon drive periods offer a great opportunity to reach a broad mass market travelling on highways, but DOOH advertising also delivers messages between these periods in retail and leisure environments. The variations in the travel or mobility patterns of the target market segments are analysed to *"try catching them where you can, where they work or play"* (Participant P). Various techniques could be identified to help with the selection

of the best locations to reach a specific target market frequently, such as vehicular passage and pedestrian traffic counts, and insight into consumers' lifestyles and psychographics, as illustrated by the following quotation:

“So we must map the work, play and social routines of a specific target audience. Then we evaluate potential advertising opportunities within the target audience’s routines and then integrate our advertising campaign through these life patterns. Ultimately, the schedule must be planned over time to deliver the ideal frequency and customise the creative content for different locations to attain the most successful treatment for that particular environment” (Participant C).

DOOH media can deliver messages to very specific audiences away from their homes where they cannot be reached by traditional broadcast and print media. DOOH advertising is more intrusive in the sense that consumers do not have to purchase a magazine or tune into a radio station to access particular content. This allows advertisers to break through the barrier to advertising consent, because the advertisements are placed in the OOH environment where their powers of intrusion do not require the explicit consent of the consumer in order to make an impact. However, their effectiveness depends on the quality of exposure determined by the *“the size and viewing angle of the displays”* (Participant O) and *“potential observing time, based on the traffic flow”* (Participant I) as well as the relevance of the information provided to passers-by. Several examples were given such as *“automatically updated display of time at traffic lights, predicted temperature and exchange rates at airports”* (Participant K) and *“community messages, special holiday messages and sales messages”* (Participant L). These factors are similar to other studies on DOOH advertising at POP, suggesting that the impact depends on the content of the message as well as the context and quality of exposure (Dennis et al., 2011; Dennis et al., 2012; Dennis et al., 2014).

3.5 DOOH media at point of transit (POT)

The participants consider the mobility patterns, behaviour and needs of consumers in order to identify distinct types of mobile audiences in the various environments, each offering unique advertising opportunities. Each environment has a distinctive prime-time pattern. In the transit environment, the high-income segment is more economically active and generally more mobile, as they leave home later in the morning than middle-income consumers due to the higher incidence of private motor vehicles. Middle-income consumers use mini-bus taxis and other forms of public transport commuting to work on a regular basis. This insight is characterised by the following quotation:

“Most of South Africa’s people are at some point in the day a captive audience in some mode of public transport. Remember, when travelling during a week they mostly have little contact with other advertising; and very important, most commuters shop within a 15-minutes’ walk of a taxi rank or drop off zone. So brands employing digital advertising in the transit environment can target the typical LSM B [middle income] employed market,

to maintain top-of-mind awareness and influence shopping behaviour just before making the decisions” (Participant K).

Some practitioners commented that DOOH advertising cannot be used as often as this form of advertising is used abroad to influence sales among pedestrians who move relatively more slowly, and visit stores in close proximity after seeing an advertisement (Burke, 2009). In South Africa, there are fewer high-income pedestrians, as high-income consumers tend to use private transport due to the lack of adequate public transport and safety concerns while walking in some cities. DOOH advertising targeting pedestrians allows relatively more detailed and sales-directed messages than advertising on highways and on main arterial routes aimed at fast-moving traffic. This insight is characterised by the following quotation:

“In the UK they did very well with creating actions or sales. They would put the website or QR (Quick Read) code on and urge the people to go there to get something for free. It is not as successful here as overseas. The difference is in South Africa we don’t have a pedestrian culture, like in London, where people are always on their feet. Here you can’t really follow the signs to the nearest McDonalds. So it is pointless to put too much information into directing pedestrians or worse drivers, as you don’t have time to read it. South Africa is also different than in Europe. We don’t have walk-in, coffee and tube culture like you have in Europe ... and also we do not have all the digital advertising that they have overseas in US or UK. I know that London it is very different than what we have here” (Participant C).

3.6 DOOH at point of purchase (POP) and point of wait (POW)

Advertising in POW and POS environments offers precise targeting opportunities to deliver messages directed at very specific groups of individuals (Kelsen, 2012). Specific audience segments based on shoppers’ behaviour (e.g. traffic in stores or shopping malls, sales figures and behaviour) can be targeted using digital directories, video walls and exterior digital signs. Leisure environments, such as cinemas, restaurants, sports venues, and health and fitness centres, offer access to highly identifiable market segments, where the lifestyle of the segment is matched with the location and the product or service being advertised. The following quotation characterises the opportunities for very precise targeting of shoppers:

“One has to realise that shoppers can also be divided in target groups depending on the purpose of their visit. Some are very goal orientated, for example to go do banking and then back to work, or they might be business users who meet someone for a quick business meeting at a coffee shop. Then you get the general shoppers who are intentionally comparing and buying shopping products versus the leisure shoppers who go primarily to the malls for browsing which of course often leads to spending. There are also those just taking a break, for example. Of course a shopper’s purpose can change during the course of a day or closer to the weekend compared to, let’s say, Mondays” (Participant L).

Static displays in shopping malls are being converted to digital screens. This offers retail managers and advertisers the potential opportunity for flexibility and customisation. Several comments were made about how DOOH advertising should be customised based on relevant issues, community preferences and daytime exposure patterns were presented, as shown by the following quotations: *“Customise and personalise it, so that in the morning we can advertise our new coffee, or hot drinks when it is rainy”* (Participant R). *“Digital should contain useful information like local community announcements and news, beautifully crafted visuals and even sounds to enhance the ambience”* (Participant M).

Unlike the unique data-driven capabilities of DOOH media successfully implemented by numerous brands to customise content at POS across Europe and the USA (Burke, 2009; Roggeveen et al., 2016), local practitioners indicated that this is not yet optimally applied in South Africa. The lack of properly-made DOOH-optimised engaging content was criticised by a number of the practitioners. *“Relevant content requires planning and continuous creation. But instead you see existing recycling content, such as TV commercials, on digital displays playing again and again rather than delivering targeted or relevant messages to the audience”* (Participant A). *“Globally, digital signage is used far more innovatively and engagingly. Technology is applied so that it interacts with audiences via cells phones, social media and even augmented reality”* (Participant O).

It is thus not the DOOH media technology per se that provide retailers or advertisers with a sustainable competitive advantage, but rather how they use it to optimise and customise customers' experiences.

4. GUIDELINES FOR DOOH ADVERTISING DEVELOPMENT AND ADOPTION IN SOUTH AFRICA

Insights derived from the local industry's perspectives were used to make some recommendations. Key focus areas for DOOH advertising practitioners to help develop and overcome obstacles in the South African DOOH media landscape will therefore form the basis of the rest of the discussion.

4.1 Contribution of major players to DOOH media development and adoption

The study revealed that the South African DOOH landscape is characterised by varying DOOH media quality and availability. The South African DOOH media landscape is thus far less sophisticated than in developed markets with precise audience targeting based on robust behavioural and geo-location data (Nicklin, 2017), and augmentation of digital and social media campaigns on DOOH (Frank, 2017; She et al., 2014). Technological limitations, high costs due to initial investment and potential vandalism, product orientation by media owners, and inadequate creative executions by advertisers were identified as the main barriers to development in this context.

All the key market players, namely, advertisers, OOH media owners and space providers (Bauer et al., 2011), could contribute to the development and adoption of DOOH advertising in the South African context. Advertisers utilising DOOH media networks to promote their brands and content should deal with the lack of creative execution, technological knowledge and implementation. Advertisers finding it difficult to design or customise their own creative execution with respect to DOOH advertising contextualisation and interactivity could work in partnerships with content creators or advertising agencies to obtain technical and design support.

OOH media owners providing and expanding DOOH media networks should be more transparent and accountable, and consumer-orientated rather than product-orientated. Precise and consistent reporting to advertisers on the quantity as well as the quality of contact with DOOH media across environments will play a vital role in the future success of DOOH advertising. This could assist in building trust between the key market players and in turn increase DOOH media adoption in South Africa. Space providers should work closely with other market players to minimise the potential effects of vandalism such as damaged DOOH media installations, smashed screens, and even stolen liquid-crystal display (LCD) displays. The adverse results of vandalism on businesses, such as replacement cost, decreased potential for return on investment and lost advertising opportunities are negative for all the market players. Potential technological solutions to consider include stainless steel DOOH media enclosures with shatterproof screens to minimise damage, tamperproof locks to prevent attempts at theft and people from inserting objects into the DOOH medium that could damage or disable the device.

4.2 User interaction and audience measurement of DOOH advertising across environments

The practitioners in this study indicated that DOOH media at POS currently dominates this sector, but advertising opportunities at POT are expected to expand due to the upgrading of the public transport systems in the country. Transportation authorities and municipalities are advised to partner with DOOH media owners to generate advertising revenues.

Businesses evaluating future DOOH media technological applications across environments should examine what the technology can potentially deliver as well as consumers' reactions. For instance, which level of real-time sensing information to adjust the content is feasible and most likely to optimise the quantity and quality of exposure at specific locations? The following are some of the possibilities with these media formats:

1. *DOOH media with basic presence detection* can detect the physical presence of a person or vehicle. This might be used to determine the mobile audience patterns of those who actually have an opportunity to see the screen content at a specific location and time. The results can then form the basis for auditing of existing sites or to ensure that the display (e.g. positioning, location and size) and content (e.g. length and format) of new sites are customised based on the verified traffic patterns.

2. *DOOH media with presence characterisation* where demographical characteristics of the audience are sensed might be suitable in retail and leisure environments. For example, a system that recognises when a young female shopper is in the cosmetic section of Red Square could show an advertisement for CK One Pure Colour Lipstick. If it detects an older woman, Bobbi Brown Intensive Skin Serum Foundation could be shown. These specific advertisements could be funded by the respective brands.
3. *DOOH media with presence identification* where unique identities can be detected within the audience allows an even more advanced level of real-time sensing information. DOOH platforms are increasingly being applied to support social media and mobile phone integration (Bauer et al., 2016; Lasinger & Bauer, 2013). This integration can be used, for example, in the form of virtual mirrors in fashion stores allowing shoppers to compare garment options onscreen and even share a photo of their favourite with friends on social media.

DOOH media location-based technologies that receive a unique trigger signal to display advertising associated with the respective locations, demographics or identities might lead to privacy concerns and backlash behaviour from some consumers in the South African context. Advertisers consider adopting these types of technologies should reflect on consumers' attitudes and privacy concerns before investing in their implementation. On the other hand, if consumers give permission and receive meaningful benefits from these DOOH media location-based technologies, such as personalised just-in-time promotions, increased engagement and relevant content, their privacy concerns might be mitigated.

4.3 Digital location-based DOOH advertising content across environments

The key to effective DOOH advertising is to utilise each potential connection point as a unique opportunity to engage and interact with targeted consumers across environments (Kelsen, 2012). The interviews with practitioners in this study revealed that creating relevant DOOH advertising content requires thought, processes and strategy based on the nature of the environment where it will be processed by consumers and the expected real waiting time.

Some noteworthy insights were obtained regarding DOOH advertising in different environments. The relatively high opportunity to process DOOH advertising at captive environments such as airports, commuter nodes and queues at mini-bus taxi ranks offers advertisers longer potential contact time. Businesses relying on DOOH advertising at these types of settings should deliver entertaining and informative content (e.g. community information, news, weather, sport updates) interspersed with advertisements. Environments with high mobility, such as fast moving vehicular traffic travelling on the highway, requires concise, context and task-relevant content.

The Elaboration Likelihood Model (ELM) of persuasion suggests that consumers process advertising messages along a central or peripheral route, depending on the communication

situation (Petty & Cacioppo, 1986). If consumers are in a setting where they are highly motivated and able to process information, processing occur via a central route. In these high involvement situations advertisements should provide consumers with rational information and potential alternatives to make a decision. However persuasion via a peripheral route is likely to occur in conditions of low motivation or ability. In these low involvement situations consumers are affected by non-content related hedonic cues such as using attractive models, famous people or humour in advertisements.

The context where OOH advertising is placed also proved to have a significant influence on the motivation, opportunity and ability of the consumer to process the content (Wilson et al., 2015; Wilson & Till, 2011). Consumers typically lack motivation and opportunity to process DOOH advertising in roadside environments because they are usually involved in other tasks such as walking or driving (Wilson & Till, 2011). However the consumer's motivation to process DOOH advertising content is higher when displayed in close proximity to point-of-interest. This can for example be a retail brand using DOOH advertising to target shoppers in a mall. When consumers notice DOOH advertising content related to their planned shopping tasks in close proximity to POP they are more likely to process the message (Burke, 2009). In this case, the elaboration likelihood of the communication setting is high and central route processing may occur, relying on cognitive responses. However when DOOH advertising is observed merely in the background by fast moving vehicular traffic the elaboration likelihood of the communication situation is low and peripheral route processing may occur (Dennis et al., 2014; Willems et al., 2017). This implies that consumers will not process the content cognitively but still may be influenced by the message emotionally if it contains hedonic peripheral cues such as colourful or sensual images.

5. CONCLUSIONS AND RECOMMENDATIONS

The research focused only on the perspectives of companies with expertise in DOOH advertising in the South African content. It did not consider implemented DOOH advertising campaigns or the potential effects on consumers. The spotlight of the research attention therefore needs to be turned to other market players in the planning, implementation and viewing of DOOH advertising campaigns.

Future studies could conduct quantitative content analysis to track DOOH advertising content of campaigns implemented by the major media owners in South Africa. For example, the frequency of appearance of content type (e.g. advertisements, community information, entertainment or news), appeal (e.g. affective versus informational cues) and format (e.g. video, photo, text, audio and integration with social media or mobile phones) could be examined using content analysis. The results could verify how DOOH advertising is actually applied by brands, product categories or in different environments, rather than relying on the reported perspectives or practices of the industry. It would also be valuable to conduct empirical research on the behaviour of consumers and practices of space providers at POP, POW and POT (e.g. retailers, stores, mini-bus taxis associations and landlords). For example, personal and electronic observations could map

customers' traffic and patterns of engagement with experimentally manipulated interactive DOOH content to measure their response and their propensity to interact with it. In light of the exponential growth of DOOH advertising, it will also be valuable to investigate South African consumers' attitudes and perceptions towards this medium. Field experiments and surveys could be designed to model the behavioural effects of DOOH advertising as brand experience provider or to enhance the atmosphere in selected settings. New DOOH media technologies in relation to connectivity, which offer new opportunities for engagement and interactivity, such as audience-driven mobile integrations and live feeds of events, might also provide another worthwhile future research agenda.

A limited number of international studies have been conducted to understand consumers' responses to DOOH media at POP (Burke, 2009; Roggeveen et al., 2016; Willems et al., 2017). A valuable contribution of this study is that it is one of the first to detail that DOOH advertising could be used to target consumers at POP, POW and POT environments. However further research on consumers' perspectives is needed to examine to what extent and under what conditions this promising marketing communication platform can be successfully applied in the South African context. This will help the industry to progress from product orientation to consumer orientation.

Despite DOOH advertising being one of the most promising, emergent and novel marketing communication platforms, no academic literature on practitioners' views and practices regarding the DOOH market could be found. The differences and current research across DOOH media environments conceptualised in the literature review of this study offer an organised basis for future research. This study is the first of its kind on DOOH media and contributes to the limited body of knowledge on OOH advertising and advertising practitioners' research in an emerging market context. It is anticipated that the results of the study could aid advertisers and marketers in understanding challenges and opportunities in South Africa for targeting consumers through DOOH advertising in various environments.

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