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EXPLORING THE ADVANTAGES OF A METHODOLOGICAL INTEGRATION OF BIG DATA ANALYSIS AND THICK DATA INVESTIGATION IN MARKETING RESEARCH: THE REQUIREMENT FOR A QUALITATIVE APPROACH IN THE DIGITAL ERA

¹Faruk GÜVEN

²Yumiko YOKOYAMA

Abstract

The continuing increase in big data combined with developments in information technology has prompted many companies to shift marketing strategies into the digital environment, making traditional marketing approaches seem increasingly obsolete. However, in addition to ethical debates regarding privacy, current market conditions have cast doubt on the overreliance of big data due to weaknesses regarding the provision of ever more sophisticated consumer insights. Therefore, emphasis is now increasingly placed on an integration of big data with thick data in pragmatic marketing research approaches. Consequently, this paper aims to illustrate the requirement for such a methodological integration by reviewing attempts to implement mixed methods in marketing research, together with the viability of digitalised qualitative initiatives. Finally, this paper will argue that thick data is still required during the marketing process, not only to gain specific insights into consumer behaviour, but also in attempts to fully comprehend broader complex market trends in the era of big data.

Keywords: Big Data, Thick Data, Marketing.

Pazarlama Araştırmasında Büyük Veri Analizi ve Kalın Veri Araştırmasının Metodolojik Entegrasyonunun Avantajlarını Keşfetmek: Dijital Çağda Niteliksel Bir Yaklaşım Gereksinimi

Özet

Büyük veri alanında devam eden artış, bilgi teknolojisindeki gelişmelerle birleştiğinde, birçok şirketi pazarlama stratejilerini dijital ortama kaydırmaya sevk etmiş ve geleneksel pazarlama yaklaşımlarını giderek geçersiz kılmıştır. Bununla birlikte, mahremiyetle ilgili etik tartışmalara ek olarak, mevcut piyasa koşulları, her zamankinden daha sofistike tüketici içgörülerinin sağlanmasına ilişkin zayıflıklar nedeniyle büyük verilere aşırı güven konusunda şüphe uyandırmıştır. Bu nedenle, pragmatik pazarlama araştırması yaklaşımlarında artık büyük verinin kalın veri ile entegrasyonuna giderek daha fazla önem verilmektedir. Sonuç olarak, bu makale, dijitalleştirilmiş nitel girişimlerin uygulanabilirliği ile, pazarlama araştırmasında karma yöntemleri uygulama girişimlerini gözden geçirerek böyle bir metodolojik entegrasyon gerekliliğini göstermeyi amaçlamaktadır. Son olarak, bu araştırma, pazarlama sürecinde yalnızca tüketici davranışına ilişkin belirli içgörüler elde etmek için

¹Dr. Öğr. Üyesi, Abdullah Gül Üniversitesi, Yönetim Bilimleri Fakültesi, İşletme Bölümü, faruk.guven@agu.edu.tr, ORCID: 0000-0002-2440-585X

²Abdullah Gül Üniversitesi, Yönetim Bilimleri Fakültesi, İşletme Bölümü, yumiko.yokoyama@agu.edu.tr ORCID:0000-0002-5657-3997

değil, aynı zamanda büyük veri çağındaki daha geniş karmaşık pazar eğilimlerini tam olarak kavrama girişimlerinde de kalın verilerin hala gerekli olduğunu tartışacaktır.

Anahtar Kelimeler: Büyük Veri, Kalın Veri, Pazarlama.

INTRODUCTION

It was reported in 2018 that 33 zettabytes, or 33 trillion gigabytes, of data would be created globally by the end of that year alone, while the number is now expected to reach 175 zettabytes by 2025 (Reinsel, Gantz and Rydning, 2018: 3). Indeed, since the internet became a vital tool for most of the population, many companies have identified digital transformation as a priority business agenda to utilise the exponentially increasing big data that is generated in cyberspace. Furthermore, what was already a significantly increased focus on digital transformation has been further accelerated since the onset of the Covid-19 pandemic with a result of shortening the previously estimated development time frame by several years.

Marketing research is not an exception to this trend of digitalisation. Companies are now investing more on digital marketing channels, while tracking consumer behaviour online using a range of big data analytical technologies such as data mining, artificial intelligence, and machine learning. Moreover, there is an ever-evolving view that traditional marketing research methods such as interviews, focus groups, and observations are becoming increasingly obsolete, given the argument that extracting consumer behavioural trends from quantitative data could prove more accurate, faster, and cheaper. However, one immediate challenge is that an apparent radical change in consumer behaviour has emerged since the pandemic. Indeed, in the context of what is now increasingly perceived as a consequential volatile economic environment, many companies have come to experience a new reality in terms of actually lacking competency in dealing with this dynamic shift in the market environment. For instance, many CEOs now identify gaining consumer insights as one of the priority issues, but simultaneously find this task increasingly daunting, as information drawn from big data is often not immediately enlightening.

Consequently, this paper aims to illustrate the current requirement for an integration of quantitative evidence from big data with contextual insights from thick data in pragmatic approaches to marketing research. First, to contextualise this argument, the way in which information technology has become the core marketing strategy will be described. Secondly, ethical issues in relation to big data usage and the influence of data protection policies by companies on consumer behaviour will be examined. Then, the problems arising from overreliance on big data in marketing process will be analysed. Next, a marketing research approach that attempts to integrate quantitative and qualitative data as well as an interdisciplinary approach will be explored. After this, the viability of digitalised qualitative research methods will be critically evaluated. Finally, this paper will argue that, even though an ever-increasing flow of data will become available while information technology will continue to advance in

the future, qualitative research is still required during the marketing process not only to gain insights into consumer behaviour, but also to comprehend the underlying reasons behind ever more complex generalised market trends.

1. DIGITAL TRANSFORMATION IN MARKETING

It was reported in 2018 that 33 zettabytes, or 33 trillion gigabytes, of data would be created globally by the end of that year alone, while the number is now expected to reach 175 zettabytes by 2025 (Reinsel, Gantz and Rydning, 2018: 3). Indeed, since the internet became a vital tool for most of the population, many companies have identified. Since readily available data continues to expand exponentially online, many companies have begun to increasingly focus on digital transformation as a priority business agenda to interpret and utilise the enormous amount of data available (Smaje & Zemmel, 2022). Marketing activities are also progressively shifting into the digital environment, making traditional marketing approaches seem increasingly obsolete. Indeed, a survey conducted with marketing leaders in North America and Europe revealed that 53% of respondents in the business-to-business sectors reported that they increased budgets for social marketing approaches such as social media platforms and search engine optimisation, while 40% reported that they decreased in-person event marketing budgets (Blum, 2021). Then, in the business-to-consumer sectors, 48% of respondents had increased their digital advertising budgets, while 43% reduced the budgets for traditional advertising approaches such as television, radio, and billboards. Moreover, it is also reported that surveys conducted with marketing leaders revealed that about 60 to 70 percent of marketing budgets were expended on digital channels in 2021 (Leone, 2022). Consequently, a survey conducted by the Boston Consulting Group (Grebe et al., 2021) illustrated that revenue in 2020 increased by 10% since 2017 for 40% of more digitally mature companies, which was more than double the rate of companies that were struggling with business digitalisation. Therefore, it seems that such refocused expenditure enabled a favourable return.

Furthermore, not only are digital marketing channels becoming more popular in recent years, but marketing intelligence is also being increasingly sought from big data. In this context, marketing intelligence is briefly defined as an attempt to incorporate comprehensive data about markets that can then be utilised to develop more effective marketing decisions (Market Business News, 2015). Traditionally, marketing intelligence is collected through sources such as sales data, surveys, and focus groups, which is then analysed to identify market opportunities, together with other factors that become key influencing issues in the subsequent formulation of a marketing strategy (Kerin & Hartley, 2021: 73). However, companies are now also sourcing market information from big data, the primary characteristics of which are expressed as the five Vs where such Vs represent volume, velocity, variety, veracity, and value (BBVA, 2020). This means that big data can offer accurate useful information that is drawn from a large amount of data that originates within diverse sources in a swift manner, which is crucial in a competitive business domain within an ever-changing market environment. That is to say

that data relevant to the identification of consumer behaviour can be found in the cyberspace, as almost all online activities are monitored and recorded when people search for information, post comments, or log into subscription accounts (Strong, 2015: 43). Therefore, data mining tools, machine learning techniques, algorithms, and artificial intelligence (AI) are now replacing the traditional marketing methods. Consequently, the recent advancement in information technology (IT) has been used to increase the capability to quantify such data and subsequently transform them into meaningful information by sorting, analysing, and restructuring. Mayer-Schönberger and Cukier (2013: 23) coined this process datafication, which is now becoming a mainstream practice in the marketing profession.

As a result, digital marketing has several advantages over traditional methods. Here, as one example, big data together with sophisticated analytical methods can provide marketing decision-makers with a more accurate estimation of consumer behaviour (Strong, 2015: 53). Subsequently, marketers can apply the information acquired from big data to marketing tactics such as an increase in website traffic and the creation of personalised advertisements in near real-time with lower marketing costs (Thompson, 2019: 10). Furthermore, supply chain management can become increasingly more efficient with swift data collection and analysis enabled by big data, which can result in a subsequent reduction in operational costs. These advantages are particularly beneficial for start-ups that have limited resources to compete with larger established businesses (Strong). For instance, DoorDash, a food ordering and delivery platform in the U.S., exemplifies these advantages. The company's machine learning and optimisation model enables them not only to reduce costs and increase efficiency, but also to keep customers, both restaurants and end users, satisfied and loyal to the company (Chauhan, 2022). Though only established in 2013, DoorDash subsequently overtook Uber Eats that was the second largest in the industry in 2018, and then became the largest food ordering and delivery service platform in 2019 surpassing GrubHub.

Moving on from the above, as digital technologies progress, the target audience can be divided into several smaller audience segments. As a result, companies are now adopting AI text generators to create tailored messages to reach and engage with a specific segment (Ives, 2019). As one example, JP Morgan Chase is currently cooperating with an AI text generator platform provider called Persado (Ives). In an initial trial, they conducted an A/B testing where two versions of advertising messages on a credit service product, one created by human copywriters and the other by AI, were displayed. The result was that the machine-generated message induced 88% more applications for the service than the human copy.

2. THE ETHICAL CONCERNS OF BIG DATA USAGE IN MARKETING

While progressive advances in technology have now made it easier and cheaper to collect, analyse, and store data, the use of big data is typically accompanied by an increasing requirement to focus on more sensitive approaches to processing the information acquired. More specifically, even personalised advertising incorporating information typically judged not to be overtly sensitive may

nevertheless still be interpreted or experienced as being too intrusive for the end recipients. To illustrate this point, Duhigg (2012) presents an example of an American discount store Target that angered the father of a teenage girl by sending her brochures relating to maternity products following accurately identifying the girl's pregnancy that had not yet been revealed to her father. Moreover, such highly personalised advertisements can have adverse effects in that some consumers may opt for less preferable products or services because of feeling their personal space and values have in some sense been violated (Wertenbroch, 2021: 21). Indeed, this issue can become even more serious where issues of ethical questions arise regarding the ill-considered use of more potentially sensitive data. For instance, while tracking the health status of people can be beneficial to monitor disease spread or tailor appropriate responsive medication, such health-related data can also be employed to discriminate against applicants such as during the attempted purchase of insurance (Martin, 2015: 73). Therefore, given the sensitivity and possible negative interpretive consequences, companies must now take considerable care during the process of the management customer data.

Indeed, mishandling potentially delicate data could result in a loss of customer trust since consumers are becoming ever more cautious, especially in relation to issues relating to online privacy. Furthermore, it has been demonstrated that consumers also tend to trust a company while being more willing to share their information where they perceive the data protection policies are appropriate, enforced, and sensitively managed (Martin & Murphy, 2017: 137). In contrast, where privacy policies seem so complex as to become almost incomprehensible, consumers can consequently lose confidence in the company and thus become less willing to engage in interactive marketing orientated communication. In this context, worryingly, IBM (2022) reported that 83% of the companies participating in the survey experienced a data breach more than once, while passing 60% of the consequential costs of such incidents to increases in product prices.

3. THE CHALLENGE OF SOLELY RELYING ON BIG DATA IN MARKETING

Furthermore, despite such technological advancement, the consequences of the Covid-19 pandemic seem to have demonstrated that digital technologies still need to be further improved to be more efficient and effective. Indeed, consumer behaviour has been changing so rapidly since the onset of the pandemic that some companies find it difficult to keep pace with the changes (Bibby et al., 2021). For example, during the pandemic, a combination of lockdowns, remote working, and subsequent increased social care requirements disrupted the daily routine of consumers, while online shopping has become increasingly the norm. As a result, it is now reported that 75% of consumers who were previously inclined to be creatures of habit, have been motivated to explore new brands and shops (Charm et al. 2022), while 20% even switched brands (Bibby et al.).

Moreover, consumer behaviour also continues to change in response to the current global financial crisis in relation to increasing consumer price inflation. While some consumers may react to

this economic crisis by reducing the number of purchases, others may opt for cheaper private labels (Hunneman, 2020).

However, given the two examples shown above, the problem of predictive analytics remains that they are particularly sensitive and susceptible to changes such that they tend to lack statistical robustness (Spiegelhalter, 2019: 76). Put simply, it is only where the status quo is preserved that predictive analytics can be considered reasonably reliable. Moreover, as such analytical tools typically work on historical data, unreliable predictions can also arise when changes become significant in purchase behaviour. Indeed, research by Forrester (Leaver, 2021) illustrates that only 15% of the companies that were surveyed consider that they currently have sufficient digital capability and competency. Consequently, some companies have had to return to traditional mass marketing approaches, and thus suspending personalised or precision marketing applications (Bibby et al., 2021).

Another problem from an over reliance on big data when engaging in marketing decisions is the misconception that big data can reflect all variables, both known and unknown, that are relevant. In this context, some data fundamentalists, a term used by Crawford (2013), believe that numbers self-evidently show what is occurring, and therefore there is no need for theories or explanations as to why something is occurring. However, the initial issue arising from this reductionist approach that attempts to extract human behaviour solely from data is a lack of consideration for what is missing in data. Indeed, a proportion of crucial values are often omitted from data (Harford, 2020: 19). For example, Netflix, a streaming service and film production company, may believe that it has sufficient information on its subscribers as far as the law allows, but information about non-subscribers is inevitably scarce. Another interesting case can be observed in relation to the demographics of the users of Twitter, a social media company. Here, users are hardly representative of the world population, as 72.7% of the 486 million global Twitter users are men, while the U.S., Japan, and India alone cover one third of the users (Datareportal, 2022). Moreover, according to the Pew Research Center (2019), 22% of adults in the U.S. use Twitter, though the demographics are also rather skewed. For instance, the American Twitter users are younger than the total U.S. population as illustrated by the fact that more than 70% of adult users are between the age of 18 and 49, compared to around 50% for the population. It was also highlighted that Twitter users are 11 percentage points more likely to have gained a degree from some higher education institution, while being 9 percentage points more likely to have a household income of over \$75,000. In addition, in terms of active users, only 10% of the users account for 80% of total tweets.

The next problematic issue in relation to data reductionism is the common assumption that correlation generally implies causation. However, treating correlations as if there were causal relationships between variables without any hypothesis is dangerous mainly for two reasons. First, correlations are rather ubiquitous in big data, most of which have no meaningful relationships (Strong, 2015: 20). Secondly, if the correlations fail to appear justifiable, there is no way to know how to reconstruct the marketing strategy (Harford, 2020: 27). Therefore, it is necessary to initially identify a

specific marketing problem, and then ask pertinent questions to identify the relevant possible correlations from big data.

In addition to the problems listed above, it is also often assumed that IT departments are primarily in charge of digitalisation of business operations including marketing (Strong, 2015: 30). However, digital transformation in marketing will not automatically occur just by installing new digital systems. Rather, human insights from marketing professionals need to be integrated into the typically reductionist approach of IT professionals. In this context, the fall of Nokia provides an example of the importance of human insights in marketing decisions. As one exemplification of the Nokia case, back in 2009, Wang (2016), a technology ethnographer, conducted marketing research in China for Nokia that dominated the smartphone market at that time. She spent months working beside low-income groups such as migrant workers, while hanging around with young people in Internet cafes to gain insights into local consumers in relation to smartphones. Consequently, Wang (2017) concluded that even these poorer people that comprise the majority in China desired high-quality smartphones like iPhone. Indeed, they were willing to spend half the monthly wages on second-hand or counterfeit smartphones and were almost at the point where they were ready to pay for high end products. Subsequently, she reported her findings and made recommendations regarding a marketing strategy in order to focus on the potential demand of the market majority, rather than targeting a selective elite minority. However, Nokia rejected her recommendations stating that her sample was too small, while there was no evidence supporting her findings in the existing big data. While this may have been the case, what Wang detected from her research was the impact of human dynamics that had not yet appeared in the available big data. Consequently, even though this decision was not the sole reason for the fall, Nokia failed to retain its dominance in the market that resulted in the handset business of the company being eventually acquired by Microsoft in 2013 (Collins, 2020).

4. MIXING QUANTITATIVE EVIDENCE AND QUALITATIVE INSIGHTS

As an advocate of the integration of qualitative and quantitative research methods, Wang (2016) labels in-depth qualitative information as thick data as opposed to big data that can be thin in terms of the meaning it provides (Figure 1). This term stems from an anthropological approach that attempts to capture the typical life experience, behavioural characteristics, emotional boundaries, and acquired values of a person in a specific cultural environmental situation through observation and interviews (Ang, 2019: 8).

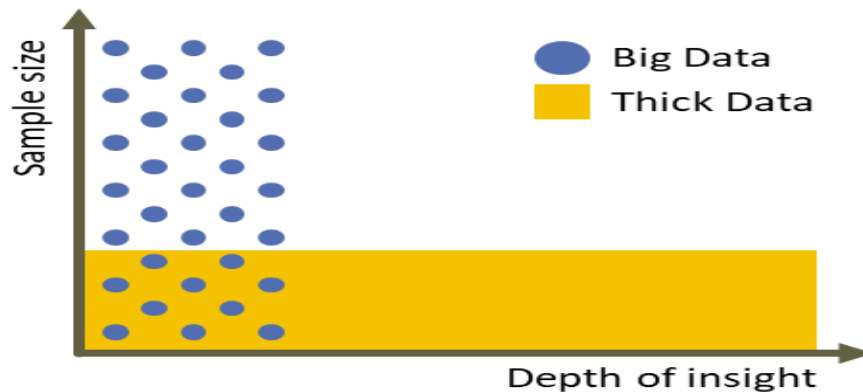


Figure 1. The Difference between Big Data and Thick Data

Source: Wang, 2016.

In this context, Rasmussen and Hansen (2015) also assert that big data research is not an alternative to traditional marketing investigation, but rather that both should complement each other. They then argue that the key to constructing sound marketing decisions requires constantly moving back and forth between big and thick data to validate where there is some form of agreement between both types of data. For instance, big data might show something has occurred, but it is the marketers' role to then conduct detailed research to form a hypothesis on what has occurred and build a marketing strategy on how to mitigate or exploit the situational change. Then, it is necessary to return to big data to establish whether there is sufficient specific evidence to support any subsequently constructed hypothesis and consequential marketing strategy in some particular context. Moreover, Moisander et al. (2020: 123) illustrate the importance of contextual information in a simple analogy. Here, the information that someone raised a hand is not informative without context. This could mean anything dependent on the circumstances such as voting in a meeting, hailing a taxi on the street, or signalling at an auction. Just like this analogy, digital data will not tell the marketers why consumers behaved the way they did. They also emphasise that thick data is becoming more crucial for marketing as thick data could reveal the insights of consumers that would not be obtained from other methods.

Indeed, the mixed method that incorporates both big data and thick data is now increasingly being adopted in the area of policy formulation. Such a pragmatic endeavour would be relevant in the discipline of marketing, as marketing methods are applied in the process of policy making due to the greater effectiveness in the primary approach towards customer persuasion, rather than rational argumentation (McKenna, 2021: 116). As one example shown in Figure 2, a research team that functions to deliver public policy solutions across UK government designs prototypes of public interventions using data drawn both from a national level and a contextual individual level (Siodmok, 2020). Then, the prototype is tested at a community level before subsequently being implemented as official policy. To exemplify this process, Siodmok argues that thick data can supplement the weaknesses of big data such as any possible omitted data, together with the challenge of integrating heterogeneous information

from multiple sources. Therefore, these two seemingly opposing camps of thinking should not be considered dichotomous, but as complementary, to overcome the potential limitations of either approach.

Given that the market environment is becoming more uncertain and complicated, an adaptation of this integrative research approach is becoming even more critical and urgent. Indeed, a global survey showed that CEOs listed a lack of customer insights as the primary problem when attempting to manage such a volatile market environment (Madsbjerg & Rasmussen, 2014: 81). Consequently, companies heavily invest in analytical technologies to quantify human behaviour to identify the needs and demands of consumers. However, despite the detailed information about the markets they provide, companies often meet with difficulty in interpreting the information regarding customer insights (Madsbjerg & Rasmussen, 2014: 82). Therefore, human sciences, once thought to have little practical use in business, are now attracting increasing attention from business world.

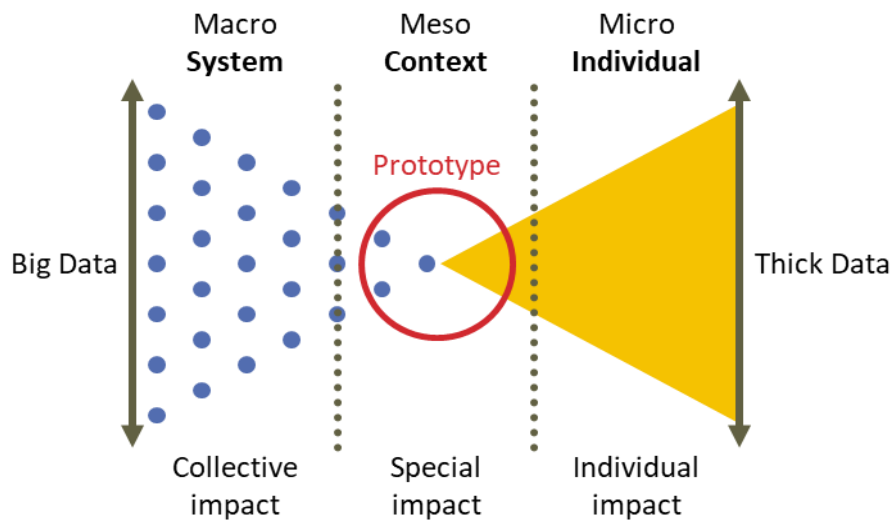


Figure 2. The Model for Combining Big Data and Thick Data

Source: Siodmok, 2020.

Indeed, more insightful marketing could become increasingly achievable following the implementation of an interdisciplinary approach that combines not only such fields as economics and computer science, but also perceptions gained from the social sciences. Indeed, Strong (2015: 95) argues that this approach would create significant opportunities for value exchange between companies that seek new knowledge and academics that desire greater empirical data within the context of shared concepts. Moreover, this approach would also promote transparency in terms of data usage and the privacy policies of companies. Here, Harford (2020: 56) observes a curious similarity between approaches to current big data analytical methods and the long-standing obsession with alchemy prior to the emergence of the enlightenment. Indeed, from the enlightenment, science subsequently flourished

as a result of the establishment of scientific methods aimed at attempts to verify knowledge by the process of experimentation and observation. This increasingly rational approach to the investigation of experiential phenomena was further progressed by the essential requirement to share knowledge acquired by way of the publication of results that, in relation to the analogy discussed above, led to the emergence of chemistry from the activities of the earlier alchemists. For example, even though certain systematic methods were applied in alchemy that produced significant advances in areas such as the development of ceramics and dyes, alchemical procedures and results were not shared due to the compulsive secretive nature of the serendipitous endeavours of the alchemists. Though perhaps requiring an imaginative leap between such apparently unrelated concepts, in terms of the underlying process, big data analytical methods and alchemy share a parallel behavioural orientation in relation to the maintenance of an ultimately self-defeating obsession with secrecy. Even given such limitations, the thrust of this research is founded on the argument that, unlike alchemy, developments in big data analytical methods represent a potential immediately achievable positive course of action. However, prospective opportunities that could arise from the application of big data analysis are initially reliant on the availability of sufficient data to facilitate wider public scrutiny of proposed actions. This, in turn, is dependent on establishing broadly acceptable levels of confidence to allow and further motivate companies to engage in at least a degree of knowledge sharing without exposing issues related to confidentiality.

5. DIGITALIZATION OF QUALITATIVE RESEARCH

Next, increased online activities have also influenced the way in which qualitative research is conducted. Even ethnographical research is now more frequently conducted online as the boundary between physical and virtual realities in modern day life seem now to be decreasing (Delli Paoli & D'Auria, 2021: 247). Ethnography is a type of research method within the discipline of anthropology where the researchers explore a particular culture, society, or organisation by immersing themselves in the environment they are observing (Mannik & McGarry, 2017: 18). For example, Netflix conducted ethnographic research to explore forms of consumer behaviour that do not show in big data, such as what other activities viewers do and what they eat while watching the programmes (Valero, 2017). This kind of research is now shifting towards the digital sphere. Kozinets (2015: 13) coined the digital form of ethnographic work as netnography, which studies online cultures and online communities through social media interactions and online communications using traditional ethnographic methods. Indeed, big data has created ample opportunities for ethnographic researchers in marketing to capture crucial consumer insights (Heinonen & Medberg, 2018: 666). Therefore, provided that digital technology continues to advance while an increasing number of human activities are conducted online, a netnographic approach may well become a major research method in the marketing process.

CONCLUSION

The aim of this paper has been to emphasise the current need for the integration of a big data quantitative approach with a thick data qualitative approach in marketing research. To this end, an attempt has been made to demonstrate that, while technology-based marketing research methods can produce more accurate predictions about consumer behaviour faster at lower cost than traditional marketing research methods in a stable marketing condition, they typically lack statistical robustness, especially in an increasingly fast-changing environment such as the present global economy. As a result, many companies are now experiencing a significant challenge in coping with the fast pace of the change due to a lack of capability and competency in a digital approach to marketing. Indeed, contrary to the view expressed in some reductionist approaches that the numbers speak themselves, such numbers are frequently ambiguous and are not immediately possible to evaluate without a viable interpretive theory or insights into what is actually occurring. Hence, overreliance on big data in the marketing research process can result in the formulation of erroneous marketing strategic decisions due to being blindsided in relation to crucial behavioural factors that can, in some case, be fatal for the survival of the business. Moreover, as consumers are becoming more aware of the online privacy and security risks, companies must now subsequently construct clear comprehensive privacy policies in order to maintain customer trust while simultaneously attempting to benefit from such available valuable information. In addition, further openness and transparency would not only fortify data protection, but also encourage increased value exchange between marketing professionals and academics from wider fields of study.

Since big data analytics became the core of marketing strategy, companies have been heavily investing in IT solutions. This transformation is expected to continue in the future in parallel with the improved sophistication of digital technologies combined with the accelerating transition of human activities into the digital sphere. Therefore, this paper concludes that the integration of big data with thick data in marketing research is now an increasingly urgent requirement, as when combined, they can supplement the potential limitations of either approach. Furthermore, qualitative data can act as a safety net to provide a fallback position when big data becomes increasingly impossible to substantiate. Most importantly, even if big data analytical tools were able to accurately predict consumer behaviour and market trends, human behavioural insights would still be required to create unique products and services. However, regardless of the development of ever more sophisticated big data analytical tools, it still remains challenging to construct marketing models with limited human insights, as some consumer behaviour can often be characterised as irrational eruptions of fads and short-term fashions that are arguably beyond any possibility of projected anticipation.

STATEMENT OF RESEARCH AND PUBLICATION ETHICS

The method used in the study does not require ethics committee approval.

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This study was not supported by any person or organization.

CONFLICT OF INTEREST STATEMENT

There is no conflict of interest between the authors.

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