

## COMPARATIVE ANALYSIS OF BIBLIOMETRIC DATA SOURCES OF EMPIRICAL STUDIES IN THE CONTEXT OF TRADITIONAL, DIGITAL AND PHYGITAL MARKETING

GELENEKSEL, DİJİTAL VE FİJİTAL PAZARLAMA BAĞLAMINDA  
AMPİRİK ÇALIŞMALARIN BİBLİYOMETRİK VERİ KAYNAKLARININ  
KARŞILAŞTIRMALI ANALİZİ

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### Abstract

The aim of this study is to evaluate and comparatively examine the latest developments of empirical consumer behavior research in the field of marketing, covering the period 1960-1979 (traditional marketing) 1980-2006 (digital marketing) 2007-2021 (phygital marketing). Within the scope of the study, empirical studies in the field of traditional, digital and phygital marketing were examined in 5 steps in terms of publication source type, basic characteristics, study subject, theoretical background, research variables. In data analysis, bibliometric analysis was used with VOSviewer program. As a result of the study, it has been determined that different journals for different marketing fields are included in the publication production process, and the number of authors has increased in phygital marketing studies. It was concluded that mixed methods came to the fore, the questionnaire was the most used data collection tool, and SEM analysis started to be used more recently. While brand purchase intention, decision making process, dissatisfaction/satisfaction subjects come to the fore in traditional marketing, online reviews have gained importance on the basis of TAM theory in digital marketing, AR and VR technologies are concentrated in phygital marketing. In

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terms of research variables, intention, attitude and satisfaction themes came to the fore as motor themes in all periods.

**Keywords:** Traditional Marketing, Digital Marketing, Phygital Marketing, Bibliometric Data, Comparative Analysis

**JEL Classification:** M30, M31

## Öz

Bu çalışmanın amacı, 1960-1979 (geleneksel pazarlama) 1980-2006 (dijital pazarlama) 2007-2021 (fijital pazarlama) dönemini kapsayan pazarlama alanlarında ampirik tüketici davranışları araştırmalarındaki son gelişmeleri değerlendirmek ve karşılaştırmalı olarak incelemektir. Çalışma kapsamında geleneksel, dijital ve fijital pazarlama alanındaki ampirik çalışmalar yayın kaynağı türü, temel özellikleri, çalışma konusu, teorik altyapı, araştırma değişkenleri açısından 5 adımda incelenmiştir. Veri analizinde VOSviewer programı ile gerçekleştirilen bibliyometrik analiz kullanılmıştır. Çalışma sonucunda farklı pazarlama alanlarına yönelik farklı dergilerin yayın sürecine dahil edildiği ve fijital pazarlama çalışmalarında yazar sayısının arttığı tespit edilmiştir. Karma yöntemlerin ön plana çıktığı, anketin en çok kullanılan veri toplama aracı olduğu ve YEM analizinin son zamanlarda daha fazla kullanılmaya başlandığı sonucuna varılmıştır. Geleneksel pazarlamada marka satın alma niyeti, karar verme süreci, memnuniyetsizlik/memnuniyet konuları ön plana çıkarken, dijital pazarlamada TAM teorisi temelinde online incelemeler önem kazanırken, fijital pazarlamada AR ve VR teknolojileri konuları öne çıkmıştır. Araştırma değişkenleri açısından niyet, tutum ve memnuniyet temaları tüm dönemlerde motor temalar olarak ön plana çıkmıştır.

**Anahtar Kelimeler:** Geleneksel Pazarlama, Dijital Pazarlama, Fijital Pazarlama, Bibliyometrik Veri, Karşılaştırmalı Analiz

**JEL Sınıflandırması:** M30, M31

## 1. Introduction

In the context of changes and transformations in traditional, digital and phygital marketing, the actuality and importance of the study is understood. Respectively, traditional marketing is replaced by digital marketing (Ha, 2004, p.329); digital marketing has also evolved into phygital marketing (Chang and Chen, 2021, p.1). Marketing has made continuous progress since the first half of the 20th century.

It is seen that the studies carried out since the 1960s have been influenced by the marketing mix and marketing management (Shaffer, 1960). However, it should be noted that the period before 1980, when technology was not used much by both businesses and customers, was the period when traditional marketing issues were studied frequently (Clarke and Belk, 1979, p.1). Accordingly, in this study, the traditional marketing period was accepted as between 1960 and 1979.

With the development of hardware and software technology, it is seen that digital marketing issues were frequently studied in the 1980s (Luarn and Lin, 2005, p.877). By the 1980s, with a doctoral thesis completed in 1985, the Technology Acceptance Model was put forward (Davis, 1985). Especially as of the 2000s, it is possible to see that consumer research has been done using this model framework (Gefen and Straub, 2000). There are also studies that explain consumer behavior in online environments and/or the use of technological tools within the framework of other models or theories (Forsythe and Shi, 2003). However, it should be noted that in the 2000s, there was a paradigm shift from digital to phygital in marketing, and consumer research has been carried out in the retail field,

especially today, regarding the phygital experiences of consumers (Banik, 2021). On the other hand, in the next paragraph, it is stated that the definition of the concept of phygital was made in 2007 and this concept was mentioned. Therefore, in this study, the digital marketing period was evaluated as the years from 1980s to 2006.

It is seen that the establishment of intelligent interaction with products or devices and the subjects of phygital marketing have been studied frequently in the 2000s (Banik, 2021, p.1; Kim et al., 2021, p.503). Although the concept of “phygital map” was defined in a study conducted in 2007 (Nakazawa and Tokuda, 2007), the concept of “phygital” was first mentioned at the meeting of the American Association of Advertising Agencies (4A’s) in June 2007 (Çakın and Yaman, 2020, p.5). On top of this, it is known that the origin of the concept of “phygital” for marketing is in the retail sector (Duhan and Singh, 2019). With regards to this context in this study, the period of “phygital marketing” has been evaluated as the period from 2007, which is accepted as the birth of the concept of phygital, to the present.

At the stage of determining the date ranges, the date of the first studies in the literature and the year in which the first studies belonging to the relevant periods were published as a result of the literature search carried out on the Google Scholar database were also taken as basis. For this reason, the periods of 1960-1979, 1980-2006 and 2007-2021 were discussed based on searches on Google Scholar in the context of traditional, digital and phygital marketing with bibliometric analysis as a technique that provides the opportunity to learn more about the development of a particular field. Paul et al. (2021) stated that progress in a particular field of study can only proceed with prior understanding of the literature in that field (Paul et al., 2021). This highlights the importance and value of this study, which sheds light on the development of the marketing discipline in terms of three different fields for the first time. The aim of this study is to examine the content of the articles written in these three periods with bibliometric analysis through the VOSviewer program. The articles of these three periods were evaluated by analyzing publication source type, basic characteristics (co authorships, sample unit, sample size, data collection tool, statistical method), study subjects, theoretical background and research variables. When the literature is examined, there are studies of Dunakhe and Panse (2021) and Faruk et al. (2021), which examine only the studies in the field of digital marketing with bibliometric analysis. Since there is no study that deals with three different marketing approaches together, this study will fill this gap in the literature. It is expected to benefit academics and practitioners as it is one of the first publications to examine the three marketing fields together.

As a result, answers to the following five questions were sought in the context of published studies for traditional, digital and phygital marketing fields addressed in three different historical periods:

Question 1: What are the source types of selected studies in three different periods and three marketing fields?

Question 2: What are the basic characteristics of selected studies?

Question 3: What are the study subjects of selected studies?

Question 4: What are the theoretical foundations of selected studies?

Question 5: What are the research variables of selected studies?

In the following parts of the study, conceptual framework is given and traditional, digital and phygital marketing concepts are explained. Second, a general framework of what the research method provides. Third, the obtained data were analyzed, and the visual maps of the study findings were presented. In the last section, discussion, theoretical and practical contributions and implications, future research directions, research limitations and conclusion are presented.

## **2. Conceptual Framework**

### **2.1. Traditional Marketing**

Since it was concluded that the traditional marketing field covered the years 1960-1979, it is possible to say that the following concepts were introduced and examined in this period. Consumerism have become a prevailing force for a successful business since the early 1950's. To date, most of what has been written about the consumers are based on speculation. In order to really understand the consumerism, Alderson's edict should be followed firstly. After his propositions and testable hypotheses, empirical evidence to support or refute these hypotheses are obtained (Anderson, 1973, p.38). Then, concepts such as customer effort, expectation, behavior, attitude, purchase, satisfaction became important for businesses. These factors affect customer decision and its decision-making process. Customer effort includes physical, emotional, and financial resources to be expended (Cardozo, 1965, p.244). Customer expectation show differences according to age, geographic region, education, occupation, income and so on (Bonfield, 1974, p. 379). These factors are highly correlated with customer expectation as the prime force in decisions (Namias, 1960, pp:33-35; Birdwell, 1968, p. 76). In addition to this the factors are shaping the customer style of life (Rich and Jain, 1968, p. 41). Psychological and sociological concepts are used in marketing studies. For example, the concepts of "decision freedom" (Reibstein et al., 1975, p.434) or "family" with the question, "who decides in family? husband or wife" (Davis, 1971, p. 305; Granbois and Summers, 1972, p. 1).

Behaviours and attitudes are complicated since customer is faced with several alternatives. The complicated process is usually conscious after evaluations or considerations (Hansen, 1969, p. 436; Oliver, 1977, p.480). Especially attitudes show cognitive, emotional, and behavioral features which are based on thoughts, feelings, and actions respectively. Intention is also likelihood or propensity to buy in the future (Bird and Ehrenberg, 1966, p. 39; Bird et al., 1970, p. 307). Therefore, customer behaviours, attitudes and intentions are affected by motivations (Holloway, 1967, p. 42), information (Foxall, 1975, p.62; Scammon, 1977, p. 148); especially manipulated information (Oshikawa, 1968, p. 429). Purchase, dependa on customer's intentions such as a product, product class, brand, needs or requests (Clarke and Belk, 1979, p. 1). On the other hand, it can represent an impulsive choice as

unplanned purchase (Kollat and Willet, 1967, p. 21; Birdwell, 1968, p. 77; Granbois and Summers, 1972, p. 1).

Satisfaction is a key factor in loyalty. Therefore, it is interested in how a customer feels after purchasing (Bell, 1967, p. 12). Loyalty was identified in 1952 in marketing literature by Brown and it possibly accounts for most of the sales volume (McConnell, 1968, p. 13). In this context, marketing strategies developed to generate loyal behaviour consider the reasons underlying such as behaviour (Jacoby and Kyner, 1973, p. 2). Advertising with media and messages is one of the strategies (McDougall, 1978, p.39; Fireworker and Friedman, 1977, p. 576; Wright, 1974, p. 192; Anderson, 1973, p.38).

Brand, price, quality, risk, confidence are taken into account while choosing the the product. For example, the high-priced product is positively correlated with perceived quality and confidence in pricing (Lambert, 1970: 69; Olshavsky and Miller, 1972, p. 19; Locander and Hermann, 1979, p. 268; Clarke and Belk, 1979, p. 1). The data about them can be obtained with different measurement techniques and marketing research to understand customers (Mazis et al., 1975, p. 38). Then it can be established the relationship between them (Bird et al., 1970, p. 307; Wright, 1975, p. 60). Stores where the goods and services are located is affective in the customer's choices (Foxall, 1975, p. 60). Furthermore, salesman and its behaviours affect the interactions in stores (Woodside and Davenport, 1974, p.198).

## **2.2. Digital Marketing**

Unlike the traditional marketing, digital marketing includes several distinct factors such as e-commerce, online shopping, web usage, digital marketplace, e-retailing, online service, mobile banking, channels, flow, avatars, etc (Ha, 2004, p. 329). Besides it needs hard and soft skills, money, documentation, data, human assistance, and time to apply digital marketing (Luarn and Lin, 2005, p. 877).

Electronic commerce has become one of the essential characteristics in the Internet era (Li and Zhang, 2002, p. 508; Kulviwat et al., 2004, p. 245). The Internet represents an extremely important medium in the context of accessing, organizing, and transmitting information (Citrin et al., 2000, p. 294). E-commerce is defined as “a network of computer networks, which is capable of providing virtually instant access to a vast storehouse of information spanning the globe” (Forsythe and Shi, 2003, p. 865). It has made online shopping easier for shoppers, to obtain information about products and prices (Chu et al., 2005, p. 115; Childers et al., 2001, p. 512) and supports two-way communication between seller and buyer (Jarvenpaa and Todd, 1996, p. 60). In this context, online shopping is also one of the most used forms of shopping (Ha and Perks, 2005, p. 438). It has emerged as one of the most important areas of electronic commerce with the cost advantage provided by information technologies (Chau et al. 2000, pp: 1-3).

The technology acceptance model has received considerable attention in literature (Gefen and Straub, 2000, p. 2). It represents a tremendous opportunity for individuals especially customers who use electronic commerce (Childers et al., 2001, p. 512; O’Cass and Fenech, 2003, p. 82; Luarn and

Lin, 2005, p. 873). Besides, this model has considered the online customer as both a customer and a computer user (Koufaris, 2002, p. 205) and has described customers as both a problem solver or seeking fun, fantasy, arousal, sensory stimulation, and enjoyment (Childers et al., 2001, p. 513). Becker (1965) accepted that customers maximize their utility subject. Therefore, a customer seeks out his/her best decision given that he/she has constraints of money and time (Bhatnagar, 2000, p. 98). While purchasing a product from a store, a customer has to expend both money and time. Therefore, the customer patronizes the retail store where his total cost or the money and time spent in the entire process are the least (Bhatnagar et al., 2000, p. 98). Nevertheless, the Internet allows customers to browse product/service extensively, collect data, locate information, download information, compare prices, buy products to use online banking services, and receive feedback. Customers can browse or shop online 24/7 from office or at home (Forsythe and Shi, 2003, p. 869; Pikkarainen et al., 2004, p. 224). Therefore, website must accord with online retailing (O’Cass and Fenech, 2003, p. 87).

Another factor that is frequently addressed within the scope of digital marketing is flow theory. In fact, the flow theory also didn’t originate in the context of digital marketing. Instead, it was used to explain the optimal experience by understanding how a customer behaves and in what way an online experience is important in the digital economy (Senecal et al., 2005, p. 5). Flow dimensions are intrinsic enjoyment, perceived control, and concentration. Flow is described as an affective state when individuals are involved in certain activities (Jiang and Benbasat, 2004, p. 117) and it has a positive influence on an individual’s attitude and unplanned purchases (Korzaan, 2003, p. 25). However, the relationship between the customer experience, brand, trust, satisfaction, and loyalty has remained limited because of digital marketing’s dynamic structure (Ha and Perks, 2005, p. 439; Szymanski and Hise, 2000, p. 309). Brands differentiate companies from their competitors. They also increase the trust between the seller and the buyer (Chu et al., 2005, p. 115). Trust is crucial (Gefen et al., 2003, p.308; Jarvenpaa et al., 2000, p. 45; Lee and Turban, 2001, p. 77) as well as price, brand name, retailer name, advertising level, packaging which are all extrinsic clues in digital marketing. Since customers cannot accurately assess product’s quality, they often rely on its extrinsic clues to avoid risks (Chu et al., 2005, p. 115). The types of perceived risk have been identified as financial, product performance, social, psychological, physical, and time/convenience loss (Forsythe and Shi, 2003, p.869; Huang et al., 2004, p. 43; Kulviwat et al., 2004, p. 249). Privacy risk is also perceived by customers to digitalism jeopardize (Jarvenpaa and Todd, 1996, p. 66; Miyazaki and Fernandez, 2001, p. 28).

### **2.3. Phygital Marketing**

Phygital marketing connects physical and digital worlds together. It offers a new customer experience and use digital tools as sales support (Banik, 2021, p. 1). Phygital marketing provides to customers a new way to shop and also enables them to interact intelligently with products and devices (Chang and Chen, 2021, p. 1). Its applications are used in the retail, fashion, banking, tourism sector and so on (Ballina et al., 2019, p. 658).

In the article written by Nakazawa and Tokuda in 2007, the first use of the concept of phygital is explained with the concept of maps, which allow users to access digital multimedia stored on various

off-the-shelf devices from physically printed maps such as wall-mounted maps and atlas books (Nakazawa and Tokuda, 2007). One reason why phygital marketing was started in 2007 is the first article in Google scholar to be published on this date, and another reason is that this concept was first used by Nakazawa and Tokuda (2007).

How smart devices can be efficiently employed to provide customer experience and boost customer engagement? Recent innovations in digital technologies provide various opportunities (Kim et al., 2021, p. 503). For instance, virtual reality (VR) enables customers to experience the store atmosphere without visiting the store (Jin et al., 2021, p. 2). It electronically generates the image of the entire real-life setting (Yim et al., 2017, p. 89). It allows customers to immerse into a virtual environment based on the hardware or software (Baek et al., 2020, p. 3). Alibaba has announced Buyplus as a new VR shopping mall. Amazon is also using VR kiosks as a new form of customer engagement (Han et al., 2020, p. 311). Augmented reality (AR) integrates computer-generated sensory information with a physical environment in real-time (Baytar et al., 2020, p. 2; Rese et al., 2016, p. 1; Rauschnabel, 2021, p. 1) and enables customers to embed a virtual object into a relevant context in reality. In this context, both real and virtual elements are required for AR. IKEA's mobile application helps customers to envision a piece of furniture in a real looking room via virtual reality (Baek et al., 2020, p. 3; McLean and Wilson, 2019, p. 210). Therefore, it offers companies and customers some benefits such as entertainment, ease of use, speeding up process of purchase decision-making, return on investment, aesthetics, service excellence, and playfulness (Huang and Liao, 2015, pp: 270-272). VR is also functional especially in education, tourism, automotive, retail, sport, game, press, museum, goverment and defence sectors.

The other smart systems are such as radio-frequency identification (RFID), quick reponse (QR) codes, decision support systems (DSS), integrated payment methods, apps, mobile devices (smartphones, tablets, glasses), smart cards, cloud computing, beacons, and so on (Azis et al., 2020, p. 605). RFID and QR codes identify and provide information to companies and customers (Balaji and Roy, 2017, p. 2; Roy et al., 2017, p. 259). DSS and integrated payment methods make decision and payment convenient. They were first developed in the 1990s, to guide and support manufacturing and repair for Boeing and now it is used in all areas (Rese et al., 2016, p. 1).

Phygital marketing contributes to brand improvement and image (Kwon and Lennon, 2009, p. 376), customer decision-making process, attitude, behavioral intention, perceived risk, word of mouth, satisfaction, and loyalty (Qin et al., 2021, p. 2; Roy et al., 2017, p. 257). It also decreases costs, gains customer data and information, provides customers with more options to shop and improves in-store shopping experiences. Therefore, companies and their customers have to adapt technology readiness (TR) and self-service technology (SST). The relationship between TR and SSTs have been studied and especially Gen Z emphasizes its importance because of their utilitarian and hedonic benefits (Park et al., 2020, pp: 1-3; Sharma et al., 2021, p. 1). Besides, these benefits have allowed companies to offer customers tools to engage with their brands through websites, social media platforms and mobile applications (McLean and Wilson, 2019, p. 211).

### **3. Method**

This current study aims to systematically compare empirical studies on consumer research over the period 1960-1979, 1980-2006, and 2007-2021. The reason for taking these date ranges was justified in the introduction part of the study and a literature review was provided. In addition, this study was carried out in certain stages. Firstly, we tried to reach the studies by making a literature search on Google Scholar, which is a comprehensive database. In order to systematize the literature in a reasonable time Google scholar is used as the main database. (Cruz-Cárdenas et al., 2021). Secondly, a literature search was conducted with the keywords of consumer behavior, traditional marketing, digital marketing and phygital marketing to reach the studies published in the time ranges of 1960-1979, 1980-2006 and 2007-2021. While scanning the literature, authors paid close attention to the use of keywords directly related to the research topic (Snyder, 2019). Thirdly, some studies were selected for this present study among the studies reached according to source types, main characteristics, study topics, theoretical foundations, and research variables. Because it is important to obtain data and evaluate the quality of the study in terms of the type of source in which the study is published, design features, research method and outcome criteria (Littell et al., 2008). Fourthly, some journal articles, conference papers, and published theses reached through literature review were selected for this study. The sample of this study consists of 120 studies. It is known that the sample of some bibliometric studies published in journals indexed by important indexes such as SSCI and Scopus is limited to 70 (Cruz-Cárdenas et al., 2021) or 101 (Senyo et al., 2019) studies. Therefore, this study was considered to meet the criteria for the minimum size of the sample. Added to this, 120 studies were analyzed, equally divided into three periods, to systematically review the literature and compare findings within a reasonable framework. Finally, the data noted for each study as a result of the content analysis were manually coded into EndNote files. VOSviewer was preferred to present the mappings of the obtained bibliometric data sources and to evaluate the findings obtained by making these mappings (Van Eck and Waltman, 2010). Visual mapping presentations of the study findings are provided on the following pages.

### **4. Findings**

Publication source type, basic characteristics, study subjects, theoretical foundations and research variables of the selected studies are presented and evaluated visually under this title.

#### **4.1. Source Types of Selected Studies**

As seen in Figures 1a, 1b, and 1c, visual mappings are provided for the source types of the selected studies.



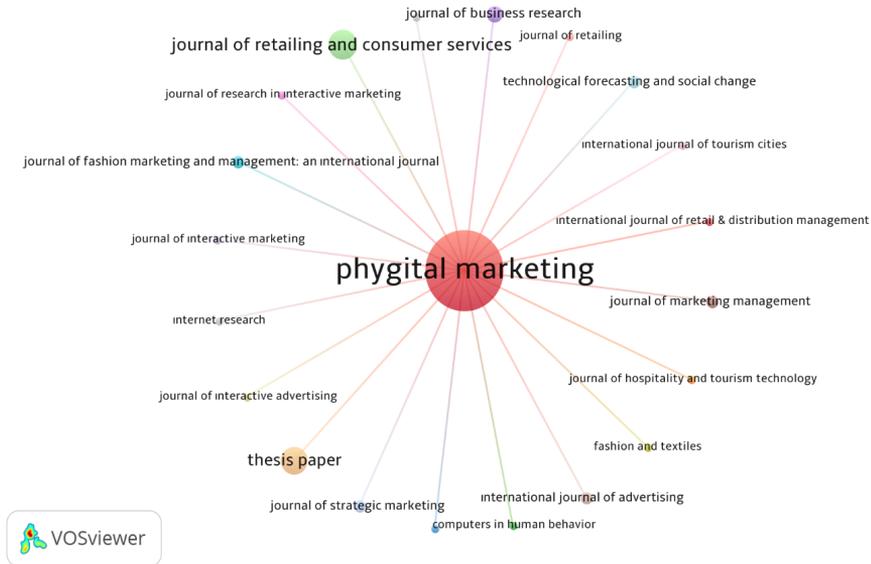
**Figure 1a.** Co-Source Type for Studies Published Between 1960 and 1979

The majority of the studies published between 1960 and 1979 and selected for this study were published in journals for marketing, marketing research, and consumer research. D letter indicates the number of documents and TLS abbreviations indicates the Total link strength. Most studies from 1960-1979 were published in the Journal of Marketing Research (D=16; TLS=16), Journal of Consumer Research (D=6; TLS=6), and Journal of Marketing (D=5; TLS=5).



**Figure 1b.** Co-Source Type for Studies Published Between 1980 and 2006

The majority of the studies published between 1980 and 2006 and selected for this study were published in leading journals for business research, retail, and e-commerce. Most studies between 1980 and 2006 were published in the Journal of Business Research (D=3; TLS=3), Journal of Retailing (D=3; TLS=3), and the International Journal of Electronic Commerce (D=3; TLS=3).



**Figure 1c.** Co-Source Type for Studies Published Between 2007 and 2021

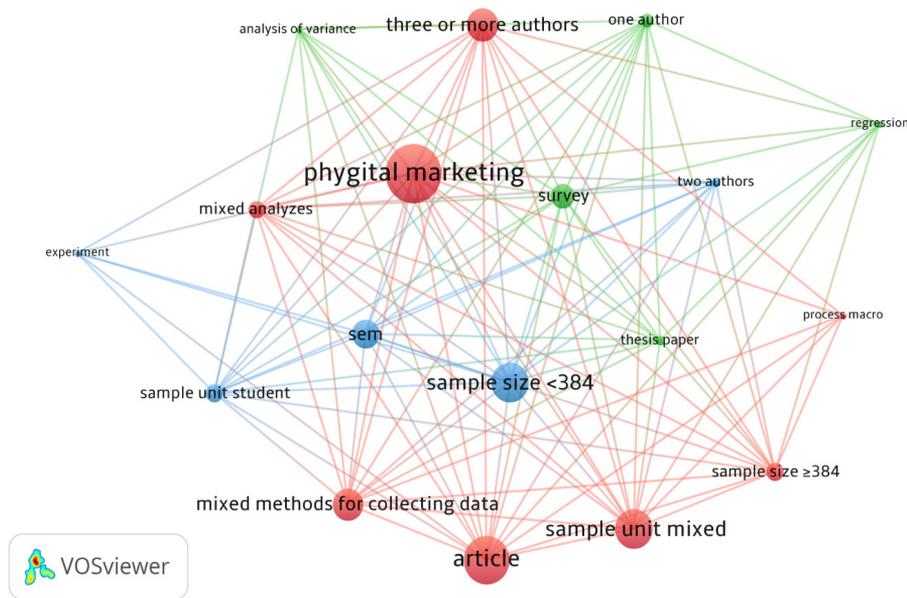
The majority of the studies published between 2007 and 2021 and selected for this study were published in journals for retailing, consumer services, and business research. Most studies published between these years were published in the Journal of Retailing and Consumer Services (D=8; TLS=8), and the Journal of Business Research (D=3; TLS=3). It should also be noted that thesis papers are the majority among the studies selected for this study (D=7; TLS=7).

#### 4.2. Basic Characteristics of Selected Studies

As seen in Figures 2a, 2b, and 2c, visual mappings are provided for the basic characteristics of the selected studies.



Most of the studies published between 1980 and 2006 are articles (D=39; TLS=234) and have two co-authorships (D=19; TLS=114). The sample unit of most studies is mixed (D=23; TLS=138). Survey method was used in most of the studies to collect data (D=28; TLS=168). The sample size of most studies is less than three hundred and eighty-four (D=22; TLS=132), and SEM was mostly used in the analysis of the data obtained (D=18; TLS=108). As a result, the most related common characteristics of the studies published between 1980 and 2006 are that the type of study is an article, it has two authors, the sample unit is mixed, the data collection method is a survey, the sample size is <384, and the analysis unit is SEM.

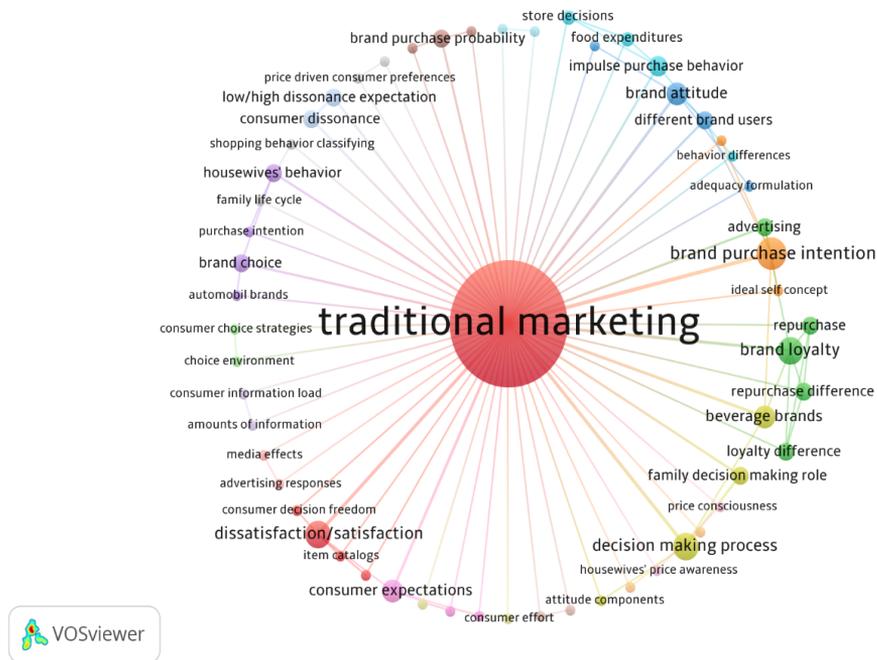


**Figure 2c.** Co-Basic Characteristics for Studies Published Between 2007 and 2021

Most of the studies published between 2007 and 2021 and selected for this study are articles (D=33; TLS=198). Also, most studies have three or more co-authorships (D=23; TLS=138). Most studies have mixed sample units (D=27; TLS=162). While most studies use mixed methods to collect data (D=22; TLS=132), the sample size of most studies is less than three hundred and eighty-four (D=27; TLS=162). Besides, SEM is generally used for data analysis (D=20; TLS=120). Finally, according to the highest link power, the common basic characteristics of the studies published between 2007 and 2021 are that the study type is an article, it has two or more authors, the sample unit is mixed, the data collection method is mixed, the sample size is <384, and the analysis unit is SEM.

### 4.3. Study Subjects of Selected Studies

As seen in Figures 3a, 3b, and 3c, visual mappings are provided for study subjects of selected studies.



**Figure 3a.** Co-Study Subject for Studies Published Between 1960 and 1979

In the studies published between 1960 and 1979, the top priority issues were the brand purchase intention (D=5; TLS=10), decision-making process (D=4; TLS=8), dissatisfaction/satisfaction (D=4; TLS=8), brand loyalty (D=3; TLS=8), beverage brands (D=3; TLS=6), and consumer expectations (D=3; TLS=6), brand attitude (D=3; TLS=6). In this context, the most prominent common study subjects of the studies published between 1960 and 1979 are the intention to purchase a brand of consumers, decision-making processes, dissatisfaction/satisfaction, brand loyalty, beverage brands, consumer expectations, brand attitude.



Figure 3b. Co-Study Subject for Studies Published Between 1980 and 2006

In the studies published between 1980 and 2006, the top priority issues were online shopping (D=11; TLS=23), online purchase intention (D=9; TLS=18), and online shopping adoption (D=4; TLS=8), flow (D=3; TLS=7), online retailer brand (D=3; TLS=6) and online shopping risk perception (D=3; TLS=6). Ultimately, online shopping, purchasing intentions and consumers' online retailing adoption are the most common subjects of studies published between 1980 and 2006.

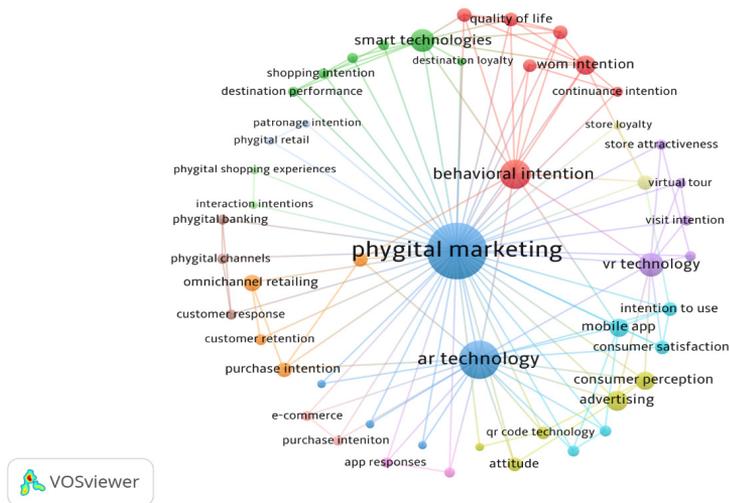
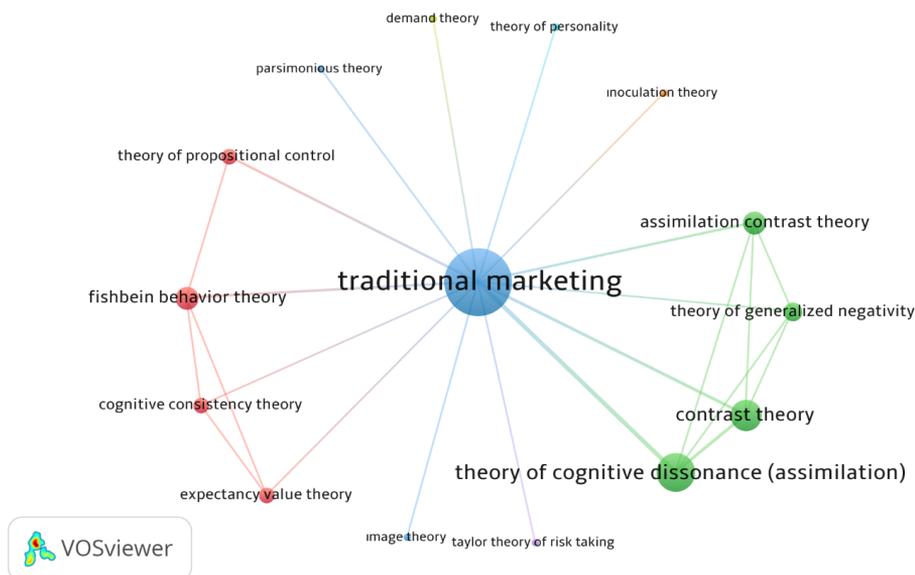


Figure 3c. Co-Study Subject for Studies Published Between 2007 and 2021

In the studies published between 2007 and 2021, the top priority issues were AR technology (D=16; TLS=47), behavioral intention (D=10; TLS=27), VR technology (D=7; TLS=18), smart technologies (D=5; TLS=16), advertising (D=4; TLS=13), omnichannel retailing (D=4; TLS=8), WOM intention (D=3; TLS=12), mobile app (D=3; TLS=11), and consumer perception (D=3; TLS=10), purchase intention (D=3; TLS=7), self-services technologies (D=3; TLS=7). In other words, AR technology, consumers' behavioral intention, VR technology, smart technologies, omnichannel retailing, WOM intention, mobile app, and consumer perception, purchase intention, self-services technologies are the most common topics of studies published between 2007 and 2021.

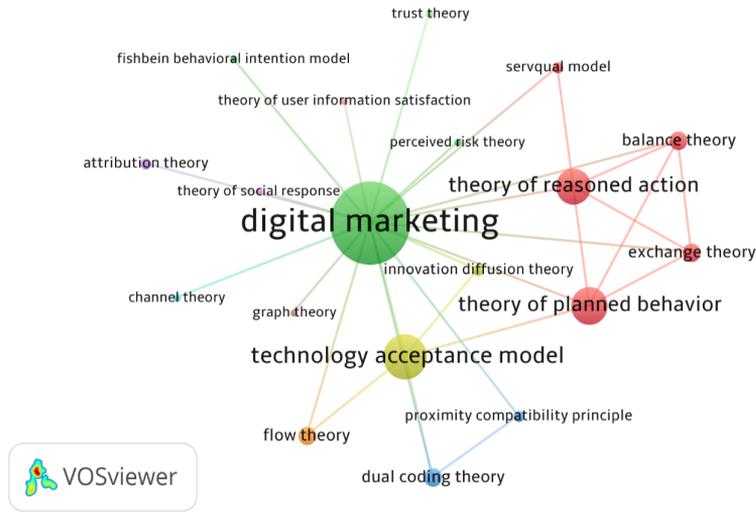
#### 4.4. Theoretical Foundations of Selected Studies

As seen in Figures 4a, 4b, and 4c, visual mappings are provided for the theoretical foundations of the selected studies.



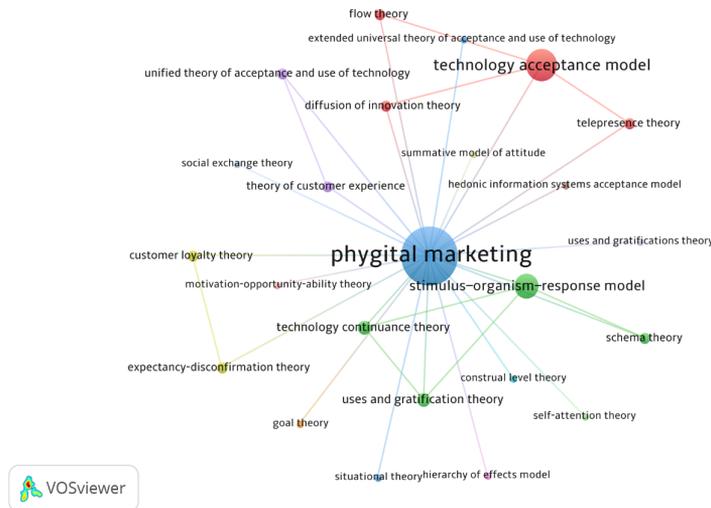
**Figure 4a.** Co-Theoretical Foundations for Studies Published Between 1960 and 1979

Most studies published between 1960 and 1979 and selected for this study are based on the theoretical foundations of the theory of cognitive dissonance (D=6; TLS=11) and contrast theory (D=3; TLS=8). The theory of cognitive dissonance (assimilation) was used together with the contrast theory, assimilation contrast theory, and theory of generalized negativity in studies published between 1960 and 1979.



**Figure 4b.** Co-Theoretical Foundations for Studies Published Between 1980 and 2006

Most studies published between 1980 and 2006 and selected for this study are based on the theoretical foundations of the technology acceptance model (D=11; TLS=16), theory of planned behavior (D=5; TLS=12), theory of reasoned action (D=5; TLS=11), and flow theory (D=3; TLS=4). Technology acceptance model was used together with the theory of planned behavior, innovation diffusion theory, flow theory, and dual coding theory in studies published between 1980 and 2006. Also, theory of planned behavior was used together with theory of reasoned action, balance theory and exchange theory.

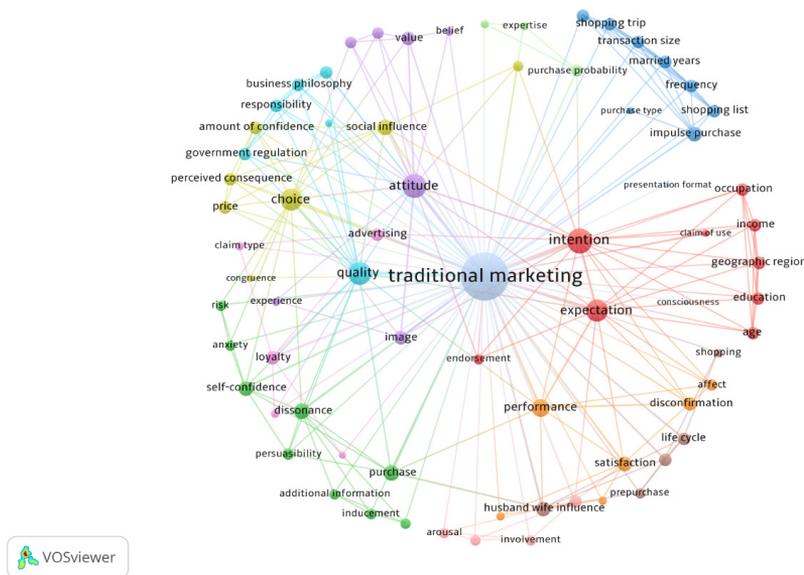


**Figure 4c.** Co-Theoretical Foundations for Studies Published Between 2007 and 2021

Most studies published between 2007 and 2021 and selected for this study are based on the theoretical foundations of the technology acceptance model (D=9; TLS=12) and stimulus-organism-response model (D=5; TLS=8). Technology acceptance model was used together with the diffusion of innovation theory, flow theory, telepresence theory, and extended universal theory of acceptance and use of technology in studies published between 2007 and 2021.

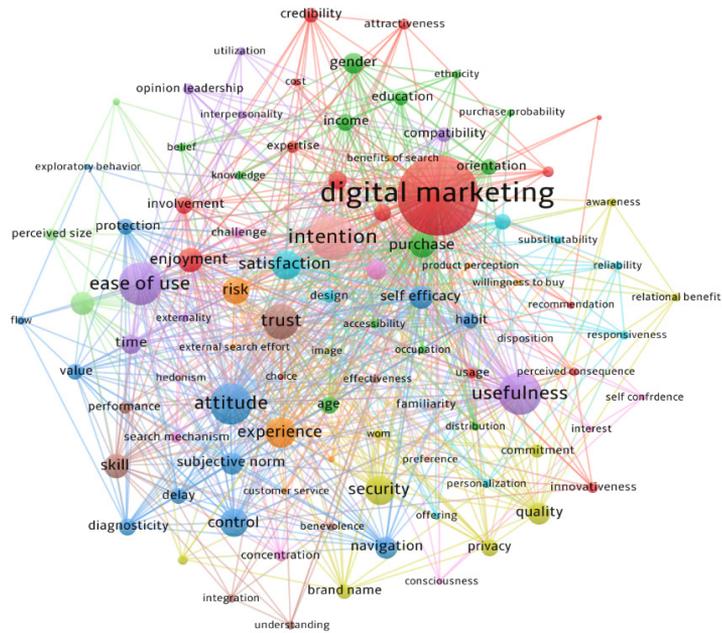
#### 4.5. Research Variables of Selected Studies

For the study subjects selected in the previous pages, consumers' brand purchase intentions, online/mobile shopping, WOM intentions, behavioral intentions to use AR technology, etc. findings are presented. Under this heading, the findings regarding the variables evaluated in terms of the hypotheses included/developed in the research models of the selected studies are presented. As seen in Figures 5a, 5b, and 5c, visual mappings are provided for research variables of selected studies.



**Figure 5a.** Co-Research Variables for Studies Published Between 1960 and 1979

Intention (D=9; TLS=29), attitude (D=7; TLS=28), choice (D=7; TLS=23), quality (D=6; TLS=25), expectation (D=5; TLS=22), performance (D=4; TLS=14), dissonance (D=3; TLS=11), purchase (D=3; TLS=10), satisfaction (D=3; TLS=9), husband-wife influence (D=3; TLS=9), image (D=3; TLS=8), loyalty (D=3; TLS=8), and advertising (D=3; TLS=6) are the variables that were most evaluated in studies published between 1960 and 1979. In some studies published in between 1960 and 1979, intention is a co-variable that is evaluated simultaneously with expectation, geographic region, age, education, occupation or income.



**Figure 5b.** Co-Research Variables for Studies Published Between 1980 and 2006

Intention (D=14; TLS=95), ease of use (D=11; TLS=86), usefulness (D=11; TLS=86), attitude (D=11; TLS=85), risk (D=9; TLS=42), trust (D=8; TLS=64), experience (D=7; TLS=52), satisfaction (D=7; TLS=50), security (D=7; TLS=48), control (D=5; TLS=44), shopping (D=5; TLS=21), purchase (D=4; TLS=39), enjoyment (D=4; TLS=36), reputation (D=4; TLS=34), quality (D=4; TLS=31), gender (D=4; TLS=28), brand name (D=4; TLS=17), skill (D=3; TLS=37), self-efficacy (D=3; TLS=35), navigation (D=3; TLS=31), subjective norm (D=3; TLS=30), impulse purchase (D=3; TLS=26), informativeness (D=3; TLS=24), income (D=3; TLS=22), privacy (D=3; TLS=21), age (D=3; TLS=20), and convenience (D=3; TLS=19) are the variables that were most evaluated in studies published between 1980 and 2006. In some studies published between 1980 and 2006, attitude is a co-variable evaluated at the same time as subjective norm, control, value, flow, delay, navigation, diagnosticity, self-efficacy, habit, or protection.



## 5. Discussion

Marketing is a constantly evolving and synchronized discipline due to periodic developments. It is a matter of curiosity under which themes the topics studied in marketing are combined, which research variables are used, which journals and research-specific qualities stand out, and what kind of change has occurred. The aim of this study is to evaluate and comparatively examine the latest developments of empirical research in the field of marketing, covering the periods 1960-1979 (traditional marketing), 1980-2006 (digital marketing) and 2007-2021 (phygital marketing) in the Google Scholar database. While other studies only examine research in the field of digital marketing (Dunakhe and Paste, 2021; Ghorbani et al., 2021), this study is the first to provide a holistic bibliometric analysis in three fields of the marketing discipline. It is thought to be important in terms of revealing the evolution of marketing. When the literature is examined, there are no studies that deal with the marketing approaches periodically and examine them comparatively. This study was carried out to fill this gap in the literature. For future research, it hopes to inspire periodic review of research fields in marketing and to broaden insights.

Within the scope of the study, the periods between 1960-1979 (traditional marketing), 1980-2006 (digital marketing) and 2007-2021 (phygital marketing) were examined in five steps in terms of publication source type, basic characteristics, study subject, theoretical background, research variables. The unequal distribution of years between each period does not mean that research in this field has developed unevenly. When the concepts of traditional marketing, digital marketing and phygital marketing are searched separately in the Google Scholar database, the first publication years of the listed empirical studies are taken as basis. Current study findings offer theoretical and practical contributions and have implications for future research directions. In addition, future trends and research limitations for researchers are indicated.

### 5.1. Theoretical Implications

For marketing professionals and researchers, the results provide an opportunity to review how studies in traditional, digital and phygital marketing have evolved. Therefore, the first major contribution of the current study is an assessment of the latest state of research in the different fields of marketing, which has contributed to the development of the marketing discipline as a whole.

Second, this study highlights the contributions of different journals to marketing research in these three fields and periods. While the Journal of Marketing, Journal of Consumer Research and Journal of Marketing Research were pioneers in the first period, the journal trends shifted to retailing, e-commerce and business journals in the following periods. In the field of phygital marketing, the Journal of Retailing and Consumer Services has come to the fore. It is also surprising that these came to the fore in this period too. The results show that marketing management journals dominate the traditional marketing research field. Remarkably, as the field continues to expand and evolve over time, different journals have been and will be involved in producing publication content. This

information can be useful to potential researchers interested in publishing articles on traditional, digital and phygital fields of the marketing discipline.

While the studies were mostly single-authored in the traditional marketing period, the studies with two authors were the majority in the digital marketing period. In the phygital period, the number of authors of the studies being 2 or more can be interpreted as the formation of a collaborative research culture among researchers. The large number of articles with multiple authors indicate a greater opportunity for future collaboration and the likelihood of further literature growth on the topic.

While the questionnaire is mostly used as a data collection tool in the traditional marketing and digital marketing period, mixed methods including qualitative and quantitative research are used more in the phygital marketing period. This is in line with the views of Golgeci et al (2022), who recommend that there is a greater need for the application of quantitative research and mixed methods to increase statistical generalization and further advances of knowledge in the field. As Muñoz-Leiva et al. (2021) stated that there are studies using eye tracking methodologies in the phygital marketing period and this technique will continue to use. In addition, it is expected that studies applying neuromarketing methodologies will increase with the frequent use of smart digital technologies such as AR and VR, which stand out in the phygital marketing period (Grewal et al., 2017).

The fact that the sample unit was mixed in all three marketing approach periods shows that the research sample was composed of different participants. If the sample size is less than 384, it can be stated that the studies were composed of participants with a population size of at least 250,000 with a 95% confidence interval and a 5% margin of error (Gill et al., 2010).

Another important contribution revealed by the study is that while variance analysis is mostly used in the traditional period in analysis, the use of structural equation model (SEM) has gained weight in studies in the field of digital and phygital marketing. In the field and period of phygital marketing, the use of Process macro came to the fore after SEM analysis. Hayes (2013) criticized SEM models and suggested Process Macro templates, especially for Baron Kenny approaches. It is expected that the use of Process Macro will increase further in future research.

Another contribution of the study is that it reveals study topics that have contributed to current marketing thinking and will continue to contribute to the future. Research in traditional marketing has developed around basic themes such as brand purchase intention, decision-making process, dissatisfaction/satisfaction, brand loyalty, brand attitude and consumer expectations. Research in digital marketing has focused on themes such as online shopping, online purchase intention, and online shopping adoption, flow, online retailer brand, and online shopping risk perception. During this period, online assessments of consumer behavior gained popularity. Nusair (2020) also stated internet marketing as the introductory stage of digital marketing in his study (Nusair, 2020). In this period, the theme of purchase intention was started to be analyzed as online purchase intention. In research in the field of phygital marketing, themes such as AR technology, consumers' behavioral intention, VR technology, smart technologies, omnichannel retailing, WOM intention, mobile apps have come to the fore. It is seen that new digital technologies are the subject of studies in the

phygital marketing approach. In this period, the effect of the purchase intention theme decreased, and consumer behavior began to be studied more comprehensively under behavioral intention. The consumer expectation theme in the traditional marketing approach has recently been used as consumer perception. This shows that while consumer expectations are at the forefront at the beginning, consumer perceptions have gained more importance in the last period.

The other contribution of the study is that it provides theoretical backgrounds in publications for possible authors. Theoretically supported research can confirm existing theories and provide a strong premise for adding new information to the literature and for a systematic deeper understanding of a phenomenon (Golgeci et. Al., 2022).

While contrast theory (Hovland et al., 1957), assimilation contrast theory (Hovland et al., 1957), and theory of generalized negativity (Aronson and Carlsmith, 1963) are used a lot in the traditional marketing approach; Technology acceptance model (Davis, 1989), theory of planned behavior (Ajzen, 1991), theory of reasoned action (Fishbein and Ajzen, 1975) and flow theory (Csikszentmihalyi, 1990) have come to the fore in the field of digital marketing. This result shows that the periods when the theories were put forward led and pioneered the research in the field of marketing in the same period. Research in the field of traditional marketing has been dealt with mostly within the framework of contrast theories. The studies are based on the investigation of the reasons for the contrasts. The reason why theories such as TAM, TPB and TRA come to the fore in the field of digital marketing is that the studies in the field of digital marketing are shaped within the framework of the use of the internet and digital technologies and their effects on consumer behavior. In the field of phygital marketing, technology acceptance model and stimulus-organism-response model are in the first place. Although the SOR paradigm was introduced in 1974 (Mehrabian and Russel 1974), the reason why its use has increased recently can be explained by the increase in consumer stimuli in both physical and digital environments. On the other hand, the technology acceptance model continues its effectiveness in the field of marketing without any decline. The reason for this can be observed in recent marketing efforts to be shaped on the basis of technology. It can be said that these findings will contribute to the authors in terms of producing new research, expanding the field, and providing a theoretical basis for new research models.

Finally, this study reveals the research variables that are considered in traditional, digital and phygital marketing research. It summarizes the variables involved in research models in the current literature regarding the distribution of empirical research in three different marketing areas.

In particular, the intention theme has come to the fore as the key theme in all periods. In addition, attitude and satisfaction are the main themes that emerged in all periods. Themes such as choice, quality, expectation, performance, which were active in the beginning, have recently declined and lost their intensity. It has been seen that the concepts (ease of use, usefulness, attitude) discussed in TAM, TPB and TRA theories along with the theme of intention in the digital and phygital marketing period are included as research variables in the studies. Again, in these periods, the theme of satisfaction gained more importance compared to previous periods. This finding can be evaluated by

observing the rising importance of being customer-oriented and creating satisfied customers during these periods.

The theme of experience is another prominent theme in digital and phygital marketing research. In this study, it has been stated that the studies in the field of digital marketing include the studies between 1980-2006. Holbrook and Hirschman (1982) stated that there is now a trend towards consumer experience rather than technical features of products and services, and this is discussed under experience economics by Pine and Gilmore (1999) and experience marketing by Hutton (1996). For this reason, it can be said that experiential marketing and online experiences contributed to this period in which the field of digital marketing developed, together with internet technologies and online evaluations and reviews. In the following period of phygital marketing, experience marketing expanded on the basis of hedonism and utilitarianism.

The concept of risk is another theme that comes to the fore in the digital marketing period and decreases in the phygital marketing period. Digital marketing is faced with skepticism by consumers from the beginning and is perceived as somewhat risky since it is a new area (Chang et al., 2016). In digital marketing research, themes such as security and control have changed as insecurity and discomfort themes in phygital marketing. The reason for this can be the increased risk perception in the consumer. The theme of informativeness, which emerged in the digital marketing period, increased its intensity in the phygital period. In this period, when both physical and digital marketing efforts are carried out, it can be inferred that the need for information has increased in the consumer. Lastly, while the theme of enjoyment started to come to the fore in digital marketing research, it greatly increased its intensity in research during the phygital marketing period. Similar to this finding, Kim and Ammeter (2018) stated that one of the most important issues for today's internet-based generation is enjoyment (Kim and Ammeter, 2018).

At this stage of the study, links showing the relationships between other variables were also revealed for each theme. For example, in traditional marketing research, impulsive purchase has a connection with variables such as shopping list, frequency, married years, shopping trip and purchase type, intention variable has a connection with expectation, geographic region, age, education, occupation and income variables. It has been seen that the choice variable is related to variables such as social influence, price, perception consequence, amount of confidence. In the field of digital marketing, ease of use and usefulness are the variables with the highest connection strength and the most connections with other variables. Attitude variable formed a cluster with variables such as control, subjective norm, delay, and value. The purchase variable is considered together with variables such as age, income, education, and gender. In the research conducted in the field of phygital marketing, the enjoyment variable formed a cluster with themes such as technology readiness, advantage, effectiveness, attractiveness, flow, support, complexity, and self-efficacy. The ease-of-use variable has links to the themes of insecurity, discomfort, work, innovation, and optimism. The attitude variable is associated with personalization and loyalty, and the interactivity is the variable associated with hedonism, utilitarianism, quality, and vividness. Performance variable has been clustered together with variables such as age, income, education, gender.

These findings will help identify knowledge gaps that could help bridge future research to advance the field. Identifying correlated variables provides a broad picture of research dynamics for potential researchers interested in research on studies in this area.

## 5.2. Practical Implications

The marketing discipline has transformed in recent years, and it can be said that this change and development will continue at an accelerating pace with new products, technologies and business models that are constantly being introduced. Due to the changes and developments in the evolution of marketing, managers are faced with an important uncertainty regarding the questions of how consumers will behave in this environment, how businesses will direct their marketing activities and what kind of strategies they will develop. But it also brings advantages as well as challenges to corporate executives and practitioners. The present study provides an opportunity to make the literature more accessible and to increase the level of knowledge about research related to application areas according to the three fields in the marketing discipline for practitioners.

According to the findings of the study, by looking at the interaction of interconnected themes, basic inferences are made such as what will be the antecedents and consequences of the marketing activities of the enterprises, how the enterprise can be affected by the development of marketing, which digital or phygital applications can be used in order to achieve success in the market.

In light of the practical insights of this study, managers are advised to note the marketing activities that drive consumers to buy and shape their intentions and behaviour. Positive experiences of websites that provide powerful experiences, ease of use and usefulness, and enjoyment together with digital marketing will lead consumers to purchase intention. Businesses should provide developments to rival businesses in this direction. For consumer behaviors determined to be shaped within the framework of TAM, TRB and TRA in studies in the field of digital marketing, e-commerce and virtual store owners should be directed to include innovations that facilitate online ordering (Bonera and Corvi, 2014).

Another practical contribution of this study for practitioners is that it guides businesses to digital and phygital-based marketing. Determining the prominent themes in the field of digital and phygital marketing will be beneficial in terms of how managers and practitioners will develop new strategies. Businesses should consider their activities in a physical sense as well as digitalization and include new technologies such as AR, VR and Smart technology in their activities. Moreover, Yaoyuneyong et al. (2014) advised businesses to improve customer experience through digital innovations such as VR and AI (Yaoyuneyong et al., 2014).

Businesses that shape their marketing efforts in the field of digital marketing and implement digital technologies in both physical and digital environments have reached different target audiences by gaining new customers and developing customer experiences. In this period when phygital marketing efforts are carried out, it would be valuable to talk about the segmentation developed by Accenture (2020) regarding having a new target customer understanding for businesses. In this segmentation

approach, customers are defined in four groups: (1) pragmatists who are defined as trusting and channel-agnostic; (2) traditionalists who prefer human interaction over digital interfaces; (3) pioneers who are technology-savvy, risk-takers, and quick-adopters; and (4) skeptics who are tech-wary and dissatisfied. Managers can use this classification to design marketing strategies and tactics tailored to their needs and preferences.

### **5.3. Future Research Directions**

This study not only examines and compares the studies in terms of three different periods and three different fields, and shows the past of the marketing discipline, but also sheds light on future research. It helps eliminate duplication in future research and provides several guidelines for five key questions (publication source type, basic characteristics, study subject, theoretical background, and research variables) to shape future research.

Determining which journals are leading in the field for the journals that are considered to be submitted will guide the authors for future research. Periodic examination of information such as which statistical methods are used, sample selection and size, data collection process, etc. will provide the opportunity to reconsider the research methodology and research design of new studies. The recent emergence of mixed methods in research methods can be interpreted as the importance of using qualitative and quantitative research methods together, and it is expected that the use of methods such as neuromarketing techniques in the field of phygital marketing will increase. It may be good for the quality of the studies that the authors shape their research methods accordingly.

The study findings will assist the authors in determining theoretical backgrounds, creating new research models, and establishing a theoretical background in the hypothesis development process. It will contribute to suggesting new study titles and research models for possible authors, taking into account interrelated variables. Another question that is not addressed in the study but needs to be answered is the countries where the studies were conducted. For this reason, country analyzes can be carried out in future studies. In addition, the development of the marketing discipline can be examined comparatively by classifying as underdeveloped, developing, and developed country.

Based on the findings of the study, it is clear that the evolution of marketing will continue on the basis of phygital marketing, which includes the use of digital and traditional marketing approaches in physical spaces. In this context, the use of internet technologies and digital technologies in marketing activities is likely to develop further. The use of technologies such as AR and VR will become more prominent within the scope of phygital marketing, as well as the continuation of the development of mobile and smart technologies, and the adaptation of digital technologies to traditional marketing will greatly contribute to the development of phygital marketing.

It will be interesting to understand how marketing keeps up with new changes and developments. Also, it will be exciting to observe how consumer expectations and perceptions are shaped, and how behaviors change in the physical and in online environment. In the age of metaverse marketing, which can also be described as the continuation of phygital marketing, it is a matter of curiosity what

awaits consumers, how digital technologies will be used in this sense, and how they will reflect on consumer behavior. It will be exploratory in terms of research that future research focuses on new research areas with a metacentric and phygitalic focus.

For future research, it can be said that it will be important to include studies that evaluate each five years separately when examining periods due to the rapid pace of change and development in new bibliometric studies focused on digitalization. It would be valuable to examine which research areas and keywords emerged over the years. Such studies will provide additional information about potential research to be developed. Designing new research models based on variables that are interconnected and form clusters will support the expansion of the literature.

The application areas of most of the technologies related to the phygital marketing field are still being developed, improved and new usage areas are created. For this reason, it would be beneficial to increase the number of studies examining the effects of the use of these applications in phygital marketing on consumer behavior.

In future research on adopting and accepting new technologies within the framework of technology acceptance theory, factors that facilitate and complicate consumers' use and acceptance of these technologies can be explored. In this context, an important study for research in the field of traditional, digital and phygital marketing may be studies that examine intergenerational effects separately. The processes of adopting new technologies and reflecting them on consumer behaviors will differ between consumers born in the digital age and those of the past. Therefore, future research examining intergenerational consumer behavior will also potentially be efficient for the literature.

#### **5.4. Limitations**

Although the current bibliometric analysis examines the marketing discipline within three different fields/periods in terms of the historical process it deals with, it is limited in few ways.

The first limitation of the study is the manual execution of the process, especially in the data processing step, and the accuracy of the applied bibliometric analysis by the researchers. The studies included in the bibliometric analysis are limited to the studies included in the Google Scholar database.

Results are based on studies published between 1960-1979 (traditional marketing), 1980-2006 (digital marketing), and 2007-2021 (phygital marketing). The lack of equal time periods between the years is due to the grouping by looking at the first date that emerged as a result of the listing made by searching the words traditional, digital and phygital marketing in the Google Scholar database. Therefore, this sitatus should be considered as a limitation of the research since it was chosen depending on the researchers' own judgment.

Another limitation of the study is that similar studies will yield different results in the near future as a result of the rapid change in digital technologies and application areas. In addition, although bibliometric analysis is an effective method for examining trends in a particular area, it has inherent

weaknesses that can overestimate one area and underestimate another (Kumar et al., 2020). Finally, the visualization analysis in this study was performed using the VOSviewer software, and the results may be different if another software is used.

## 6. Conclusion

In this study, our aim was to examine the development of the marketing discipline in terms of three different fields with bibliometric analysis, to make comparisons and to reveal the themes that emerged in each period. For the five questions addressed in this context, the findings were analyzed and reported for each period.

In order to achieve the objectives of our study, a systematic literature search was made by searching the Google Scholar database with the name of the relevant marketing fields. Empirical studies were selected from these studies and examined through the VOSviewer software.

In the study, publication source type, basic characteristics, study subject, theoretical background, and research variables for traditional, digital and phygital marketing fields were examined and visual outputs were presented. The evolution of the marketing discipline is discussed for each assessment. In which journals the studies are published periodically, the main methodological features of the studies, which theories stand out, which study subjects and research variables are frequently used, and the connections between them are examined. Finally, recommendations for future research are presented.

As a result, it may be possible to say that the distinction between “digital marketing” and “traditional marketing” has come to an end in today’s age. Marketing has recently developed on the basis of phygital marketing. Lamberton and Stephen (2016) also mentioned this sitatus and emphasized that some digital elements will be included in all marketing activities (Lamberton and Stephen, 2016). This result is a finding that should be taken into account both for researchers working in the field of marketing and for managers. It can be suggested that research and practices gain depth in this direction.

The biggest criticism of digital marketing is that it lacks the “touch and feel” element and appeals only to the visual senses. Researchers are attempting to incorporate multi-sensory online experience into this (Petit et al., 2019). This process will accelerate the transition to phygital marketing.

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