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Sustainable Entrepreneurship: A Bibliometric Analysis of Digital Marketing Trends

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Abstract: This research aims at how important digital marketing is for encouraging sustainable business, focusing on global trends, country-specific strategies, and the use of new technologies. The goal of this study is to explore academic papers that discuss about how sustainable business and digital marketing can work together, directing on big economies like the G7, China, and India. A mixed-method approach was used, which included bibliometric analysis, and document analysis. 80 scientific papers were used to collect data, and the PRISMA method was used to make sure that the review process was organised and clear. The main results show that digital marketing tools like content marketing, search

engine optimization (SEO), and social media are very important for making sustainable business practices more visible and having a bigger effect. Getting people to care about sustainability and interact with brands is especially easy through social media and influencer marketing. AI and big data analytics are widely used in G7 countries to improve marketing strategies and reach people who care about the environment. China focusses on e-commerce and mobile technologies, while India uses social media and local influencer marketing to reach a wide range of people. New technologies like AI and big data analytics are changing digital marketing strategies. They give marketers more information about how customers behave and let them make more personalized campaigns. This study is useful because it explores how digital marketing strategies can be used to reach sustainability goals in a thorough way. The results are useful for researchers, policymakers, and businesspeople who want to combine digital marketing with sustainable entrepreneurship. Businesses can improve their efforts to be sustainable, connect with customers more effectively, and build a strong brand presence that cares about social and environmental issues by understanding and using these strategies.

Keywords: Artificial intelligence, Big data analytics, Consumer engagement, Digital marketing, Sustainability, Entrepreneurship.

Introduction

Sustainable entrepreneurship that focuses on environmental, social and economic objectives is offering a rapidly growing stream of research in the areas of business field. At its heart, entrepreneurial ecosystem building emphasizes a holistic approach to entrepreneurship that creates value not just for companies, but also for society and the environment (Shwetzter et al., 2019). The addition of these three dimensions — environment, social and economic organically form the foundation for sustainable entrepreneurship investigation on a global level in big issues such as sustainability (Silvestri & Veltri, 2020). This means advertising and marketing delivered through digital channels such as search engines, websites, social media, email (Theodoraki et al., 2022). It is more effective in presenting knowledge-based campaigns to break the consciousness of sustainability, eco-friendly product and services and have a massive conversation with people at large. Digital Marketing can help the sustainable entrepreneurs to showcase the products, build niche ecosystems and even create a shift in consumer behaviour towards responsible shopping (Calderon-Monge et al., 2020).

Standard literature on sustainable entrepreneurship and digital marketing was researched as to overcome this gap. It examines how the world is responding, and tries to capture noteworthy trends and strategies as well as best practices globally - with a focus on the larger economies (G7 countries along with China and India). This experience will be particularly valuable for understanding the global landscape of sustainability practices, as these countries are very influential in terms of economic trends and impact. In order to guarantee a clear and broad revision of the literature, this analysis is done under the structures based on PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyzes). It aims to ensure the full reporting and reproducibility of systematic reviews through providing a standard checklist for carrying out each stage (identification, screening, inclusion) relevant studies. Following this approach this review presents an explicit and methodical synthesis of existing studies on Sustainable entrepreneurship and digital marketing.

It can be seen that sustainable entrepreneurship is important in addressing global challenges such as climate change, resource depletion and social inequality (Jayaratne et al., 2019). The adoption of sustainable practices by entrepreneurs leads to a more robust and fair economy (Rosário et al., 2022). They develop profitable, environmentally and socially-conscious businesses. Such a dual focus on profit and purpose is more commonly recognized today as an important part of lasting business success, as well as societal welfare. There are many benefits of digital marketing for sustainable entrepreneurs. At the same time, it allows them to reach a large audience at comparatively lower costs which has made that accessible for every business small or big. Naturally, this provides a targeted place for

entrepreneurs to help convey their sustainability commitments by sharing them on digital platforms and using these efforts as a way to generate conversation with customers. Which go hand in hand creating strong brand identities based around ethical/sustainable practices. The other advantage in line is the data and analytics of not only digital marketing but also for tracking ways to understand consumer behavior. Although there is a lot of research in both sustainable entrepreneurship and digital marketing respectively, the intersection between these two fields are still under-explored. This review attempts to narrow this gap by conducting a comprehensive analysis on how digital marketing is applied in transitioning towards sustainable entrepreneurship objectives. It focuses on leading economies to identify global trends and best practices that can be adapted in different context.

Research Problem

A lot of new research is being done in the area where sustainable business and digital marketing meet. There aren't enough, though, thorough reviews that bring together all the existing research and find global trends. This study fills in that gap by doing a thorough bibliometric analysis of relevant scientific publications, pointing out important trends and patterns and giving information about how things are done in different countries.

Research Focus

The main goal of this study is to find and analyse scientific papers that explore the connection between digital marketing and sustainable entrepreneurship. The goal is to find the main strategies, trends, and practices used around the world, with a focus on the biggest economies.

Research Aim and Research Questions

The primary aim of this research is to analyze the global trends in sustainable entrepreneurship and digital marketing as reflected in scientific publications. The research questions include:

1. What are the predominant themes and trends in the literature on sustainable entrepreneurship and digital marketing?
2. How do these trends vary across different countries, particularly the G7 countries, China, and India?
3. What are the key digital marketing strategies employed to achieve sustainable entrepreneurship goals?

Literature Review

In fact, the intersection of environmentally-conscious entrepreneurship and digital marketing comprise an ever flexing area of study. While sustainability is recognized by most businesses as a strategic imperative to be integrated into core operations, digital marketing has emerged as an important leverage factor in visibility for these efforts (Khan et al., 2019). In this literature review, we study the worldwide tendencies of sustainable entrepreneurship and digital marketing with particular reference on G7 countries as well China and India that are considered leading economies. In the light of recent studies that highlight digital marketing strategies as tools to facilitate sustainable entrepreneurship. When digital tools are integrated, industry uses would be able to better communicate the sustainability work that they do more broadly and have even greater avenues for engaging with stakeholders, helping embed a culture of openness. Using platforms like social media, SEO and content marketing, green entrepreneurs can reach larger audiences to increase consumer awareness in addition to promoting socially conscious products (Park et al., 2021b).

Global Trends in Sustainable Entrepreneurship and Digital Marketing

A major trend that has been seen in the research is that digital marketing strategies are being used to stay in business. Gregori and Holzmann (2020) and Tohãnean et al. (2020) both do research that shows how digital tools can change the way sustainable business practices are seen and how they affect

people. These studies show that social media, search engine optimisation (SEO), and content marketing are some of the most important parts of successful digital marketing strategies. Sustainable entrepreneurs, therefore utilize social media platforms as primary avenues to communicate with consumers, stakeholders and the general public (Basri et al., 2019; Stawicka, 2021). Facebook, Twitter, Instagram and LinkedIn - all are unique platforms for businesses to discuss their sustainability practices as well as market eco-friendly goods whilst engaging a community around the values brand (Nabivi, 2020). Through it, chat marketing allows brands to have a direct conversation with their user base via that social signaling channel (He et al., 2021). Furthermore, sustainable entrepreneurs are able to post all the updates about their initiatives and maybe even share educational content regarding sustainability as well as connect with potential customers through social media (Di Tullio et al., 2021). This lead interactions with a brand that can increase trust and help build lasting customer loyalty (Shah et al., 2020). A good channel to launch awareness campaigns on sustainability promote viral content - companies can sponsor promotion for likes and shares which will allow the brand to reach a wider audience. Subsequently, particular initiatives can make their way into the illuminating spotlight with global trending environmental provisions. Working with sustainability-centric influencers can help drive a brand's message. Small influencer marketers working with wasteful companies makes no sense here - larger influencers can spread the word on sustainable products and practices better to a wider audience making these strategies far more credible impactful. Social media campaigns increased brand awareness and engagement with sustainable brands (Kong et al., 2021). Overall, businesses that give a public voice to their sustainability activities on social media boast increased customer loyalty and brand awareness.

Search Engine Optimization (SEO). Optimizing the online content to rank higher in search engine pages makes it easier for potential consumers to find information about sustainable products and practices (Ziakis et al., 2019). The base of solid SEO strategies are appropriate and relevant keywords, which the customers may probably type in their search queries. For sustainable businesses, this could mean terms related to "eco-friendly," "sustainable products" or even hearing their own organization referred to as a green business (Hojnik et al., 2019). When used as naturally and organically possible within website content, blogs, metadata, these keywords help to boast search rankings. Sustainable entrepreneurs can write content on frequently asked questions about sustainability, showcase their practices and educate consumers about the advantages of moving towards sustainable options. Additionally, well-written and informative content is more likely to attract backlinks - which lifts search rankings (Schulkind, 2022). Technical Optimization can include faster pageloads, mobile-friendliness and secure connections (SSL/HTTPS). They help users and also optimize for the technical as they are added to allow search engines to crawl, index pages properly. Businesses with a strong SEO strategy and an experienced marketing team can make lasting changes to their organic position (Poturak et al., 2022). Research by Sakas et al. (2022) has revealed that businesses employing solid SEO strategies are seeing increased traffic well beyond 48 hours.

Content Marketing. As for sustainability, content marketing can play an essential role in educating the consumer and promote a responsible consumption (Fischer et al., 2021). It is a strategy where we can create and share valuable, relevant content consistently to attract or retain customers with the goal of driving population. Content marketing also allows sustainable entrepreneurs to communicate their sustainability practices and the benefits of their product, as well as educate prospects about environmental issues (Del Vecchio et al., 2021; Veleva, 2021). Educational content in the form of blogs, articles videos and infographics engage consumers so that they learn while being promoted. Content marketing stories about their journey with sustainability, the resulting change from actions taken and statements of satisfied customers can be shared by businesses. Stories are personal and relatable which provides human or emotional expression to the brand (Dhote & Kumar, 2019; Kemp et al., 2021). One way we keep readers up-to-date is by consistently updating them with new sustainability programs, product releases and company updates. The latter could include things like

newsletters, blog posts and also updates that you post on your social media. Content marketing resulted in a discernible increase of consumer awareness and specific knowledge of minimum ethics, CSR or sustainability content (Park et al., 2021a). With regular output of this high-quality content, promotes its sustainable businesses as thought leaders in sustainability right across the country - enabling them to inform and engage a community full of eager consumers.

Country-Specific Trends

Different countries have very different ways of adopting and using digital marketing strategies to help businesses stay in business. This difference is caused by things like changes in technology, economic priorities, cultural views on sustainability, and the rules and regulations in place. We can learn more about how digital marketing is being used to promote sustainability around the world by looking at specific trends in economies that are on the rise, like the G7, China, and India. Every one of these areas has its own unique ideas and ways of doing things that add to the field of sustainable entrepreneurship as a whole.

G7 Countries. Countries, including Canada, France, Germany Italy, Japan United Kingdom and US have been leading the charge in implementing sustainable technologies into their marketing approach. The commitment to artificial intelligence (AI) with new analytical solutions based on big data across studies, which can help optimize sustainability-oriented marketing and offer consumers incentives for long-term consumption (van Riel et al., 2021). Advanced tools help businesses to understand more about customer behaviors, likes and trends which ultimately varies their marketing strategies with specific target (Kumar et al., 2021). Artificial intelligence and big data analytics are largely used in G7 countries. These are technologies that help businesses analyze large-scale data making it possible to find patterns and insights which would be very difficult or almost impossible for a human alone (Bublitz et al., 2019). Examples include AI-powered tools that can analyze consumer interactions across digital platforms to uncover trends and forecast future behaviors. This further becomes very advantageous for sustainable entrepreneurship where companies can deep dive into customization of their marketing strategies leading to increase awareness among environment-friendly consumers. Research by Battisti et al. (2022) explore about how AI-driven insights can assist companies in designing incredibly personalized marketing campaigns that promote sustainability. One of these could be segmenting audiences by their environmental values while another part would target those sharing certain behaviors, with the goal to present them personalized messages on how this company is environmentally responsible in its practice and product (Sheth et al., 2022). This way brands can make themselves more attractive for environment-friendly consumers, while also increasing the engagement and loyalty.

Businesses are able to optimize their marketing tact through a combination of different data sources such as social media, web analytics and customer feedback (Yang et al., 2022). Big data analytics allow companies to monitor the effectiveness of their marketing efforts and pivot strategies in real-time based on data points as well as consumer feedback (Mariani & Nambisan, 2021). Data analytics could be used to better understand which channels are optimal for reach customers, when campaigns should launch and what types of content is resonating most with audiences. Such data-driven approach warrants sustainability businesses that they get the most bang for their bucks when it comes to marketing ROI.

In addition to improving marketing strategies, big data analytics and AI also fuel consumer engagement through personalised experiences (Gupta et al., 2020). When it comes to sustainability, personalization is a critical element of strong consumer relationships (Purcărea et al., 2022). Consumers who believe a brand reflects their values are more likely to be loyal while also telling others about the brand. AI-driven personalization tools will tailor the content and offers shown to each individual customer based on their previous behavior (Kishen et al., 2021). If a user regularly consumes eco-friendly related content, they could get tailored suggestions for green products and relevant promotions.

This level of customization not only enhances the consumer journey but also solidifies the brand's dedication to sustainability. A leading UK fashion brand uses artificial intelligence to collect and analyse customer feedback as well as social media trends to develop sustainable clothing lines reflecting demand in consumer market (Pereira et al., 2022). In the U.S., a large retailer uses big data analytics to improve its supply chain and minimize waste, garnering awareness for sustainability efforts via digital campaigns.

China. In the context of sustainable entrepreneurship, digital marketing in China is particularly driven by e-commerce platforms and mobile tech which establish a differentiated way on global basis (Hu et al., 2020; Li, 2022; Tim et al., 2021). Being one of the world's largest and fastest growing digital markets, Chinese are smartly using this huge mobile internet user base to market highly viable products or services through new creative digital marketing strategies (Ahmad & Kumari, 2022). The scale at which mobile internet has been adapted and the vast numbers of e-commerce platforms available to businesses have created an opportunity for companies to really involve consumers in sustainable programs. The combination of E-commerce platform has an indispensable role in the function and strategy for self-sustained entrepreneurship based on digital marketing in China. A number of green products can be found in the Chinese e-commerce platforms, such as organic food, sustainable fashion clothing for all ages and genders category, energy-efficient household appliances and eco-friendly home furnishing (Peng et al., 2022). These platforms usually have specific sections or logos destined to help the customer identify and select sustainable choices easily. Also, many of the e-commerce giants in China are trying to sustainable supply chain (Febransyah & Camelia, 2022). In order to promote sustainable consumption, e-commerce platforms offer discounts and cashback as an incentive on the purchase of eco-friendly association products.

As a result of the high proportion of smartphone consumers in China, this has facilitated mobile technology and applications for sustainable entrepreneurship (Rakshit et al., 2022; Xie et al., 2022). Especially when it comes to reaching and engaging with a broad audience, mobile apps together with social commerce play an even greater role. A growing part of this trend is the many mobile apps targeting sustainable living in China. Users learn about sustainable living, suggest environmentally sound products that also help users reduce their carbon footprint. For example, Alipay has developed an app called Ant Forest that turns sustainability activities into a game, where users win points and rewards for taking part in environmentally friendly behaviours (Chen et al., 2020; Zhang et al., 2021). Social commerce, an unparallel combination of social media and e-commerce has become a significant force on the Chinese digital marketing landscape (Craig et al., 2021). Low barrier-to-entry platforms also make it easier to reach and engage with consumers, promoting sustainable products and building sustainability-themed communities.

Amidst this, a new wave of innovative digital marketing practice that exploits the specificities of mobile technologies and e-commerce platforms for pushing sustainability is currently being pioneered by Chinese businesses. Interactive campaigns using gamification and social sharing is how China does its best Ant Forest by Alipay is an example where users can plant a virtual tree based on their green action, such as taking public transport or reducing the use of plastic (Wang et al., 2022). These virtual trees are then actually turned into real planted trees in local reforest projects all across China. The power of influencers or key opinion leaders (KOLs) has been pivotal in getting the word out about sustainable products in China (Moriuchi, 2021). Using their platforms to promote a more sustainable lifestyle, they educate followers about sustainability and advertise products in keeping with this theme. Their seals of approval will do a lot to put sustainability brands on the map. Brands have been using live stream to showcase and explore about their products in real time.

Kwak et al. (2019) illustrate in their research that Alibaba, one of the largest e-commerce companies based on China embeds sustainability into its digital marketing strategy. The service operates consumer preferences and past purchasing behaviors to recommend sustainable products with AI algorithms. Alibaba also drives as much of its logistics through companies that it propels out to

the global in an attempt to minimize environmental impact (Suominen, 2019). Its initiative "Green Logistics" - the companies' program to deliver goods with electric vehicles where available, reduce fuel consumption on delivery routes and use more recyclable packaging materials. They are then marketed at consumers via digital advertising campaigns that highlight the brand's sustainability efforts. Mobile technologies can also foster more sustainable behaviors, as is seen in the case of Alibaba's Ant Forest initiative on its Alipay app. By gamifying this process, the provision of such knowledge becomes an experience to take part in; it does not just teach users about sustainability-this model engages with them through a systematic commitment to saving our planet.

Chinese companies are also working to educate consumers about sustainability via their digital platforms (Zhao et al., 2019a). Types of content, like articles or videos and infographics travel well through social media networks to mobile apps. Through these educational initiatives, they will spread the word about environmental challenges, sustainable consumer habits and more importantly making an informed choice of what to buy. These promotions typically come around the time of major sales events to ensure their effect is as broad based as possible. Social media channels, where businesses create communities aligned around the issues of sustainability. For instance, consumers have access to communal WeChat eco-friendly living groups where they can swap tips and tricks with others on how to live more environmentally friendly (Zhang, 2021). The communities give us a sense of unity and we are all in this together.

India. Across India, for sustainable entrepreneurship; social media and influencer marketing hold main ground on all digital marketing strategies (Chatterjee et al., 2021). These techniques are necessary to reach the seventeen percent of people in this large, varied country and engage them at the local level for sustainable living (Salvia et al., 2019). The digital space in India is quite dynamic and has a vast reach due to the large number of people using smartphones and internet services, hence social media marketing these days is one of the primary tools for sustainable entrepreneurs. These sites offer a powerful tool to bring those endeavors into contact with prospective buyers and consumers, telling their stories of sustainability and reaching out. Social media has a huge footprint from mountains to villages in India. These platforms have millions of active users that enable sustainable entrepreneurs to get their messages out there in a wide array and scalable demographic groups (Lubberink, 2020). This kind of social media content is interactive. Sustainable businesses across India are leveraging various media and methods from teaching the public about sustainability issues in fun and interesting ways, while showing off their products or offices that incorporate green practices. Social media helps create communities around sustainability issues. Companies can establish groups or pages for enthusiasts to connect and share innovative sustainable practices, reach out with questions about sustainability living challenges they are encountering at home (Sivarajah et al., 2020). A shared purpose magnifies results.

Influencer Marketing

Sustainable entrepreneurship in India is largely driven by influencer marketing. Influencers, or key-opinion-leaders (KOLs) have a large following in these platforms and can effectively spread the word of sustainability. In India, local influencers work very well as they are able to relate much better and that is mainly because of the varied regional languages and cultural nuances present (Mohan & Punathambekar, 2019). They can share messages of sustainability that are relevant and relatable to their followers creating a more powerful narrative around climate activism. A local influencer, for instance, might pass on the message of reducing plastic use or endorse eco-friendly products in a regional language making it more relatable to that community. Influencers often have a lot of trust and credibility from their followers. Their followers are willing to follow their endorsements for more eco-friendly products or actions. In this way, sustainable businesses work with influencers to design specific campaigns that raise awareness about environmental challenges and market responsible products (Kwon and Lee, 2021). These campaigns can range from product reviews, tutorials and giveaways, which not only connects with the audience but also make them participate. For example, an illustrative case study provided by Khare et al. (2022) shared how local influencers were positive towards

enhancing sustainability awareness in India. A sustainable fashion brand undertook the services of a selection of up-and-coming local influencers to promote its range of eco-friendly clothing. Through the influencers, content is generated in their mother tongue which exposes this brand to products of its own and teaching about how sustainable fabric is friendly on nature. Live sessions on the campaign would have influencers talking about sustainable fashion, answering questions from their followers and shilling styling tips with products by the eco-conscious brand.

Indian companies are also relying on out-of-the-box internet marketing techniques besides social media and influencer promotion to boost responsible entrepreneurship agenda. It is a common practice in content marketing to increase awareness of sustainability - not only among suppliers, but also consumers. Through reliable content marketing, businesses become thought leaders in sustainability. Being a country with one of the highest smartphone penetration rates, India based businesses could look at mobile marketing as an option to reach this consumer base (Kumar & Mittal, 2020). The apps to monitor green actions and reward users with sustainable habits have also been a hit. Sustainable brands and products are being introduced into e-commerce platforms in India. The new-age online marketplaces like Flipkart and Amazon India, have a section on the website dedicated to such eco-friendly products making it hassle free for consumers of ecofriendly consumer durables.

There are various challenges associated with promoting sustainable entrepreneurship in India through digital marketing efforts as well. India has a digital divide, even though internet access is increasing rapidly some rural and underserved communities still have limited to no exposure to the older or traditional version of computer systems (Asadullah & Bhattacharjee, 2022). The gap between a broad and majority consumer perception of sustainability must be bridged by sustainable businesses to ensure that the messages about their products reach all segments. Raising consumer awareness on sustainability is still a key issue. The change in behavior is driven by a continuous education and awareness campaign. India is also moving away from a grey market into one that focuses on sustainability. Regulatory changes and compliance with the law will continue to be important for businesses in terms of properly implementing a digital marketing strategy.

Theoretical Frameworks

This study relies on the theoretical bases of sustainability, digital transformation and marketing theory. The frameworks are structured to guide an entrepreneur in understanding how digital marketing could be leverage for his sustainable entrepreneurship goals. The goal of the review is to provide a broad perspective on research today by working across these frameworks.

Principles of Sustainability

Sustainable entrepreneurship is based on the principles of sustainability. Sustainability covers three elements, which are environmental, social and economic. These principles enable businesses in adding value with minimum adverse effect on the environment and society (Bocken & Short, 2021). Environmental Sustainability is the responsible use of natural resources ensuring their availability for future generations (Hajian & Kashani, 2021). These practices include reducing carbon footprints, wasting less and conserving more (water), as well as protecting biodiversity. They are entrepreneurs that consider the role of environmental aspects in relation to their business models and focus on eco balance for sustainability over time. The social sustainability and well-being of us all, both now and into the future. This includes areas like, but by no means limited to, worker welfare, community engagement and social balance. By focusing on social issues as part of global sustainability, businesses are able to make a direct contribution toward societal well-being through inclusive growth and also tackle some critical challenges facing society. The theory seeks to promote "sustainable entrepreneurship", an endeavor that connects profit with its other side of responsibility-thereby creating a holistic approach and method for ensuring long-term business success while increasing resilience.

Digital Transformation

It is the inculcation of digital technologies into all areas for mechanism of company operations. It marks a pivot - the fulcrum of change in business behavior and delivery. Sustainable entrepreneurship further depends on digital transformation, which allows businesses to innovate, streamline functions and improve customer relationships (Bresciani et al., 2021). Digital transformation also relies on technological innovation, comprising of new products or services. Artificial intelligence, big data analytics, blockchain technology and the Internet of Things (IoT) present sustainable entrepreneurs with pathways to forging new solutions that meet pressing environmental or social challenges (Goralski & Tan, 2020). This digital transformation process also helps businesses to execute their operations more promptly and efficiently. Efficiencies and cost removal are delivered by automation, data analytics and digital platforms making the solution more efficient in terms of decision therapeutics (Criado & Gil-Garcia, 2019). Over the long term, these efficiencies can help to reduce resource consumption and environmental impact for sustainable businesses. Digitalisation therefore is making it easier for sustainable entrepreneurs to communicate their sustainability initiatives, educate consumers and foster a loyal customer base.

Marketing Theory

It is an aggregated set of ideas, strategies that are used to navigate businesses in promoting their products and services (Quach et al., 2020). In the context of sustainable entrepreneurship, marketing theory is paramount in developing messages that correspond to consumer values and behavior change with respect to sustainability. To really succeed, sustainable entrepreneurs must understand why people act the way they do and what it means to be a "sustainably minded" person. Environment awareness, social influence and personal values have a major role to play when it comes of consumer behavior (Trudel, 2019). The value proposition identifies what is different and valuable about your business's offerings to customers. Sustainable businesses usually have a triple bottom line: they are set up to meet not only economic goals, but also social and environmental ones (Khan et al., 2021). Effectively communicating this value proposition is essential for acquiring and retaining customers who care about sustainability. This concept of sustainable marketing mix today is increasingly supported by digital or online strategies for a better positioning and spread the word about it. Market segmentation is the identification of portions (or segments) of a market that are different from one another. This is defining the process, where we pick out specific segments to direct marketing towards. Segmentation and targeting help sustainable entrepreneurs to reach the most probably interested consumers in terms of sustainability (Jaiswal et al., 2021). Automated or semi-automated digital marketing tools allow for very sharp targeting making the impact of a sustainability campaign more effective through personalization.

The paper then proposes a comprehensive framework to understand how digital marketing can support sustainable entrepreneurship by integrating sustainability, theory of marketing and some elements related with switch to the field within the traditional discipline. Incorporating digital marketing tactics with sustainability plans and actions to dictate business behavior by these environmental, societal and financial standards. This convergence builds a unified brand image and confidence among customers. Digital transformation encourages innovation, leading to sustainable entrepreneurs developing new solutions and adapting themselves with dynamic market trends (Khurana et al., 2022). Combining digital technology with defensive approaches to sustainability helps tackle deeper problems and generate value from doing so. Marketing theory supports sustainable entrepreneurs in communicating specific value to consumers. Digital marketing to help educate consumer behavior and create a sustainable lifestyle loyal customer base for companies.

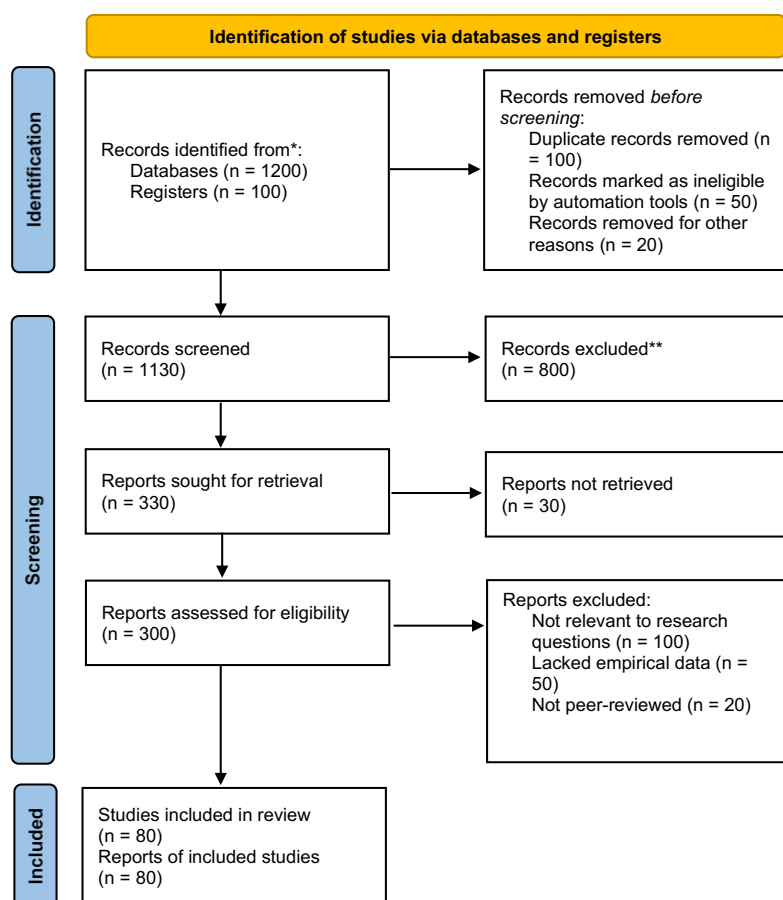
Materials and Methods

Data Collection

The use of PRISMA for identifying, screening and including studies provide a methodological framework to improve the consistency and reliability of literature review. Major academic databases such as Scopus, Web of Science and Google Scholar were searched extensively. A literature review was conducted using search words in the following areas: sustainable entrepreneurship, digital marketing, environmental sustainability, social sustainability and economic. Search results were refined using Boolean operators (AND, OR). When first searching for the desired records, it turned out that there was a big number of them in all bases. These files were exported for further processing in reference management software. We identified any duplicate records and deleted them using the reference management software to ascertain uniqueness of each one. All other articles were reviewed by title/abstract. This phase led to the exclusion of studies that were out-of-scope or irrelevant. Full texts of selected studies were obtained and assessed for eligibility. This study was included as part of the main analysis based on pre-defined inclusion criteria. As for inclusion criteria, we examined a paper based on the relevance to sustainable entrepreneurship and digital marketing, research rigor and how the study related G7 countries, China and India. Articles published in poor-quality journals, if they have no empirical contribution (that is theoretical and not even proposed as an opinion paper) nor refer to sustainable entrepreneurship or digital marketing. The final analysis included studies if they met all inclusion criteria. The PRISMA flow diagram documents how studies were identified, screened and ultimately included in the review.

Figure 1

PRISMA Flow Chart



Source: Authors' development.

Sample and Participants

This study includes a sample of 80 publications from different academic journals and conference proceeding. They were chosen because they are related to the themes of our research and refer specifically among others, to the largest economies or groups in national economy such as G7 countries, China and India. The selection criteria ensures that both the diversity and coverage of literature on sustainable entrepreneurship and digital marketing were represented.

Instruments and Procedures

Multiple data sources were used to obtain comprehensive insights from the selected publications and experts in each field. We gathered publication metadata such as citation counts, year of publications, authorships and journal impact factors from the identified publications. This data helped quantify the trends and direction of research within sustainable entrepreneurship, and digital marketing. To underpin academic understanding, a literature review analysis was conducted on pertinent policies, reports and case studies. Specifically, I read through government reports and industry white papers as well case studies from businesses that were seeing long-term success in sustainable digital marketing efforts. We conducted a structured analysis of the documents. This framework aimed to identify the best practices, challenges and impact of digital marketing towards sustainable entrepreneurship. We used mixed-method analyses to allow for a comprehensive exploration of the findings, both in quantitative and qualitative forms. Statistical software was employed to analyze data, and trends, patterns and relationships in the literature were identified. Drawing on key metrics, such as publication frequency and citation counts (including co-authorship networks) offered insights into the evolution of research in this area.

Results

The study's findings show some important patterns and trends in the research that talks about how digital marketing and sustainable entrepreneurship can work together. This part gives an in-depth summary of the results, with tables and graphs to show the main trends, country-specific strategies, and how new technologies are being used. There is also a PRISMA flow diagram that shows how the systematic review process works. After looking at 80 scientific papers, we found some important trends in the literature. A lot of studies show that digital marketing is becoming more and more important for encouraging long-term business. Significant number of people use digital marketing tools like social media, search engine optimization (SEO), and content marketing to make sustainable business practices more visible and have a bigger effect. Digital marketing strategies used in different countries are very different from one another. These differences are caused by things like the infrastructure of technology, cultural attitudes, and the rules and regulations in place. Artificial intelligence (AI) and big data analytics are two examples of advanced technologies that are being used more and more in digital marketing for sustainability. Businesses can improve their marketing strategies and connect with customers better with these technologies.

Table 1

Summary of Key Trends by Country

Country	Key Trends
G7 Countries	Use of AI and big data analytics
China	Focus on e-commerce and mobile technologies
India	Emphasis on social media and influencer marketing

Source: Author's development.

In Table 1, we can see that main digital marketing strategies that different countries use to encourage people to start their own businesses. China focusses on e-commerce and mobile technologies,

while India puts a lot of effort into social media and influencer marketing. The G7 countries use advanced technologies like AI and big data analytics.

Table 2

Adoption of Digital Marketing Tools in Sustainable Entrepreneurship

Digital Marketing Tool	Frequency (%)	Impact Level
Social Media	85	High
Search Engine Optimization	70	Medium
Content Marketing	65	Medium
Email Marketing	45	Low
Influencer Marketing	60	High
AI and Big Data Analytics	50	High
Mobile Marketing	55	Medium

Source: Author’s development.

Table 2 shows how often and how much different digital marketing tools help promote sustainable business. After SEO, content marketing, AI, and big data analytics, social media and influencer marketing are the most common and important ones.

Table 3

Country-Specific Adoption of Emerging Technologies

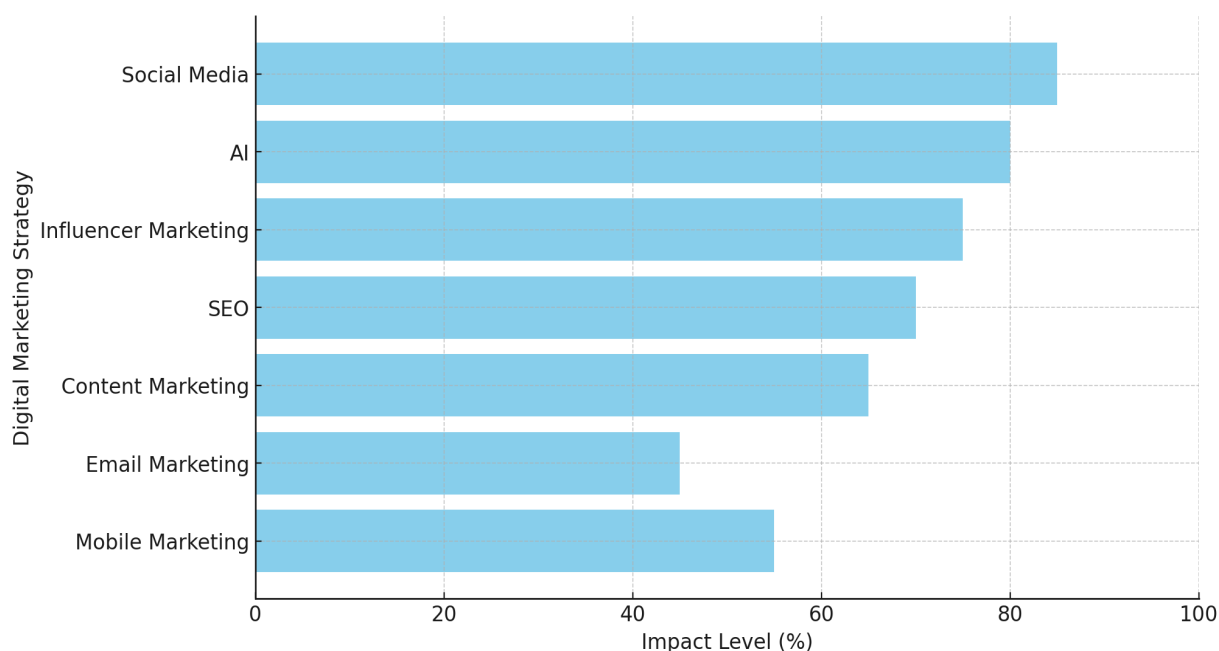
Country	AI Adoption (%)	Big Data Analytics Adoption (%)
USA	65	60
Germany	55	50
China	70	65
India	45	40
Japan	60	55
UK	50	45
France	48	42

Note. Source: Author’s development.

Table 3 shows how fast AI and big data analytics are being used in various countries. China and the US are the most advanced users of these technologies, followed by Japan and Germany. This shows that these countries are more likely to use advanced digital tools in their long-term marketing plans.

Figure 2

Impact of Digital Marketing Strategies on Sustainable Entrepreneurship



Source: Authors' development.

Figure 2 shows how different digital marketing strategies can help businesses stay in business. The graph shows that social media, AI, and influencer marketing have the most significant effects on making sustainable business practices more visible and effective. The word cloud (Figure 3) shows the terms that were used most often in the publications. It shows how important key ideas are for digital marketing and sustainable entrepreneurship.

Figure 3

Word Cloud of Key Terms



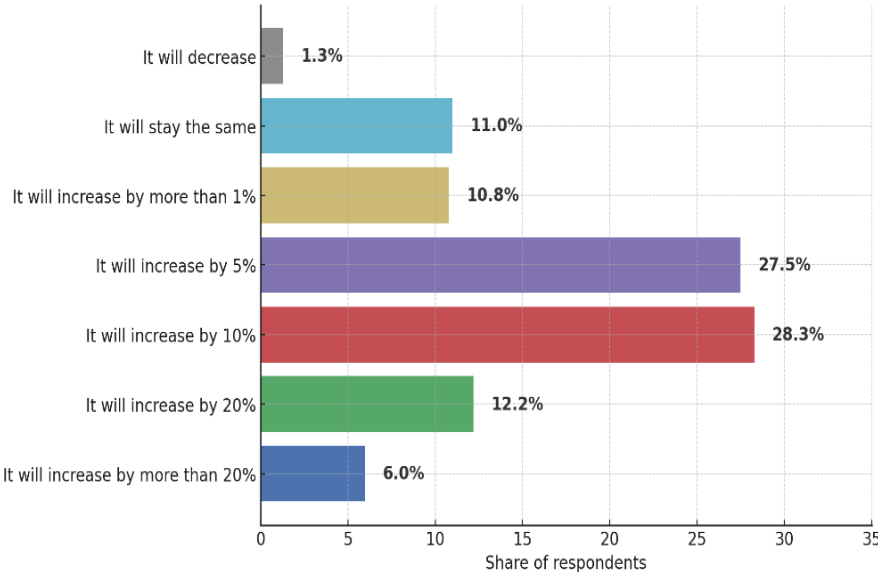
Source: Authors' development.

The word cloud draws attention to words like "sustainability," "digital marketing," "social media," "AI," "big data," and "influencer marketing," which shows how important these ideas are in the

literature. Digital marketing strategies that are used in sustainable business are seen by many as an important way to encourage eco-friendly business practices.

Figure 4

Share of Companies Planning Changes in Spending on Sustainable Marketing in the Next Years in Europe as of July 2022

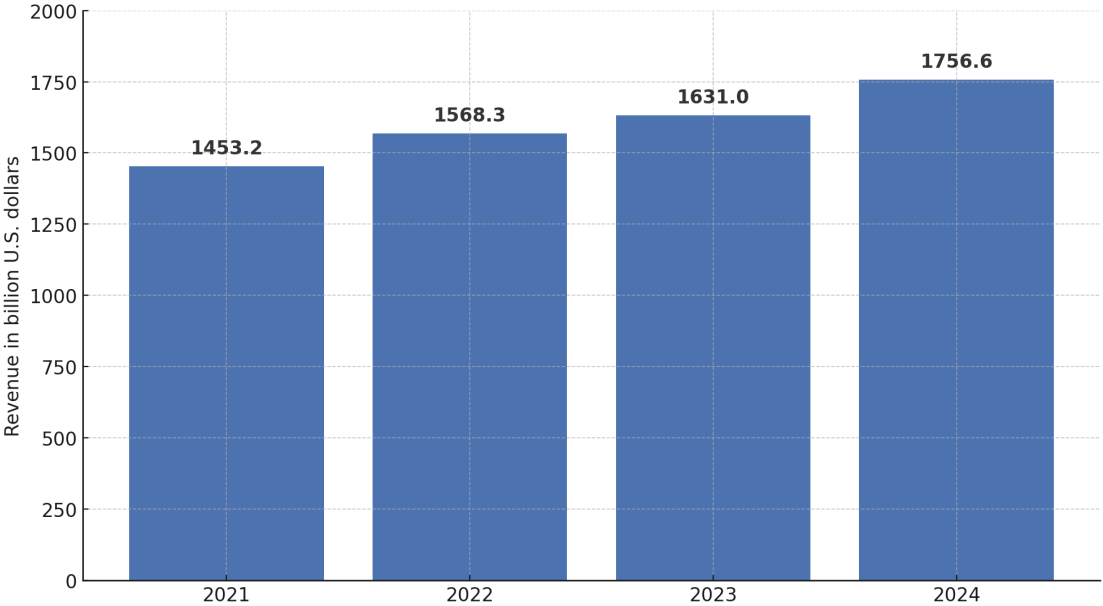


Source: Statista (2022).

Figure 4 shows how much companies in Europe plan to spend on sustainable marketing and how that will change in July 2022. Notably, a large majority of respondents (28.3%) said they thought spending would go up by 10%, followed by 27.5% who thought spending would go up by 5%. This shows that more money is being put into environmentally friendly marketing methods, which shows that businesses are becoming more aware of how important they are. On the other hand, only 1.3% expect a decrease, which shows that most people agree on how important are the sustainability initiatives. This information shows that digital marketing progress has led to a shift towards incorporating sustainability into core business strategies. The focus on putting more money into investments shows that businesses are using digital marketing tools to improve their efforts at sustainable entrepreneurship. This is in line with larger trends found in bibliometric analyses. This change not only meets the growing demand for environmentally friendly products from customers, but it also sets businesses up for long-term gains in a market that is changing quickly.

Figure 5

Advertising and Marketing Spending Worldwide from 2021 to 2024 (in Billion US Dollars)

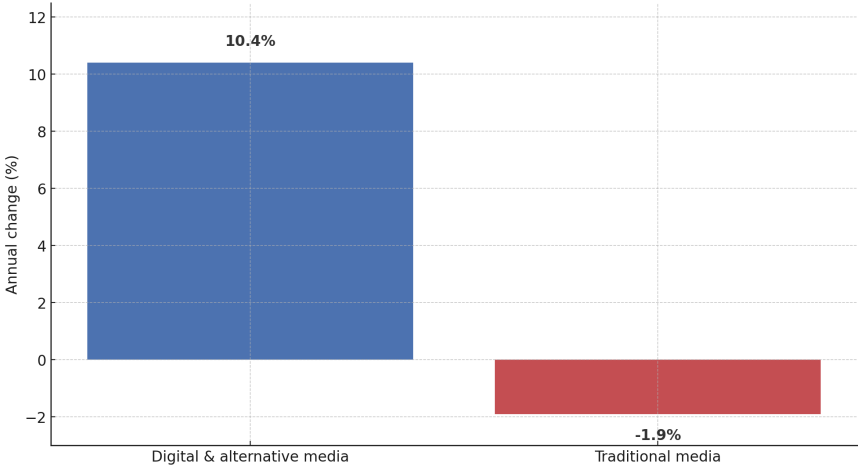


Source: Statista (2021).

Figure 5 shows how much money will be spent on marketing and advertising around the world from 2021 to 2024, in billions of dollars. Costs have been going up over the years, as shown by the data. The amount spent went up from \$1,453.2 billion in 2021 to \$1,568.3 billion in 2022. As things keep going up, spending will reach \$1,631 billion in 2023 and is expected to go up even more to \$1,756.6 billion in 2024. This rise in spending shows how digital marketing strategies are becoming more important and how advertising plays a big part in helping businesses grow. It's likely that businesses are spending more to use new marketing technologies and platforms to reach more people and get customers more involved. This trend fits in with the larger move in business towards going digital. In this world, marketing and advertising are very important for staying competitive and growing the market.

Figure 6

Annual Change in Traditional and Digital Advertising and Marketing Spending Worldwide



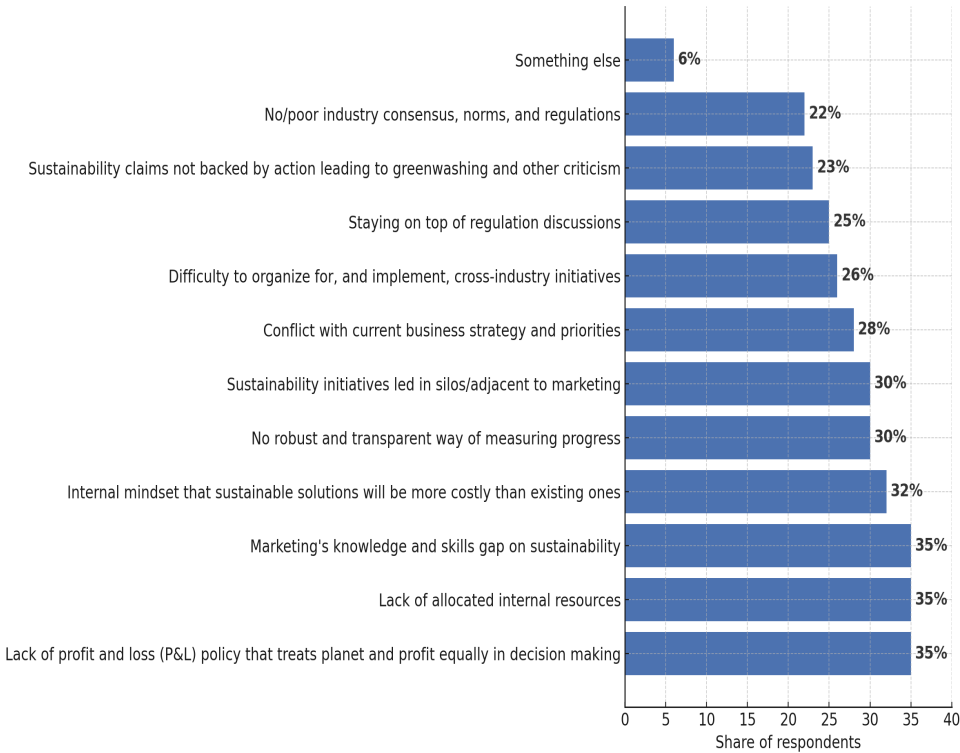
Source: Statista (2022).

The Figure 6 shows how advertising and marketing spending will change each year around the world in 2023, breaking down traditional media, digital and alternative media, and more. Spending on digital and alternative media has gone up by a big 10.4%, which shows that people are still moving

towards digital platforms. This trend is happening because having an online presence and interacting with people online are becoming more and more important in modern marketing plans. On the other hand, spending on traditional media like print, radio, and TV has gone down by 1.9%, which shows that people are moving away from these traditional advertising channels. This drop in spending suggests that businesses are shifting their marketing funds to digital channels in order to better reach and interact with their intended audiences.

Figure 7

Leading Challenges Preventing Transition Towards Sustainability According to marketers Worldwide



Note. Source: Statista (2022)

Figure 7 shows the main problems that are stopping the move towards sustainability. Three problems that were mentioned by 35% of those who answered are not having a profit and loss (P&L) policy that makes decisions with the environment and profit in mind, not having enough internal resources, and marketing professionals who don't know enough about sustainability. These problems bring to light the problems that organizations face that make it hard for them to adopt sustainable practices. People's belief that long-term solutions will cost more than current ones (32% of respondents) and the lack of reliable and clear ways to track progress (30%) are two other major problems. These show common misunderstandings and the lack of good ways to measure efforts to be more environmentally friendly. Sustainability efforts are often led in separate areas, they don't always fit with current business strategies, and it can be hard to organise projects that involve more than one industry. These are all big problems that show we need unified and cohesive approaches to sustainability (30%, 28%, and 26% respectively). Other problems include keeping up with regulatory discussions (25%), dealing with sustainability claims that aren't backed up by action to stop "greenwashing" (23%), and the lack of industry standards, rules, and consensus (22%). A small percentage of respondents (6%) named other challenges that were not specified.

According to 85% of studies social media platforms have high impact. These platforms open the door for businesses to interact directly with consumers, communicate about their sustainability programs and create a community around what they believe. The approaches to this are so divergent with regard to different nations. These technologies are used in the G7 countries, for example AI and big

data analytics have become mainstream to help corporations to optimize their marketing activities targeting environmentally concerned consumers. More than 60% of businesses using artificial intelligence (AI)/ big data analytics are in use across business tactics that include marketing or advertising which ranks top among various industries alongside Germany having more percentage. In China, companies are raised on online marketplaces and mobile technologies to promote sustainable products. To play a role in encouraging people to practice consumer consciousness, we need bold efforts at digital marketing which is aesthetically presented. In fact, 70% of businesses in China are using AI and 65% have implemented big data analytics. Hence for India, reaching out to the mass depends on the promotion through social media and influencer marketing. Influential local voices drive sustainability messages and consumer action. This strategy is used by about 60% of businesses in India, meaning we can see the returns are a bit on higher side. Artificial intelligence and big data analytics are the modern technologies reshaping how entrepreneurs use digital marketing to stay ahead. These technologies allow businesses to analyse the behaviour of consumers, improve marketing campaigns and customize interactions with customers.

Results of this study have shown the importance and critical role digital marketing play in leading to sustainable entrepreneurship. Digital marketing tools and tailor-made country specific strategies, paired with upcoming technologies such as AI, big data analytics increases the scope and impact of sustainable business actions. These results offer useful knowledge for researchers, policy-makers and marketing practitioners who aim to use digital advertising effectively towards sustainability goals. This finding provides abundant opportunities for future research to investigate these trends and come up with imaginative solutions that would further blend digital marketing and sustainability.

Discussion

These findings are consistent with a previous literature that has highlighted digital marketing as an essential tool in driving sustainable entrepreneurship. The implementation of digital marketing techniques combined with AI and big data analytics also play an important role in increasing the effectiveness and reach of sustainable business initiatives (Zhang et al. 2020). In order to disentangle the net effect as well as reinforce existing literature, this work will end with a deep insight into its principal outcomes and point out practical implications for sustainable entrepreneurship from an international perspective. More areas where this is happening are in integrating sustainability into digital marketing efforts to propel greener business practices. The results show that companies have adopted social media, search engine optimization (SEO), and content marketing to communicate sustainability initiatives as well-realized strategies for engaging directly with consumers building a strong brand.

Social Media Platforms which are key tools for Ecopreneurs facilitate a two-way communication with consumers, driving engagement and building an entire ecosystem based on shared values around sustainability. Social media is the highest used digital marketing tool in this study, having 85% of studies that referred to its significant impact. This aligns with Nekmahmud et al. (2022), suggesting the potential of social media in spreading awareness and modifying consumer behavior toward sustainability. SEO helps increase the visibility of sustainable enterprises on the Internet, as a result making it easier for consumers to find information about products and services. Ahmad et al. (2022) agrees, identifying SEO as a vital method of driving organic traffic and enhancing brand reach. It entails producing content of quality that can be related to by the target audience, all with a goal toward establishing trust and authority. Kapoor et al. (2021) further emphasize that content marketing is crucial in persuading the sustainability narrative.

The study noted practical distinctions in digital marketing execution based on regional views and regulatory environments as well. In G7 countries, AI and big data analytics are widely used. They help business analyze customer data and predict campaigns. Zhao et al. (2019b) discussed how AI-driven insights aids businesses in tailoring their marketing efforts to better reach environmentally aware

shoppers. According to this study, more than 60% of U.S. and German companies can now use AI and big data solutions in their marketing strategies. Leveraging e-commerce platforms and mobile technologies, China places a strong emphasis on sustainable purchases. This has offered a fertile ground for innovative digital marketing efforts aimed at raising awareness among mobile internet users to enable them lead more sustainable lives. Zhang and Erturk (2022) present the ways in which businesses from China apply mobile apps combined with social commerce to make their products reach a broader clientele while intensifying consumer engagement. The statistic was even higher within Chinese enterprises, with 70% of them employing some level of AI and over half (65%) working with big data analytics - the most direct feature reflecting technology input. For India, the unique challenge was to seed the idea among such a broad and diverse audience; suffice it say that social media is an essential for this market as well.

The emerging technologies of AI and big data analytics have been found to revolutionize the use of digital marketing strategies among sustainable entrepreneurs. Besides enabling the businesses to analyze consumer behaviors, the big data analytics and AI also allows the businesses to come up with viable marketing strategies that are more personalized and targeted. The technological approach enables sustainable entrepreneurs to analyze expansive interrelations and develop data-destructive insights that enhance decision-making. Bag et al. (2021) in their research also found out that AI and big data was the perfect way to enhance the efficiency of marketing. The findings of this study have several practical meanings towards sustainable entrepreneurs across the globe. Through the integration of digital marketing strategies and the use of advanced technologies, sustainable entrepreneurs can streamline their sustainability and brand strategy. Despite the similarities in the techniques, the regional differences observed emphasize the need for the entrepreneurs to consider the culture and marketing trends in the countries of focus. Effective sustainable entrepreneurs need to develop their strategies that fit the culture and consumers of the country of focus. The findings of this study can be supported by the previous study by Dumitriu et al. (2019) who found that the digital tools are the perfect ways of ensuring sustainable in business development. Countries in the G7 countries are also utilizing AI and bigger in optimizing their marketing strategies.

Conclusions and Implications

The common theme across these global pictures is the pivotal role of digital marketing in scaling sustainable entrepreneurship. Key insights from the analysis indicate, advanced digital technologies, and creative marketing are all necessary for obtaining sustainable goals. Using social media, search engine optimization (SEO), content marketing and technology like artificial intelligence (AI) or Big Data Analytics can help companies improve their visibility, attract customers and grow a sustainable functioning business. Results suggest that combining digital marketing strategies with environmentalism can be an effective approach to promoting green business practices. In many instances, this has been particularly powerful through the lens of social media and influencer marketing-providing businesses with ways to establish communities that can directly engage consumers. Content marketing and SEO also serve an important purpose in both easing this perception by improving visibility - reaching consumers when they are not physically present to see a product's sustainability claims, or read recycle information on packaging.

This research indicates a tremendous disparity in where companies put their digital marketing budget using simple values. The G7 countries are major users of AI and big data analytics, enabling them to adopt an advanced marketing strategy aimed at appealing to environmentally aware customers. China is rapidly digitally growing country, focus on E-commerce platforms as well mobile technologies which are playing a significant role in the numerous advertising and promotional activities in India whereas country likes of India with diverse population more emphasis given to social media & influencer marketing. These country-specific strategies illustrate the necessity to adapt digital marketing operations based on regional markets and local cultural preferences. Sustainable entrepreneurship and digital marketing strategies are rising exponentially through uses of artificial

intelligence, big data analytics. These same technologies widely used by businesses for things like consumer behavior analysis, campaign optimization and personalized engagement leading to larger conversations have now been applied in influencer marketing. These technologies have enjoyed high adoption rates in countries such as China and the USA, emphasizing their importance within contemporary digital marketing strategies. For researchers, policy makers and practitioners alike the practical implications of these findings are profound. Firms should not necessarily reinvent their strategies, but rather combine best-practice digital marketing with sustainability objectives. Government policies should encourage the uptake of new technologies and facilitate knowledge sharing across geographies. In turn, researchers could probe deeper the interrelationship between digital marketing and sustainability for new ways forward to promote more positive social and environmental conditions.

Suggestions for Future Research

The Influence of Digital Marketing on Sustainable Entrepreneurship; Future researchers are suggested to examine how digital marketing strategies can be applied in sustainable entrepreneurship and the long-term effects that these may have. Future longitudinal studies are needed to assess the efficacy and durability of these strategies longitudinally. There may also be comparative studies across jurisdictions to add more insights and supported conclusions based on the findings of this study. Through research into how digital marketing is being used in any part of a nation for sustainability, so that it would help the researcher to find out what countries are doing better and to what extent. More research should be done on how emerging technologies such as AI, Big Data Analytics and Blockchain are going to play a critical role in sustainable entrepreneurship for digital marketing. Studying the way in which these technologies may optimize transparency, accountability and efficacy within sustainability will help gain unprecedented understanding. Accessible to international scholars and practitioners, this new understanding of digital marketing for sustainability is rooted in a collaborative paradigm. Joint research efforts may help the strategies change according to international best practices and consider local conditions as well. Research in the future should investigate on other aspects of consumer behavior regarding sustainable products and digital marketing. Investigate how brands going sustainable attracts consumers, digital marketing and influencing their buying behaviour. This information can help ensure that businesses are better able to do good and achieve their sustainability goals by driving change, as digital marketing strategies for sustainable entrepreneurship continue to evolve.

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Conflict of Interest

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References

- Ahmed, N., & Kumari, A. (2022). The implication of e-commerce emerging markets in post-COVID era. *International Journal of Entrepreneurship and Business Management*, 1(1), 21–31. <https://doi.org/10.54099/ijebm.v1i1.102>
- Ahmad, U. F., Mahdee, J., & Bakar, N. A. (2022). Search engine optimisation (SEO) strategy as determinants to enhance the online brand positioning. *F1000Research*, 11, Article 714. <https://doi.org/10.12688/f1000research.73382.2>

- Asadullah, M. N., & Bhattacharjee, A. (2022). Digital divide or digital provide? Technology, time use, and learning loss during COVID-19. *The Journal of Development Studies*, 58(10), 1934–1957. <https://doi.org/10.1080/00220388.2022.2094253>
- Bag, S., Gupta, S., Kumar, A., & Sivarajah, U. (2021). An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision making for improving firm performance. *Industrial Marketing Management*, 92, 178–189. <https://doi.org/10.1016/j.indmarman.2020.12.001>
- Basri, W. S. M., & Siam, M. R. (2019). Social media and corporate communication antecedents of SME sustainability performance: A conceptual framework for SMEs of Arab world. *Journal of Economic and Administrative Sciences*, 35(3), 172–182. <https://doi.org/10.1108/JEAS-01-2018-0011>
- Battisti, S., Agarwal, N., & Brem, A. (2022). Creating new tech entrepreneurs with digital platforms: Meta-organizations for shared value in data-driven retail ecosystems. *Technological Forecasting and Social Change*, 175, Article 121392. <https://doi.org/10.1016/j.techfore.2021.121392>
- Bocken, N. M., & Short, S. W. (2021). Unsustainable business models—Recognising and resolving institutionalised social and environmental harm. *Journal of Cleaner Production*, 312, Article 127828. <https://doi.org/10.1016/j.jclepro.2021.127828>
- Bresciani, S., Huarng, K. H., Malhotra, A., & Ferraris, A. (2021). Digital transformation as a springboard for product, process and business model innovation. *Journal of Business Research*, 128, 204–210. <https://doi.org/10.1016/j.jbusres.2021.02.003>
- Publitz, F. M., Oetomo, A., Sahu, K. S., Kuang, A., Fadrique, L. X., Velmovitsky, P. E. ... Morita, P. P. (2019). Disruptive technologies for environment and health research: An overview of artificial intelligence, blockchain, and internet of things. *International Journal of Environmental Research and Public Health*, 16(20), Article 3847. <https://doi.org/10.3390/ijerph16203847>
- Calderon-Monge, E., Pastor-Sanz, I., & Garcia, F. J. S. (2020). Analysis of sustainable consumer behavior as a business opportunity. *Journal of Business Research*, 120, 74–81. <https://doi.org/10.1016/j.jbusres.2020.07.039>
- Chatterjee, S., Chaudhuri, R., Sakka, G., Grandhi, B., Galati, A., Siachou, E., & Vrontis, D. (2021). Adoption of social media marketing for sustainable business growth of SMEs in emerging economies: The moderating role of leadership support. *Sustainability*, 13(21), Article 12134. <https://www.mdpi.com/2071-1050/13/21/12134>
- Chen, B., Feng, Y., Sun, J., & Yan, J. (2020). Motivation analysis of online green users: Evidence from Chinese “Ant Forest”. *Frontiers in Psychology*, 11, Article 1335. <https://doi.org/10.3389/fpsyg.2020.01335>
- Craig, D., Lin, J., & Cunningham, S. (2021). *Wanghong as social media entertainment in China*. Cham: Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-65376-7>
- Criado, J. I., & Gil-Garcia, J. R. (2019). Creating public value through smart technologies and strategies: From digital services to artificial intelligence and beyond. *International Journal of Public Sector Management*, 32(5), 438–450. <https://doi.org/10.1108/IJPSM-07-2019-0178>
- Del Vecchio, P., Secundo, G., Mele, G., & Passiante, G. (2021). Sustainable entrepreneurship education for circular economy: Emerging perspectives in Europe. *International Journal of Entrepreneurial Behavior & Research*, 27(8), 2096–2124. <https://doi.org/10.1108/IJEER-03-2021-0210>
- Dhote, T., & Kumar, V. (2019). Long-duration storytelling: Study of factors influencing retention ability of brands. *Journal of Creative Communications*, 14(1), 31–53. <https://doi.org/10.1177/0973258618822871>

- Di Tullio, P., La Torre, M., & Rea, M. A. (2021). Social media for engaging and educating: From universities' sustainability reporting to dialogic communication. *Administrative Sciences*, 11(4), Article 151. <https://doi.org/10.3390/admsci11040151>
- Dumitriu, D., Militaru, G., Deselnicu, D. C., Niculescu, A., & Popescu, M. A. M. (2019). A perspective over modern SMEs: Managing brand equity, growth and sustainability through digital marketing tools and techniques. *Sustainability*, 11(7), Article 2111. <https://doi.org/10.3390/su11072111>
- Febransyah, A., & Camelia Goni, J. I. (2022). Measuring the supply chain competitiveness of e-commerce industry in Indonesia. *Competitiveness Review: An International Business Journal*, 32(2), 250–275. <https://doi.org/10.3390/su15010050>
- Fischer, D., Reineremann, J. L., Mandujano, G. G., DesRoches, C. T., Diddi, S., & Vergragt, P. J. (2021). Sustainable consumption communication: A review of an emerging field of research. *Journal of Cleaner Production*, 300, Article 126880. <https://doi.org/10.1016/j.jclepro.2021.126880>
- Goralski, M. A., & Tan, T. K. (2020). Artificial intelligence and sustainable development. *The International Journal of Management Education*, 18(1), Article 100330. <https://doi.org/10.1016/j.ijme.2019.100330>
- Gregori, P., & Holzmann, P. (2020). Digital sustainable entrepreneurship: A business model perspective on embedding digital technologies for social and environmental value creation. *Journal of Cleaner Production*, 272, Article 122817. <https://doi.org/10.1016/j.jclepro.2020.122817>
- Gupta, S., Leszkiewicz, A., Kumar, V., Bijmolt, T., & Potapov, D. (2020). Digital analytics: Modeling for insights and new methods. *Journal of Interactive Marketing*, 51(1), 26–43. <https://doi.org/10.1016/j.intmar.2020.04.003>
- Hajian, M., & Kashani, S. J. (2021). Evolution of the concept of sustainability. From Brundtland report to sustainable development goals. In C. M. Hussain & J. F. Velasco-Muñoz (Eds.), *Sustainable Resource Management* (pp. 1–24). Elsevier. <https://doi.org/10.1016/B978-0-12-824342-8.00018-3>
- He, A. Z., Cai, Y., Cai, L., & Zhang, Y. (2021). Conversation, storytelling, or consumer interaction and participation? The impact of brand-owned social media content marketing on consumers' brand perceptions and attitudes. *Journal of Research in Interactive Marketing*, 15(3), 419–440. <https://doi.org/10.1108/JRIM-08-2019-0128>
- Hojnik, J., Ruzzier, M., & Konečnik Ruzzier, M. (2019). Transition towards sustainability: Adoption of eco-products among consumers. *Sustainability*, 11(16), Article 4308. <https://doi.org/10.3390/su11164308>
- Hu, J., Ouyang, T., Wei, W. X., & Cai, J. (2020). How do manufacturing enterprises construct e-commerce platforms for sustainable development? A case study of resource orchestration. *Sustainability*, 12(16), Article 6640. <https://doi.org/10.3390/su12166640>
- Jaiswal, D., Kaushal, V., Singh, P. K., & Biswas, A. (2021). Green market segmentation and consumer profiling: A cluster approach to an emerging consumer market. *Benchmarking: An International Journal*, 28(3), 792–812. <https://doi.org/10.1108/BIJ-05-2020-0247>
- Jayarathne, M., Sullivan Mort, G., & D'Souza, C. (2019). Sustainability entrepreneurship: From consumer concern towards entrepreneurial commitment. *Sustainability*, 11(24), Article 7076. <https://doi.org/10.3390/su11247076>
- Kapoor, P. S., Balaji, M. S., & Jiang, Y. (2021). Effectiveness of sustainability communication on social media: Role of message appeal and message source. *International Journal of Contemporary Hospitality Management*, 33(3), 949–972. <https://doi.org/10.1108/IJCHM-09-2020-0974>

- Kemp, E., Porter III, M., Anaza, N. A., & Min, D. J. (2021). The impact of storytelling in creating firm and customer connections in online environments. *Journal of Research in Interactive Marketing*, 15(1), 104–124. <https://doi.org/10.1108/JRIM-06-2020-0136>
- Khan, A. A., Wang, M. Z., Ehsan, S., Nurunnabi, M., & Hashmi, M. H. (2019). Linking sustainability-oriented marketing to social media and web atmospheric cues. *Sustainability*, 11(9), Article 2663. <https://doi.org/10.3390/su11092663>
- Khan, I. S., Ahmad, M. O., & Majava, J. (2021). Industry 4.0 and sustainable development: A systematic mapping of triple bottom line, Circular Economy and Sustainable Business Models perspectives. *Journal of Cleaner Production*, 297, Article 126655. <https://doi.org/10.1016/j.jclepro.2021.126655>
- Khare, A., Sadachar, A., & Chakraborty, S. (2022). Influence of celebrities and online communities on Indian consumers' green clothing involvement and purchase behavior. *Journal of Fashion Marketing and Management: An International Journal*, 26(4), 676–699. <https://doi.org/10.1108/JFMM-02-2021-0033>
- Khurana, I., Dutta, D. K., & Ghura, A. S. (2022). SMEs and digital transformation during a crisis: The emergence of resilience as a second-order dynamic capability in an entrepreneurial ecosystem. *Journal of Business Research*, 150, 623–641. <https://doi.org/10.1016/j.jbusres.2022.06.048>
- Kishen, R., Upadhyay, S., Jaimon, F., Suresh, S., Kozlova, N., Bozhuk, S. ... Matchinov, V. A. (2021). Prospects for artificial intelligence implementation to design personalized customer engagement strategies. *Journal of Legal, Ethical and Regulatory Issues*, 24(6), 1–18. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/jnlolletl2424&div=165&id=&page=>
- Kong, H. M., Witmaier, A., & Ko, E. (2021). Sustainability and social media communication: How consumers respond to marketing efforts of luxury and non-luxury fashion brands. *Journal of Business Research*, 131, 640–651. <https://doi.org/10.1016/j.jbusres.2020.08.021>
- Kumar, V., & Mittal, S. (2020). Mobile marketing campaigns: practices, challenges and opportunities. *International Journal of Business Innovation and Research*, 21(4), 523–539. <https://doi.org/10.1504/IJBIR.2020.105996>
- Kumar, V., Ramachandran, D., & Kumar, B. (2021). Influence of new-age technologies on marketing: A research agenda. *Journal of Business Research*, 125, 864–877. <https://doi.org/10.1016/j.jbusres.2020.01.007>
- Kwak, J., Zhang, Y., & Yu, J. (2019). Legitimacy building and e-commerce platform development in China: The experience of Alibaba. *Technological Forecasting and Social Change*, 139, 115–124. <https://doi.org/10.1016/j.techfore.2018.06.038>
- Kwon, K., & Lee, J. (2021). Corporate social responsibility advertising in social media: A content analysis of the fashion industry's CSR advertising on Instagram. *Corporate Communications: An International Journal*, 26(4), 700–715. <https://doi.org/10.1108/CCIJ-01-2021-0016>
- Li, X. (2022). Research on the development level of rural e-commerce in China based on analytic hierarchy and systematic clustering method. *Sustainability*, 14(14), Article 8816. <https://doi.org/10.3390/su14148816>
- Lubberink, R. (2020). Social entrepreneurship and sustainable development. In W. Leal Filho, A. M. Azul, L. Brandli, A. Lange Salvia, & T. Wall (Eds.), *Decent Work and Economic Growth* (pp. 913–923). Cham: Springer. https://doi.org/10.1007/978-3-319-95867-5_47

- Mariani, M. M., & Nambisan, S. (2021). Innovation analytics and digital innovation experimentation: The rise of research-driven online review platforms. *Technological Forecasting and Social Change*, 172, Article 121009. <https://doi.org/10.1016/j.techfore.2021.121009>
- Mohan, S., & Punathambekar, A. (2019). Localizing YouTube: Language, cultural regions, and digital platforms. *International Journal of Cultural Studies*, 22(3), 317–333. <https://doi.org/10.1177/1367877918794681>
- Moriuchi, E. (2021). Influencer marketing. In *Cross-cultural social media marketing: Bridging across cultural differences* (pp. 45–53). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83867-175-420211005>
- Nabivi, E. (2020). Implementation of green marketing concept through social media activities: A systematic literature review. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 11(2), 55–67. <https://www.ceeol.com/search/article-detail?id=975077>
- Nekmahmud, M., Naz, F., Ramkissoon, H., & Fekete-Farkas, M. (2022). Transforming consumers' intention to purchase green products: Role of social media. *Technological Forecasting and Social Change*, 185, Article 122067. <https://doi.org/10.1016/j.techfore.2022.122067>
- Park, H., Kim, Y., & Popelish, B. (2021a). Corporate social responsibility and stakeholder engagement: A content analysis of PRSA silver anvil award-winning CSR campaigns. *Journal of Sustainability Research*, 3(3). <https://doi.org/10.20900/jsr20210015>
- Park, E., Kwon, J., & Kim, S. B. (2021b). Green marketing strategies on online platforms: A mixed approach of experiment design and topic modeling. *Sustainability*, 13(8), Article 4494. <https://doi.org/10.3390/su13084494>
- Peng, J., Li, K., & Gao, Y. (2022). How the Internet affects China's green consumption development: Empirical research based on Baidu Index Data. *Sustainability*, 15(1), Article 50. <https://doi.org/10.3390/su15010050>
- Pereira, A. M., Moura, J. A. B., Costa, E. D. B., Vieira, T., Landim, A. R., Bazaki, E., & Wanick, V. (2022). Customer models for artificial intelligence-based decision support in fashion online retail supply chains. *Decision Support Systems*, 158, Article 113795. <https://doi.org/10.1016/j.dss.2022.113795>
- Poturak, M., Keco, D., & Tutnic, E. (2022). Influence of search engine optimization (SEO) on business performance: Case study of private university in Sarajevo. *International Journal of Research in Business and Social Science (2147-4478)*, 11(4), 59–68. <https://doi.org/10.20525/ijrbs.v11i4.1865>
- Purcărea, T., Ioan-Franc, V., Ionescu, Ș. A., Purcărea, I. M., Purcărea, V. L., Purcărea, I. ... Orzan, A. O. (2022). Major shifts in sustainable consumer behavior in Romania and retailers' priorities in agilely adapting to it. *Sustainability*, 14(3), Article 1627. <https://doi.org/10.3390/su14031627>
- Quach, S., Thaichon, P., Lee, J. Y., Weaven, S., & Palmatier, R. W. (2020). Toward a theory of outside-in marketing: Past, present, and future. *Industrial Marketing Management*, 89, 107–128. <https://doi.org/10.1016/j.indmarman.2019.10.016>
- Rakshit, S., Islam, N., Mondal, S., & Paul, T. (2021). Mobile apps for SME business sustainability during COVID-19 and onwards. *Journal of Business Research*, 35, 28–39. <https://doi.org/10.1016/j.jbusres.2021.06.005>
- Rosário, A. T., Raimundo, R. J., & Cruz, S. P. (2022). Sustainable entrepreneurship: A literature review. *Sustainability*, 14(9), Article 5556. <https://doi.org/10.3390/su14095556>

- Sakas, D. P., Giannakopoulos, N. T., Terzi, M. C., Kamperos, I. D. G., Nasiopoulos, D. K., Reklitis, D. P., & Kanellos, N. (2022). Social media strategy processes for centralized payment network firms after a war crisis outset. *Processes*, *10*(10), Article 1995. <https://doi.org/10.3390/pr10101995>
- Salvia, A. L., Leal Filho, W., Brandli, L. L., & Griebeler, J. S. (2019). Assessing research trends related to Sustainable Development Goals: Local and global issues. *Journal of Cleaner Production*, *208*, 841–849. <https://doi.org/10.1016/j.jclepro.2018.09.242>
- Schulkind, A. (2022). Your website as marketing hub. In *Marketing for Small B2B Businesses: How Content Creates Marketing Muscle and Powers Traditional and Digital Marketing* (pp. 135–154). Berkeley, CA: Apress. https://link.springer.com/chapter/10.1007/978-1-4842-8741-5_8
- Shah, S. S., Jalil, A., & Shah, S. A. H. (2020). Growth effects of religion dependent social capital: An empirical evidence. *Social Indicators Research*, *149*(2), 423–443. <https://doi.org/10.1007/s11205-019-02253-2>
- Sheth, J. N., Jain, V., Roy, G., & Chakraborty, A. (2022). AI-driven banking services: the next frontier for a personalised experience in the emerging market. *International Journal of Bank Marketing*, *40*(6), 1248–1271. <https://doi.org/10.1108/IJBM-09-2021-0449>
- Shwetter, C., Maritz, A., & Nguyen, Q. (2019). Entrepreneurial ecosystems: A holistic and dynamic approach. *Journal of Industry-University Collaboration*, *1*(2), 79–95. <https://doi.org/10.1108/JIUC-03-2019-0007>
- Silvestri, A., & Veltri, S. (2020). Exploring the relationships between corporate social responsibility, leadership, and sustainable entrepreneurship theories: A conceptual framework. *Corporate Social Responsibility and Environmental Management*, *27*(2), 585–594. <https://doi.org/10.1002/csr.1822>
- Sivarajah, U., Irani, Z., Gupta, S., & Mahroof, K. (2020). Role of big data and social media analytics for business-to-business sustainability: A participatory web context. *Industrial Marketing Management*, *86*, 163–179. <https://doi.org/10.1016/j.indmarman.2019.04.005>
- Stawicka, E. (2021). Sustainable development in the digital age of entrepreneurship. *Sustainability*, *13*(8), Article 4429. <https://doi.org/10.3390/su13084429>
- Statista. (2022). *Share of companies planning changes in spending on sustainable marketing in the next years in Europe as of July 2022*. <https://www.statista.com/statistics/1305790/europe-companies-sustainable-marketing-spending-plans/>
- Statista. (2021). *Advertising and marketing spending worldwide from 2020 to 2024*. <https://www.statista.com/statistics/1446002/advertising-marketing-spending-worldwide/>
- Suominen, K. (2019). *Revolutionizing world trade: How disruptive technologies open opportunities for all*. Stanford University Press. <https://www.sup.org/books/title/?id=27868>
- Theodoraki, C., Dana, L. P., & Caputo, A. (2022). Building sustainable entrepreneurial ecosystems: A holistic approach. *Journal of Business Research*, *140*, 346–360. <https://doi.org/10.1016/j.jbusres.2021.11.005>
- Tim, Y., Cui, L., & Sheng, Z. (2021). Digital resilience: How rural communities leapfrogged into sustainable development. *Information Systems Journal*, *31*(2), 323–345. <https://doi.org/10.1111/isj.12312>
- Tohănean, D., Buzatu, A. I., Baba, C. A., & Georgescu, B. (2020). Business model innovation through the use of digital technologies: Managing risks and creating sustainability. *Amfiteatru Economic*, *22*(55), 758–774. <https://www.cceol.com/search/article-detail?id=888540>

- Trudel, R. (2019). Sustainable consumer behavior. *Consumer Psychology Review*, 2(1), 85–96. <https://doi.org/10.1002/arcp.1045>
- van Riel, A. C., Andreassen, T. W., Lervik-Olsen, L., Zhang, L., Mithas, S., & Heinonen, K. (2021). A customer-centric five actor model for sustainability and service innovation. *Journal of Business Research*, 136, 389–401. <https://doi.org/10.1016/j.jbusres.2021.07.035>
- Veleva, V. (2021). The role of entrepreneurs in advancing sustainable lifestyles: Challenges, impacts, and future opportunities. *Journal of Cleaner Production*, 283, Article 124658. <https://doi.org/10.1016/j.jclepro.2020.124658>
- Wang, S., Ibrahim, M. H., & Li, M. (2022). Motivations influencing Alipay users to participate in the ant forest campaign: An empirical study. *International Journal of Environmental Research and Public Health*, 19(24), Article 17034. <https://doi.org/10.3390/ijerph192417034>
- Xie, G., Huang, L., Bin, H., Apostolidis, C., Jiang, Y., Li, G., & Cai, W. (2022). Sustainable entrepreneurship in rural E-commerce: Identifying entrepreneurs in practitioners by using deep neural networks approach. *Frontiers in Environmental Science*, 10, Article 840479. <https://doi.org/10.3389/fenvs.2022.840479>
- Yang, J., Xiu, P., Sun, L., Ying, L., & Muthu, B. (2022). Social media data analytics for business decision making system to competitive analysis. *Information Processing & Management*, 59(1), Article 102751. <https://doi.org/10.1016/j.ipm.2021.102751>
- Zhang, H., Song, M., & He, H. (2020). Achieving the success of sustainability development projects through big data analytics and artificial intelligence capability. *Sustainability*, 12(3), Article 949. <https://doi.org/10.3390/su12030949>
- Zhang, L., & Erturk, E. (2022). Potential lessons from Chinese businesses and platforms for online networking and marketing: An exploratory study. *Social Sciences & Humanities Open*, 6(1), Article 100274. <https://doi.org/10.1016/j.ssaho.2022.100274>
- Zhang, X. (2021). Anti-incineration mobilization on WeChat: Evidence from 12 WeChat subscription accounts. *Environmental Communication*, 15(8), 1061–1076. <https://doi.org/10.1080/17524032.2021.1941176>
- Zhang, Y., Chen, J., Han, Y., Qian, M., Guo, X., Chen, R. ... Chen, Y. (2021). The contribution of Fintech to sustainable development in the digital age: Ant forest and land restoration in China. *Land use Policy*, 103, Article 105306. <https://doi.org/10.1016/j.landusepol.2021.105306>
- Zhao, H., Zhao, Q. H., & Ślusarczyk, B. (2019a). Sustainability and digitalization of corporate management based on augmented/virtual reality tools usage: China and other world IT companies' experience. *Sustainability*, 11(17), Article 4717. <https://doi.org/10.3390/su11174717>
- Zhao, L., Lee, S. H., & Copeland, L. R. (2019b). Social media and Chinese consumers' environmentally sustainable apparel purchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 31(4), 855–874. <https://doi.org/10.1108/APJML-08-2017-0183>
- Ziakis, C., Vlachopoulou, M., Kyrkoudis, T., & Karagkiozidou, M. (2019). Important factors for improving Google search rank. *Future Internet*, 11(2), Article 32. <https://doi.org/10.3390/fi11020032>