Digital Marketing Tools' Transformative Role in Sustainable Development: Navigating Limited Mobility and Disrupted Infrastructure Worldwide

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ABSTRACT:

This study explores the transformative role of digital marketing in promoting sustainable development amid global crises-specifically war, restricted mobility, and disrupted infrastructure. Using Ukrainian organic cosmetics (HS 3304) as a case, it evaluates export opportunities to high-potential markets such as the UK, France, the Netherlands, Belgium, Canada, Singapore, Australia, and Japan. These markets feature strong demand for natural, ethical, and innovative products.

Digital marketing is framed as a strategic instrument, supporting not only international promotion but also economic resilience, sustainability, and social recovery. It allows businesses to communicate without physical presence—vital during wartime-and optimize logistics, update consumers in real time, and ensure operational continuity despite infrastructure damage.

Consumer-behavior analysis using SEMrush, Ahrefs, Google Trends, and social media listening shows consistent growth in organic, vegan, and sustainable beauty themes, while niche segments remain underserved with low competition and marketing costs-ideal for Ukrainian producers.

The research highlights digital marketing's role in supply chain flexibility, enabling rerouting, risk mitigation, and demand forecasting. It also supports the creation of digital products-virtual showrooms, AR tools, e-commerce, and chatbots—ensuring ongoing engagement during mobility restrictions.

Environmental and social benefits are also emphasized: companies can reduce emissions, cut print and event-related transport, and involve consumers in crowdfunding and sustainability efforts.

Finally, tools like Trade Map and The Global Economy help assess export potential, identify market trends, and guide entry strategies. The study offers a roadmap for Ukrainian businesses, positioning digital marketing as a critical lever for survival, growth, and integration into the global sustainable economy.

Keywords: digital marketing, sustainable development, social resilience, economic resilience, environmental balance, consumer environmental behaviour, social inclusion, organic cosmetics, export, restricted mobility, logistics, logistical processes, supply chains, omnichannel marketing, crisis marketing, e-commerce, market analytics, business intelligence, ESG, ESG reporting, business processes, digital products and services, social media, email marketing, mobile applications, chatbots, online services, platform solutions, low-code/no-code platforms, crowdfunding, green content marketing, zero-waste, cruelty-free, consumer-behaviour trends, SEMrush, Ahrefs, logistics management, marketing research.

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1. Introduction

The modern world is undergoing profound transformations driven by globalization, economic digitalization, and frequent crises, from the COVID-19 pandemic to armed conflicts and climate-related disasters. These challenges have resulted in significant restrictions on the mobility of people and goods, the destruction of infrastructure, and growing socio-economic instability across many regions of the world. At the same time, the pursuit of sustainable development models requires new tools capable of maintaining economic activity, reducing environmental impact, and fostering social inclusion even under conditions of disrupted infrastructure.

Digital marketing tools are becoming increasingly important in this context, as they enable companies to engage with target audiences without physical interaction, optimize logistics, create new digital products and services, and ensure communication transparency. These tools possess substantial transformational potential, allowing businesses to mitigate the adverse effects of infrastructural constraints and contribute to the sustainable development of both the economy and society.

However, academic research that comprehensively examines the transformative role of digital marketing, specifically in the context of sustainability and in overcoming the consequences of limited mobility and damaged infrastructure, remains underdeveloped. There is a pressing need for a deeper analysis of digital marketing tools as mechanisms for business adaptation, the strengthening of social resilience, and the promotion of environmental balance. Although this study does not include pilot case studies, it lays the groundwork for future empirical research aimed at testing digital tools in real-world crisis contexts.

Thus, the study of the transformative role of digital marketing tools in sustainable development is highly relevant, as it addresses the current challenges of the global economy, contributes to the search for innovative solutions for both business and society, and holds significant practical value for overcoming the consequences of crises around the world.

2. Literature Review

Various aspects of digital marketing as a tool for engaging with target audiences have been explored by Chaffey, D. & Ellis-Chadwick, F. (2019), Kotler, P., Kartajaya, H., & Setiawan, I. (2021), Tiago, M. T. P. M. B. & Veríssimo, J. M. C. (2014), and Kuzmin, O. Ye. & Yatsunska, O. I. (2022). While acknowledging the importance of these studies and the value of their findings, it should be noted that further research is needed to examine digital marketing not only as a commercial communication tool, but also as a mechanism for business adaptation to crisis conditions, overcoming mobility restrictions and infrastructure challenges, and achieving the goals of sustainable development.

The optimization of logistics processes through digital marketing has been addressed in the scientific literature by Christopher, M. (2016), Hübner, A., Holzapfel, A., & Kuhn, H. (2016), and Ivanov, D. & Dolgui, A. (2020). Nevertheless, there is a need for further research focusing on digital marketing as a tool for enhancing the resilience of logistics systems in times of crisis, ensuring supply chain continuity, and minimizing the

negative consequences of infrastructural constraints in the context of sustainable development.

We would also like to highlight scholars who have focused on the use of digital tools to support supply chain resilience during crises such as the COVID-19 pandemic and armed conflicts. The development of digital products and services has been studied by Ries, E. (2011), Lemon, K. N. & Verhoef, P. C. (2016), and Petrenko, N. V. (2021). However, further research is needed to explore digital product and service creation not only as a means of commercial growth but also as a way to enhance social resilience, ensure service accessibility under conditions of limited mobility, and support the achievement of sustainable development goals amid crisis and post-crisis transformations. Future studies should examine how different social groups, particularly marginalized or displaced populations, access such services in crisis conditions, as digital inclusion cannot be assumed across all demographics.

Different facets of digital marketing as an instrument of sustainable development have been presented by Brennan, L. & Binney, W. (2010), Lim, W. M. et al. (2022), Martínez-Ruiz, M. P. & Izquierdo-Yusta, A. (2020), and Parguel, B., Benoît-Moreau, F. & Larceneux, F. (2011). However, further research is required to examine digital marketing as a comprehensive mechanism for integrating the environmental, social, and economic pillars of sustainable development — one capable not only of shaping consumer preferences but also of driving substantive changes in business and consumer behavior under global pressures.

Research on digital marketing in contexts of restricted mobility and damaged infrastructure has been conducted by Sheth, J. (2020), Pantano, E. et al. (2020), Ivanov, D. (2021), and Pauwels, K. (2020). Yet, additional studies are needed that position digital marketing as a key enabler of business continuity, consumer engagement, and the reestablishment of economic linkages when mobility is constrained and infrastructure is compromised.

The role of digital marketing as a driver of social resilience and ecological balance has been discussed by Elkington, J. (1997), Grewal, D., Roggeveen, A. L. & Nordfält, J. (2017), and Schaltegger, S., Hansen, E. G. & Lüdeke-Freund, F. (2016). Nonetheless, research must advance toward understanding how digital marketing can reinforce corporate social responsibility, foster environmentally conscious consumer behaviors, and bolster societal resilience in the face of mounting economic and environmental challenges.

A review of the contemporary academic literature reveals considerable interest in individual dimensions of digital marketing, whether as a means of audience engagement, logistics optimization, or digital product and service innovation, and its growing recognition as a catalyst for sustainable development. However, as this survey of leading scholars demonstrates, there is a near-complete absence of work that synthesizes these strands into a unified framework describing the transformative potential of digital marketing amid global crises, limited mobility, and disrupted infrastructure. This gap represents both a scientific and practical vacuum whose resolution is critical: digital marketing holds the promise not only of economic advancement but also of enhanced social stability, environmental stewardship, and increased resilience for businesses and communities. It can sustain operations and communication under crisis conditions, maintain supply-chain efficiency when infrastructure fails, deliver essential digital services

to populations facing mobility constraints, and cultivate socially and ecologically responsible practices among firms and consumers. Accordingly, research into the transformative role of digital marketing tools in sustainable development has a vital mission — to equip societies and enterprises worldwide with the means to adapt effectively to contemporary challenges, mitigate the ramifications of crises, and foster the emergence of more resilient and responsible economic and social systems.

3. Results of the Study

An integrated approach to the transformative role of digital marketing in sustainable development is depicted in Figure 1; it enables businesses to remain viable and helps societies overcome the repercussions of global crises and build a more resilient future. However, while this conceptualization highlights digital marketing's strategic potential, further empirical research is needed to assess whether these tools lead to sustainable, long-term outcomes or merely provide short-term continuity in times of crisis.

Digital Marketing

as a communication tool that maintains trust and engagement with customers during crises

as a tool for optimizing supply chains and logistics to ensure the availability of goods and services

as a platform for creating digital products and services capable of compensating for physical infrastructure constraints

as a means of achieving sustainable development goals, including social resilience and environmental responsibility

as a tool for strategic analysis of markets and the economic environment

Figure 1. The Transformative Role of Digital Marketing in Sustainable Development

This figure illustrates how digital marketing can function as a multifunctional tool that not only supports businesses during challenging times but also makes a significant contribution to sustainable development, social resilience, and infrastructure recovery. By doing so, it enables societies and enterprises worldwide to adapt more effectively to crises, maintain economic activity, and progress toward a more resilient and equitable future.

The deployment of digital marketing as a communication instrument under crisis conditions enables uninterrupted engagement without physical contact — via social media platforms, messaging apps, email, and mobile applications. This capability is especially vital when stakeholders demand rapid, reliable, and transparent information. Digital marketing also serves as a mechanism for notifying audiences about operational changes, product or service availability, updated locations, revised schedules, and safe transit routes, which proves critical amid mobility disruptions and damaged infrastructure. Facilitating two-way

feedback allows organizations to respond promptly to customer needs and grievances. Moreover, digital marketing fosters trust between businesses and communities during turbulent periods, enhances social resilience, and mitigates panic. It provides a low-risk environment for piloting new business models and thus becomes a strategic tool for economic survival and recovery, preserving access to goods and services even when infrastructure faces severe constraints.

In examining digital marketing's role in logistics optimization, it can be argued that in crisis conditions, when supply chains undergo severe disruptions, digital marketing engages customers in demand-supply management processes, while digital tools enable demand forecasting, which is critical for effective inventory control. Moreover, digital platforms allow for the management of omnichannel sales, the rerouting of product flows to accessible channels, and the rapid notification of customers regarding changes in product availability or delivery schedules. Consequently, digital marketing, as an integrated business-process instrument, underpins supply chain resilience even when infrastructure is compromised.

The creation of digital products becomes a mechanism for social inclusion, accessibility, and economic resilience during crises, as many traditional services become unavailable offline under restricted mobility. Digital marketing not only supports the promotion of new digital offerings, such as online courses, telemedicine, and electronic services, but also drives their development and dissemination, ensuring access to essential services and products when physical visits to stores or offices are impossible. At the same time, it empowers businesses to swiftly pivot by designing digital solutions that substitute traditional services.

Digital marketing exerts a powerful influence on the cultivation of environmentally and socially responsible consumer behavior. Through digital instruments, companies can promote eco-friendly products, communicate their efforts to reduce carbon emissions, and engage consumers in sustainable development initiatives — thereby diminishing the environmental footprint associated with traditional marketing methods (e.g., printed materials, transport for offline events). In crisis situations, digital marketing not only sustains commercial activity but also facilitates social initiatives such as fundraising, humanitarian aid, and public information campaigns. Today, digital marketing serves as a catalyst for sustainable development and a means of building a more resilient, cohesive society capable of withstanding global crises, particularly where conventional tools lose effectiveness due to emergencies or infrastructural limitations.

To deepen the analytical dimension of this discussion, future studies should examine how specific sectors — such as Ukrainian cosmetic companies operating during wartime — utilize digital marketing tools compared to similar businesses in other conflict-affected countries. Such comparative case studies could contextualize Ukraine's experience, identifying both shared patterns and unique strategies that contribute to resilience, sustainable consumer behavior, and business continuity under extreme conditions.

Analytical and statistical digital platforms for business intelligence and market research further enhance the transformative role of digital marketing in sustainable development. Specifically, they enable the adaptation of marketing strategies to global disruptions (for example, shifts in supply chains caused by war or pandemic), contribute to reduced ecological emissions, optimize logistical routes to minimize unnecessary transport, and support decision-making for sustainable export strategies by accounting for demand for green goods and services across different markets. Crucially, these platforms supply the data needed to generate analytical content in digital marketing, such as infographics and market reports, for customer engagement.

Accordingly, digital marketing emerges as a transformative instrument that significantly expands the role of business in sustainable development. It not only facilitates effective communication and engagement with target audiences without physical contact but also enables rapid responses to crises, maintains continuity of supply chains, and fosters the creation of new digital products and services to meet society's urgent needs. Moreover, it promotes socially responsible and environmentally balanced consumer behavior. A comprehensive investigation of digital marketing's transformative role in sustainable development aims to equip businesses and communities worldwide with the tools to adapt successfully to global crises, mitigate the effects of mobility constraints and infrastructural damage, sustain economic activity, and advance toward a more resilient, equitable, and inclusive future.

A comprehensive framework for systematizing digital marketing tools should enable empirical assessment of their impact on business and societal resilience during crises, facilitate the testing of practical case studies across areas such as communications, logistics, new product development, and sustainable marketing, inform the creation of actionable recommendations for businesses and communities seeking to leverage digital marketing to overcome mobility and infrastructure challenges, and provide the methodological foundations necessary for integrating these tools into broader sustainable development strategies (Table 1).

Table 1. Systematization of Digital Marketing Tools Promoting Sustainable Development

Tools	Types	Characteristics
Digital marketing for communication & audience	Social Media (Social Media Marketing)	Creating informational campaigns on Facebook, Instagram, TikTok, and LinkedIn to inform populations in crisis situations; using targeted ads to reach audiences affected by crises or with specific needs.
engagement	Messengers & Chatbots	Developing chatbots (Telegram, Viber, WhatsApp) to deliver up-to-date information on business operations and product/service availability; sending bulk broadcasts to announce service changes or updated schedules.
	Email Marketing	Implementing triggered email series with updates on the crisis situation, logistics, or company social initiatives; using email to engage consumers in sustainable initiatives (donations, volunteering, etc.).
	Mobile Apps	Building or upgrading mobile apps for interactive client communication (e.g., push notifications about store hours during air raids or transport restrictions).
Tools for logistics process optimization	CRM & CDP Systems	Integrating CRM with supply-chain data to personalize communications and forecast product shortages; using consumer behavior data to adapt logistics (what and where to deliver under limited access).
	Omnichannel Platforms	Leveraging Shopify, Magento, or Salesforce Commerce Cloud to rapidly reconfigure sales and delivery channels; flexibly rerouting product flows among warehouses and stores.

Tools for creating digital products & services	Supply Chain Visibility Tools Online Service Platforms Low-code/No-code Platforms	Integrating track-and-trace systems for transparent product-availability info; sending automated notifications to customers about delivery-time changes. Using Zoom, Teams, or Google Meet to deliver educational, medical, and legal services online; creating marketplaces for digital products (courses, subscriptions, e-books). Developing rapid digital solutions (apps, websites) without programmers via platforms like Webflow, or Bubble in crisis				
	Analytics & Testing Services	contexts. Applying Google Optimize, Hotjar, and A/B testing to validate digital solutions quickly.				
Sustainable- development via digital marketing	Platforms for Environmental Initiatives Green content marketing	Engaging customers through crowdfunding (Patreon, Kickstarter) for sustainability projects; running digital campaigns to promote «green» products. Producing special projects, blogs, or videos on corporate environmental responsibility; embedding ecological				
	ESG Reporting Tools	calculators (e.g., CO ₂ -reduction calculators) on websites. Implementing digital platforms for transparent publication of social and environmental impact reports.				
Crisis digital marketing tools	Media and social network monitoring	Using Brandwatch, Mention, or Hootsuite to monitor crisis- related sentiment and respond swiftly; analyzing hashtags and geotags for localized crisis communication (e.g., safe routes, heating centers).				
	Crisis Info Sites & Landing Interactive Maps & Dashboards	Rapidly creating single-page sites with real-time crisis updates (product availability, logistics changes, humanitarian aid). Building interactive maps of store/service availability or transport routes via Google Maps or Mapbox.				
Strategic market & economic- environment analysis tools that enable digital	Analytical and statistical digital platforms for business intelligence and market research (Trade Map)	Trade Map (International Trade Centre): provides export/import statistics by country and market, helps identify potential markets, track demand/supply dynamics, discover logistics routes, spot price trends, competitors, and partners, and assess supply-chain resilience critical during crises or mobility constraints.				
marketing to become a driver of sustainable development in the world	Economic and statistical platforms with global macroeconomic data (TheGlobalEconomy)	TheGlobalEconomy.com aggregates over 200 countries' economic, trade, investment, financial-stability, social, and environmental indicators; supports market-entry risk analysis, tracking of sustainable-development indices, corruption levels, political stability, and evaluation of market attractiveness for sustainable business.				

The systematization of digital marketing tools demonstrates their multifaceted potential as a transformative resource, capable not only of sustaining business operations in crisis conditions but also of actively contributing to sustainable development, social resilience, and the restoration of economic and social systems. Practical digital marketing instruments, from communication platforms and logistical solutions to digital product creation, ESG reporting, and analytics systems, enable businesses to adapt swiftly to global crisis challenges, maintain operational continuity, and build consumer trust even under conditions of limited mobility or compromised infrastructure. For society, these tools provide access to essential services, reliable information, and social support, thereby helping to reduce panic and strengthen community resilience.

In a global context, this systematization lays the methodological and practical groundwork for positioning digital marketing as a key driver of sustainable development. By doing so, businesses and communities worldwide will be better equipped to counter the effects of crises, minimize economic and social losses, and build a more resilient and inclusive future.

In the continuation of this research, aimed at most effectively highlighting the role of digital marketing tools in sustainable development through the lens of limited mobility and compromised infrastructure, the analysis concentrates on the product category of «environmentally friendly consumer goods».

Using «environmentally friendly consumer goods» as our case, we will examine how digital marketing can stimulate demand for eco-friendly products even amid global crises and mobility constraints, demonstrating how such goods can become a transformational driver of sustainable development with the support of digital tools. Digital marketing is a critical enabler that allows eco-friendly products to maintain, and even grow their market positions under conditions of restricted mobility and disrupted infrastructure, while simultaneously advancing the attainment of sustainable development objectives.

This study focuses on the product group «33 Essential Oils», produced in Ukraine, which possesses export potential and enables an examination of digital marketing's transformational role in sustainable development. Specifically, we have selected «33 Essential Oils», encompassing organic items classified under HS 3304 or 3305. We will assess organic status at the brand or certification level (e.g., EU Organic, COSMOS, ECOCERT) and present actual production data from Ukrainian manufacturers. Market entry and trade opportunities will be analyzed using Trade Map and TheGlobalEconomy. Finally, we will devise a digital marketing strategy for promoting this Ukrainian sustainable product and show how digital channels can help businesses survive wartime disruptions, penetrate new export markets, bolster foreign-exchange earnings, and foster sustainable development and environmental consciousness.

A dynamic analysis of Ukraine's export performance in the «33 Essential Oils» product group compares the evolution of enterprises' economic potential from 2020 to 2024, accounting for market fluctuations caused by the full-scale invasion of Ukraine, by product structure (Table 2).

Table 2. Dynamics of Ukraine's exports in the «33 Essential Oils» product group, 2020–2024 (thousand USD)

	Product Subgroup	E	xport Vo	olume, 2 usand I		024,	Absolute Change (thous. USD)			
		2020	2021	2022	2023	2024	2022/2021	2023/2022	2024/2023	
1	2	3	4	5	6	7	8	9	10	
3304	Cosmetic or makeup preparations and skin- care preparations, including sunscreen preparations	38,73	55,09	25,31	19,79	23,70	-29,79	-5,52	3,92	

3305	Preparations for use on the hair	17,38	18,46	14,52	14,43	12,60	-3,94	-0,09	-1,83
3307	Shaving preparations, including pre- and after-shave products; personal deodorants; bath preparations	13,37	12,38	7,71	8,43	10,35	-4,67	0,72	1,92
3303	Perfumes and toilet waters (excluding after-shave lotions, personal deodorants, and hair lotions)	16,73	30,58	13,63	6,74	6,29	-16,95	-6,89	-0,44
3301	Essential oils (terpeneless or not), including concretes and absolutes; resinoids; extracted oleoresins	3,25	3,05	4,26	2,82	4,29	1,20	-1,43	1,47
3302	Mixtures of odoriferous substances and mixtures (including alcoholic solutions) based on one or more of these substances	4,62	5,25	5,20	3,04	2,69	-0,04	-2,16	-0,35
3306	Oral or dental hygiene preparations, including denture-fixing pastes and powders	1,71	1,35	1,07	0,93	1,16	-0,28	-0,15	0,24
	Total	95,77		71,70		61,09	-54,47	-15,52	4,92

Source: generated based on the State Statistics Service of Ukraine [2025]

A dynamic analysis of Ukraine's exports in the «33 Essential Oils» product group (Table 2) reveals the following trends.

In 2020, total exports amounted to USD 95.77 thousand. In 2021, exports rose sharply by USD 30.39 thousand (+31.73 %) to USD 126.16 thousand. However, in 2022, coinciding with Russia's full-scale invasion and severe logistical disruptions, exports plummeted by USD 54.47 thousand (-43.17 %) to USD 71.70 thousand. The decline persisted in 2023, albeit at a slower pace, with a reduction of USD 15.52 thousand (-21.63 %) to USD 56.18 thousand. In 2024, a modest recovery occurred: exports increased by USD 4.92 thousand (+8.75 %), reaching USD 61.09 thousand. Thus, following the precipitous wartime drop and infrastructure challenges, export volumes have begun to stabilize, though they remain well below the pre-invasion peak observed in 2021.

Within individual subgroups, HS 3304 («Cosmetic and skin-care preparations, including sunscreens») recovered strongly in 2024, posting a 19.8 % increase over 2023 after having halved in 2022, indicating a resilient market rebound.

Conversely, HS 3305 («Hair-care preparations») suffered three consecutive years of decline and has yet to regain stability.

HS 3307 («Shaving preparations, deodorants, and bath products») showed a clear restoration trend in 2023–2024, with exports rising by 25 % in 2024, revealing further growth potential in this segment.

The most affected subgroup is HS 3303 («Perfumes and toilet waters»), which experienced a further decline in 2024 and remains unstable and crisis-ridden.

The HS 3301 («Essential oils») segment is small in volume but showed a strong recovery in 2024 (+52.1 % versus 2023). By contrast, HS 3302 («Mixtures of odoriferous substances») continues to contract, with its outlook remaining uncertain. Although exports of HS 3306 («Oral or dental hygiene preparations») are minimal, this niche subgroup recorded growth for the first time in 2024 (+26 %).

Overall, HS 3304 («Cosmetic and skin-care preparations, including sunscreens») has retained its leadership position despite the 2022 downturn. The recovery observed in 2024 underscores its highest potential for digital-driven exports. The most severely impacted segments, HS 3303 («Perfumes») and HS 3305 («Hair-care preparations»), have shown weak or no recovery, whereas HS 3307 («Shaving preparations, personal deodorants, and bath preparations») demonstrated positive dynamics in 2023–2024. Thus, following the critical drop in 2022, export volumes are stabilizing and beginning to rebound, creating a solid foundation for the further development of digital marketing strategies.

While this analysis primarily focuses on retrospective dynamics due to the unprecedented nature of wartime disruptions, it acknowledges the value of predictive modeling for strategic planning. However, given the inherent uncertainty surrounding the duration and intensity of ongoing hostilities, and the persistent hope for their imminent resolution, developing accurate scenario-based projections remains methodologically challenging. Therefore, the inclusion of advanced econometric forecasting is proposed as a direction for future research once more stable baseline conditions emerge.

For subsequent analysis, the subgroup HS 3304 «Cosmetic or makeup preparations and skin-care preparations, including sunscreen preparations» has been selected due to its status as the largest export segment, its recovery trend in 2024, its high potential for digital promotion, and its direct relevance to sustainability themes.

Importing markets for Ukrainian HS 3304 products will be identified, and the export dynamics to the top 15 partner countries for the period 2020–2024 will be analyzed (Table 3).

Table 3. Dynamics of Ukraine's Exports of HS 3304 Products («Cosmetic or makeup preparations and skin-care preparations, including sunscreen preparations») to the Top 15 Importing Partners, 2020–2024 (thousand USD)

Importing Partner	Makeup	Preparation	of HS 330 ns and Skir ens») from USD	Relative Change, %					
Markets	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
World	38730	55091	25306	19788	23704	42,2	-54,1	-21,8	19,8
Poland	11380	17182	8146	4996	7244	51,0	-52,6	-38,7	45,0
Moldova	901	1087	1636	2247	2432	20,6	50,5	37,3	8,2

Italy	663	1483	1421	1406	2319	123,7	-4,2	-1,1	64,9
Germany	3762	275	1785	1768	2197	-92,7	549,1	-1,0	24,3
Latvia	462	496	908	1109	155	7,4	83,1	22,1	-86,0
Lithuania	1808	1991	1313	125	1112	10,1	-34,1	-90,5	789,6
Bulgaria	252	501	668	524	840	98,8	33,3	-21,6	60,3
Romania	89	136	248	534	604	52,8	82,4	115,3	13,1
Kazakhstan	719	925	725	711	542	28,7	-21,6	-1,9	-23,8
Slovakia	39	57	126	267	325	46,2	121,1	111,9	21,7
Azerbaijan	445	353	379	346	305	-20,7	7,4	-8,7	-11,8
Israel	10	92	292	200	295	820,0	217,4	-31,5	47,5
Cyprus	34	61	128	159	291	79,4	109,8	24,2	83,0
USA	216	313	195	298	255	44,9	-37,7	52,8	-14,4
United Arab Emirates	184	83	194	72	241	-54,9	133,7	-62,9	234,7
Others	17766	30056	7142	5026	4547	69,2	-76,2	-29,6	-9,5

Source: generated based on the State Statistics Service of Ukraine [2025]

The analysis of Table 3 data indicates that exports of Ukrainian HS 3304 products («Cosmetic or makeup preparations and skin-care preparations, including sunscreens») experienced significant volatility during 2020–2024. After a pronounced increase in 2021 (+42.2 %), exports plunged by more than half in 2022 (-54.1 %) due to the war and logistical disruptions. The decline continued in 2023, albeit more slowly, and 2024 exhibited signs of recovery (+19.8 %), pointing to the market's potential for further stabilization and growth.

Among the top 15 importing markets, Poland has traditionally played the leading role as Ukraine's largest cosmetics purchaser. Although Poland's imports contracted sharply during the conflict, it demonstrated a substantial rebound in 2024. Notable growth was also recorded in Italy, Romania, Israel, and Lithuania, reflecting these countries' readiness to consume Ukrainian eco- and organic products. Conversely, Kazakhstan, Azerbaijan, and Latvia reduced their imports, signaling the need for further analysis of market-entry barriers or adjustments to marketing strategies. These findings confirm the promising prospects for expanding Ukraine's organic cosmetics exports through digital marketing, which can not only restore lost volumes but also extend geographic reach into new markets, meet global demand for sustainable products, and support the country's economic recovery during wartime and in the post-crisis period.

The world's principal importing markets for HS 3304 products will now be identified, and the dynamics of global import volumes for the top 15 markets during 2020–2024 will be analyzed (Table 4).

Table 4. Dynamics of Global Imports of HS 3304 («Cosmetic or Makeup Preparations and Skin-Care Preparations, Including Sunscreens»), Top 15 Global Importers, 2020–2024 (thousand USD)

Global		Import V	olume, thou	Relative Deviation, %					
Importing Markets	2020	2021	2022	2023	2024	2021/ 2020	2022/ 2021	2023/ 2022	2024/ 2023
World	64900,0	74581,7	74132,7	76263,2	75689,4	14,9	-0,6	2,9	-0,8
China	17328,6	20287,4	18014,5	14430,3	13023,2	17,1	-11,2	-19,9	-9,8

USA	4484,1	5555,9	6351,3	6837,5	7792,4	23,9	14,3	7,7	14,0
Hong	7707,1	3333,7	0331,3	0037,3	1172,7	25,5	17,0	7,7	17,0
Kong,	7234,2	7280,4	6214,8	5812,2	4035,7	0,6	-14,6	-6,5	-30,6
China	1257,2	7200,4	0217,0	3012,2	7033,7	0,0	-17,0	-0,5	-50,0
Germany	2247,7	2677,2	2630,8	2989,0	3157,7	19,1	-1,7	13,6	5,6
United	2271,1	2011,2	2030,0		3137,7	17,1		13,0	
Kingdom	2009,4	2020,8	2378,9	2752,8	3074,4	0,6	17,7	15,7	11,7
France	1720,0	1915,7	2033,9	2621,3	2741,1	11,4	6,2	28,9	4,6
Singapore	2894,3	3087,9	3078,8	2992,8	2687,2	6,7	-0,3	-2,8	-10,2
Canada	1409,3	1576,0	1808,9	1965,3	1999,5	11,8	14,8	8,6	1,7
Netherlands	994,1	1331,6	1800,3	1735,6	1908,4	33,9	35,2	-3,6	10,0
Japan	1388,8	1474,4	1497,9	1593,8	1808,4	6,2	1,6	6,4	13,5
Spain	969,5	1149,4	1358,3	1585,4	1638,1	18,6	18,2	16,7	3,3
Poland	1020,5	1171,7	1321,7	1492,4	1632,0	14,8	12,8	12,9	9,4
Italy	1035,2	1185,9	1233,5	1559,4	1623,8	14,6	4,0	26,4	4,1
United									
Arab	797,5	966,1	1306,9	1624,4	1422,4	21,2	35,3	24,3	-12,4
Emirates									
Belgium	1294,1	1395,5	1330,3	1421,2	1380,6	7,8	-4,7	6,8	-2,9
Macau,	2358,5	3222,0	2399,7	1630,9	1160,4	36,6	-25,5	-32,0	-28,8
China	2330,3	1	Í	Í	1		-23,3		-20,0
Australia	788,2	883,1	975,0	1143,6	1147,7	12,0	10,4	17,3	0,4
Saudi	596,6	624,3	814,9	973,1	1057,6	4,6	30,5	19,4	8,7
Arabia					ŕ	,			
Mexico	484,9	622,2	712,3	879,4	1026,2	28,3	14,5	23,5	16,7
Czech Republic	820,6	910,4	944,2	973,1	997,9	10,9	3,7	3,1	2,5
Others	13023,9	15243,9	15925,9	19249,8	20374,5	17,0	4,5	20,9	5,8

Source: generated based on the State Statistics Service of Ukraine [2025]

The analysis of global imports of HS 3304 products («Cosmetic or makeup preparations and skin-care preparations, including sunscreens») reveals a consistently robust market from 2020 to 2024. Import volumes rose from USD 64.90 billion in 2020 to a peak of USD 76.26 billion in 2023, followed by a slight decline of 0.8 percent in 2024 to USD 75.69 billion. This pattern demonstrates the resilience of the global cosmetics market, even amid the COVID-19 pandemic and ongoing geopolitical instability, presenting favourable entry opportunities for new players, including Ukrainian manufacturers.

At the same time, the importing-country composition has shifted significantly. China, while remaining the largest single market, saw its imports fall for three consecutive years —from USD 20.29 billion in 2021 to USD 13.02 billion in 2024 (a 9.8 percent drop in the last year), which may reflect changes in domestic consumer demand or trade policy. Conversely, the United States, the United Kingdom, France, Italy, and Poland exhibited stable or moderate growth, notably the U.S. (+14.0 percent in 2024) and Italy (+4.1 percent), underscoring a rising interest in sustainable and organic cosmetics within these markets. Significant growth has also been recorded in smaller markets, most notably Mexico (+16.7 % in 2024), Saudi Arabia (+8.7 %), and Australia, underscoring the ongoing diversification of global demand. These developments create new opportunities for Ukrainian cosmetics manufacturers, particularly in light of rising interest in eco-friendly

and organic products. The deployment of digital marketing strategies will enable more agile adaptation to shifts in the global marketplace, facilitate the identification of emerging niches, and allow for rapid response to demand in high-potential regions, capabilities that are critical for sustaining Ukrainian exports amid wartime conditions and throughout post-crisis recovery.

A comparison of the analytical findings from Tables 3 and 4 indicates that Ukraine is already present in key EU markets (Poland, Italy, and Germany), as well as in the United States and the United Arab Emirates; however, the export volumes of HS 3304 products remain modest relative to these markets' overall scale.

Among the world's largest importers: China, the United Kingdom, France, Singapore, Canada, the Netherlands, Japan, Spain, Belgium, Australia, Saudi Arabia, and Mexico, all of which import cosmetics exceeding USD 1 billion annually, Ukraine has yet to establish significant export relationships. This gap highlights the substantial potential for expanding Ukrainian exports, especially within premium and organic segments. Digital marketing offers a pathway to enter these markets effectively despite mobility constraints or elevated logistics costs, with priority given to those regions exhibiting growing demand for sustainable and organic cosmetics, areas in which Ukrainian HS 3304 products can compete strongly based on quality, natural sourcing, and competitive pricing.

Based on the preceding comparative analysis of global import structure and Ukrainian export performance in HS 3304 («Cosmetic or makeup preparations and skincare preparations, including sunscreens»), a shortlist of eleven priority markets has been identified. These markets: China, the United Kingdom, France, Singapore, Canada, the Netherlands, Japan, Spain, Belgium, Australia, Saudi Arabia, and Mexico, exhibit substantial cosmetics import volumes yet remain largely untapped by Ukrainian businesses.

At this stage, a macroeconomic assessment of these markets will be conducted using the analytical platform TheGlobalEconomy.com to evaluate their economic and socio-political attractiveness for the export of Ukrainian organic and eco-friendly cosmetics. Specifically, we plan to analyze sustainable development indices, political stability ratings, purchasing power (GDP per capita), consumer environmental-awareness indices, and geographic distance from Ukraine (Table 5).

The outcome of this phase will be a further refinement of the target markets that present the most favorable macroeconomic conditions for premium and sustainable cosmetics. This will enable Ukrainian producers to prioritize their digital-marketing strategies toward markets with high demand for eco-friendly products and stable economic and political environments conducive to business.

Table 5. Macroeconomic Analysis of Markets with the Most Favorable Conditions for Exporting HS 3304 «Cosmetic or makeup preparations and skin-care preparations, including sunscreen preparations» from Ukraine, 2024

Indicator / Chine Chine Chine Market Chine	France Singapore Canada	Netherlands Japan Spain	Be	Saudi Arabia Mexico
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Sustainable Development Index	74,4	81,9	83,1	71,5	79,2	80,0	80,7	81,0	80,7	77,9	65,2	70,8
Purchasing Power (GDP per capita, USD)		49463,9	44690,9	84734,3	53431,2	64572,0	33766,5	33509,0	54700,9	64820,9	32094,0	13790,0
Consumer Environmental Awareness Index	62,2	72,6	67,0	81,8	61,1	66,9	61,4	64,0	66,8	63,1	66,7	55,0
Political Stability Index (business environment score)		0,5	0,3	1,4	0,8	0,7	1,0	0,3	0,4	0,9	-0,2	-0,6
Economic Freedom Index (overall)	49,0	69,0	63,0	84,0	72,0	77,0	68,0	63,0	66,0	76,0	62,0	62,0
Distance from Ukraine (km, average for HS 3304 group)	5 943	3158,9	2690,1	8 618	7 740	2138,2	11 922	3767,2	2247,8	12 975	4551,0	10 772

Source: generated based on Global Economy, dashboards.sdgindex.org/rankings [2025]

Most of the markets not yet penetrated by Ukrainian businesses exhibit high Sustainable Development Index scores (above 70), indicating particularly favorable conditions for promoting products in the sustainable category. The leaders in this regard are France (83.1), the United Kingdom (81.9), and Spain (81.0). Consumer Environmental Awareness is also notably high in Singapore (81.8), the United Kingdom (72.6), and France (67.0), suggesting that consumers in these markets are willing to pay a premium for eco-friendly cosmetics. By contrast, Mexico (55.0) and Saudi Arabia (66.7) register lower levels of environmental awareness, which may complicate the introduction of organic product lines.

In terms of purchasing power, Singapore is the clear frontrunner with a GDP per capita of USD 84,734.3, followed by Australia, the Netherlands, Canada, and the United Kingdom — all markets characterized by medium to high demand for premium cosmetics. China (12,614.1) and Mexico (13,790.0), however, have substantially lower purchasing-power figures, calling into question the immediate potential for luxury segments despite China's overall market scale. Political Stability Index scores are highest in Singapore (1.4), Australia (0.9), Canada (0.8), and Japan (1.0), thus reducing entry-risk, whereas China (-0.5), Saudi Arabia (-0.2), and Mexico (-0.6) present negative stability indicators that warrant more cautious market-entry strategies.

Geographic distance further influences export viability: the nearest markets — the Netherlands (2,138 km), Belgium (2,247.8 km), and France (2,690.1 km) — offer lower logistics costs and should be prioritized for initial digital-marketing efforts. Conversely, Singapore, Australia, and Japan are each over 8,000 km away, which increases transportation expenses, although their high incomes and strong environmental awareness may offset the added logistical burden.

The Economic Freedom Index is led by Singapore (84), Australia (76), and the Netherlands (77), indicating particularly business-friendly environments. China (49) and

Saudi Arabia (62) score lower, suggesting that market entry there will require careful regulatory analysis.

Accordingly, the most attractive markets for Ukrainian organic cosmetics exports appear to be the United Kingdom, France, the Netherlands, Belgium, and Canada, as they combine high purchasing power, strong environmental awareness, political stability, and geographical proximity (EU countries). Singapore, Australia, and Japan also present promising opportunities for premium cosmetics, driven by high incomes and environmental consciousness, despite their distance. In contrast, China, Saudi Arabia, and Mexico pose greater risks due to lower political stability, reduced purchasing power, or weaker environmental awareness, necessitating a tailored digital-marketing strategy and product adaptation.

The global market for organic and eco-cosmetics is rapidly evolving under the influence of digital tools, environmental trends, and shifting consumer behaviour. For Ukraine, which seeks to expand exports in HS 3304, it is essential to account for local demand characteristics in each key market. This study, therefore, focuses on trend analysis in the United Kingdom, France, the Netherlands, Belgium, and Canada, as well as on the premium segments of Singapore, Australia, and Japan, markets with the greatest potential for Ukrainian organic cosmetics.

This section examines trends in the organic and eco-cosmetics sector across the key markets identified as most attractive for Ukrainian organic cosmetics exports: the United Kingdom, France, the Netherlands, Belgium, Canada, Singapore, Australia, and Japan.

The British market exhibits strong interest in the concept of transformational luxury, where consumers seek a fusion of natural ingredients, artisanal craftsmanship, and technological innovation. Circular packaging solutions are especially prominent: zero-waste initiatives are expanding, and retailers such as Boots and Superdrug have introduced in-store refill stations. Demand is also rising for beauty-tech offerings, including AI-driven personalization and AR-based skincare consultations. Moreover, inclusivity has become a key trend, with an expanding range of men's grooming products and formulations tailored to diverse skin types and tones. Relevant digital-marketing keywords and social-listening topics include «organic skin care», «refill beauty», «AI skincare», as well as discussions around cruelty-free and sustainable beauty on platforms such as Instagram and TikTok.

The French organic-cosmetics market demonstrates mixed dynamics. Although the broader natural-cosmetics segment is growing at approximately 5 % per annum, certified organic lines face pressure from higher price points and competition from noncertified natural brands. Solid-format products (e.g., shampoo bars), zero-waste approaches, and the use of locally sourced ingredients (such as Alpine botanicals, seaweeds, and superfruits) are particularly popular. The nutricosmetics category, beauty «from within», including skin-targeted nutraceutical supplements, is also expanding rapidly. For digital-market analysis in France, key search terms include «cosmétique bio», «beauté durable», and «cosmétiques solides», alongside monitoring of French-language social-media conversations around these topics.

The Netherlands and Belgium markets follow a Western European trajectory, with consumers increasingly gravitating toward «clean», vegan brands that prioritize responsible packaging and zero-waste concepts. Solid formats, such as shampoo bars and

soap bars, are especially popular, as are brands with transparent supply chains. Digital-market analysis should therefore include search terms in English as well as Dutch and French, for example «biologische cosmetica», «duurzame beauty», and «cosmétiques bio».

The Canadian market is defined by a strong emphasis on sustainability and clean beauty. Refill systems and eco-packaging have become decisive brand-selection factors, while personalization technologies, AI, and AR tools for product recommendations are growing by hundreds of percent year-on-year. Consumers show keen interest in biotech ingredients, antioxidants, and SPF protection, and continue to purchase retinol products despite their potency and associated risks. Online sales account for over half of the market, with buyers actively seeking inclusive offerings and discussing local brands on social media. Key English- and French-language queries for digital monitoring include «organic skincare», «clean beauty», and «eco refill».

In Singapore, eco-haircare is experiencing a boom: solid shampoos, plant-based hair dyes, biodegradable towels, and waterless salon services are in high demand. Innovation in packaging, particularly recycled and refillable formats, and products free of ammonia and harsh chemicals are major draw factors. Forecasts project that by 2025, sustainable haircare products will represent roughly 30 % of the market. For insight into consumer searches, English-language terms such as «solid shampoo», «eco haircare», and «refill cosmetics» should be prioritized.

The Australian market mirrors trends seen in the UK and Canada. Consumers there seek high-end eco-products and show keen interest in biotechnological formulations, cruelty-free cosmetics, zero-waste solutions, and solid cosmetics. Although local data are scarcer, Australians also prioritize transparent manufacturing and safe ingredients. For digital analysis, key search queries include «organic beauty», «sustainable cosmetics», and «cruelty-free skincare».

The Japanese organic-cosmetics market combines a premium segment with a high-tech approach. Consumers favor minimalist care routines and the so-called «glass skin» regimen, which emphasizes gentle cleansers, products for sensitive skin, and shower filters to combat hard water. Japan is also advancing refill systems and eco-packaging. Moreover, biotechnological innovations in premium cosmetics, blending natural ingredients with scientific research, are particularly well developed. For digital monitoring, Japanese keywords such as 《オーガニック化粧品》 (organic cosmetics),》ナチュラルスキンケア》 (natural skin care), and 《サステナブルビューティー》 (sustainable beauty) should be included.

The analyzed markets all demonstrate sustained interest in organic and ecocosmetics, yet each has its own local nuances that must be accounted for when planning market entry. To conduct effective Digital Market Intelligence, it is advisable to develop localized keyword lists for each market, utilize tools like Google Trends, SEMrush, or Ahrefs to gauge topic popularity, and perform social listening to uncover the issues most important to consumers in each country (Table 6).

Cosmencs,	2020–2024	
Market	Query Language(s)	Sample Search Queries
United Kingdom	English	organic skin care, natural cosmetics, sustainable beauty, cruelty- free cosmetics, vegan beauty
France	French	cosmétique bio, maquillage bio, beauté durable, cosmétique vegan
Netherlands	Dutch, English	biologische cosmetica, duurzame beauty, natuurlijke huidverzorging
Belgium	French, Dutch	cosmétique bio, biologische cosmetica, duurzame schoonheidsproducten
Canada	English, French	organic skin care, clean beauty, cosmétique bio
Singapore	English	organic skincare, clean beauty, natural cosmetics
Australia	English	organic beauty, sustainable cosmetics, cruelty-free skincare
Japan	Japanese, English	オーガニック化粧品,ナチュラルスキンケア,サステナブ

Table 6. Comparison of Popular Search Queries in Target Markets for Ukrainian Organic Cosmetics. 2020–2024

To gain a deeper understanding of the market environment and identify opportunities for entering foreign markets, we analyzed the competitive landscape of organic cosmetics in the selected markets by identifying key brands, their positioning, digital strategies, and primary communication channels. This enables Ukrainian producers to clearly see their potential competitors, the trends driving demand, and which marketing tools to deploy (Table 7).

Table 7. Competitive Landscape Analysis in Target Markets for Ukrainian Organic Cosmetics

Market	Active Brands	Positioning	Digital Strategies	Main Channels
United Kingdom	Clean Skincare,	Sustainability, cruelty- free, luxury & mid- range	Storytelling, SEO blogs, email newsletters, eco- influencer collabs	Instagram, TikTok, Pinterest, YouTube, e-commerce (Boots, Lookfantastic)
France	Paris, Nuxe Bio,	Natural local ingredients, pharmacy brands	1 0 - 00	Instagram, Facebook, YouTube, e- commerce (Sephora, Nocibé)
Netherlands & Belgium	Hauschka, Weleda,	Vegan, clean-label transparency, local production	Localized websites, sustainability content, short-form videos	Instagram, TikTok, e-commerce (bol.com, GreenJump)
Canada		Eco-friendly, vegan, local brands	SEO, TikTok presence, email marketing	Instagram, TikTok, Pinterest, e- commerce (Well.ca, Amazon.ca)
Singapore	Kew Organics, Biconi, O'right	Luxury eco segment, clean beauty	Instagram/Facebook engagement, KOL campaigns	Instagram, Facebook, e-commerce (Lazada, Shopee)

Market	Active Brands	Positioning	Digital Strategies	Main Channels
	Nukin Biologi	Clean beauty, cruelty- free, Australian ingredients		Instagram, TikTok, e-commerce (Adore Beauty, Chemist Warehouse)
Japan	THREE Cosmetics, Naturaglacé, O'right, MUJI Skincare		Video content, influencer collabs, Instagram Stories	Instagram, TikTok, YouTube, e- commerce (Rakuten, Amazon Japan)

As the analysis demonstrates, demand for eco-friendly products, transparency, and storytelling predominates across all markets, with Instagram and TikTok serving as the primary digital channels. For Ukrainian companies, this underscores the need to position themselves clearly as sustainable brands, produce localized content, engage actively on social media, and share their own narratives, an approach that can not only differentiate them during wartime but also help attract foreign-currency revenues to support the national economy.

A keyword analysis of the organic/eco-cosmetics topic in the following target markets — the United Kingdom, France, the Netherlands, Belgium, Canada, Singapore, Australia, and Japan — was conducted using SEMrush and Ahrefs. This analysis assesses monthly search volume (MSV), keyword difficulty (KD), and cost per click (CPC), and identifies potentially niche keywords for SEO and PPC strategies (Table 8).

Table 8. Keyword Analysis (SEMrush/Ahrefs) for Target Markets of Ukrainian Organic Cosmetics

MSV	KD	CPC	Comment
2	3	4	5
	United	l Kingdom (Uk	(2
~1 800	Medium	£1-2	Popular sustainability topic
~1 200	Low	-	Seasonal interest
~1 100	Low	-	Niche query, low competition
~10	Low	-	Long-tail query, SEO potential
		France	
~5 400	Medium	€0.80-1.20	Most popular query, high competition
~1 300	Low	€0.60-1.10	Targeted product, lower KD
~1 000	Medium	€0.70	Niche — decorative cosmetics
~600	Low	€0.40	Trend for solid formats
	Ŋ	Netherlands	
~720	Medium	€0.80-1.50	Basic query for the organic topic
~500	Low	€0.50-0.80	Niche — skincare
~250	Low	€0.40	Sustainability topic
~200	Low	€0.30-0.50	Narrow niche, low competition
		Belgium	
~1 100	Medium	€0.70-1.20	French-speaking region
	2 ~1 800 ~1 200 ~1 100 ~10 ~1 300 ~1 000 ~600 ~720 ~500 ~250 ~200	2 3	2 3 4 United Kingdom (UF) ~1 800 Medium £1-2 ~1 200 Low - ~1 100 Low - ~10 Low - France ~5 400 Medium €0.80-1.20 ~1 300 Low €0.60-1.10 ~1 000 Medium €0.70 ~600 Low €0.40 Netherlands ~720 Medium €0.80-1.50 ~500 Low €0.40 ~250 Low €0.40 ~250 Low €0.40 ~200 Low €0.30-0.50 Belgium

Keyword	MSV	KD	CPC	Comment				
1	2	3	4	5				
biologische cosmetica	~300	Low	€0.50	Dutch-speaking region				
duurzame beauty	~200	Low	€0.40	Similar trends as Netherlands				
cosmetica vegan	~120	Low	€0.30	Narrow segment, low competition				
Canada								
organic skincare Canada	~1 900	Medium	CAD \$1.20– 2.50	High interest, good SEO potential				
natural face cream Canada	~900	Low	CAD \$1.00	Popular product				
clean beauty brands Canada	~750	Medium	CAD \$1.50	Clean beauty trend remains strong				
vegan skincare Canada	~400	Low	CAD \$0.80	Narrow segment, low competition				
Singapore								
organic skincare Singapore	~1 100	Medium	SGD \$1.50- 2.50	High interest in organic topic				
eco-friendly beauty Singapore	~450	Low	SGD \$1.20	Sustainability trend				
cruelty-free skincare	~300	Low	SGD \$1.00	Narrow segment, growing interest				
solid shampoo Singapore	~120	Low	SGD \$0.70	Zero-waste trend, niche topic				
Australia								
organic skincare Australia	~2 100	Medium	AUD \$1.50- 2.80	High interest				
vegan beauty Australia	~900	Medium	AUD \$1.20	Strong vegan trend				
cruelty-free skincare	~600	Low	AUD \$1.00	Niche segment				
refillable cosmetics	~150	Low	AUD \$0.80	Zero-waste trend, promising niche				
Japan								
オーガニック化粧品 (organic cosmetics)	~2 400	Medium	¥120–250	Highest interest in organic segment				
ナチュラルスキンケア (natural skincare)	~1 800	Medium	¥90–160	Emphasis on sensitive skin				
サステナブルビューティー (sustainable beauty)	~400	Low	¥80–150	New but promising niche				
リフィル化粧品 (refill cosmetics)	~100	Low	¥60	Zero-waste trend, still modest				

Across all examined markets, search interest in organic, vegan, and eco-friendly cosmetics has consistently risen, with consumers increasingly drawn to natural ingredients, sustainable packaging, and ethical production. This trend opens substantial opportunities for Ukrainian producers to enter new markets even under wartime conditions. At the same time, long-tail keywords with low competition and moderate advertising costs (CPC approximately USD 1–3) offer small and medium-sized Ukrainian brands an effective path for SEO and PPC promotion, provided that content is localized into target-market languages. Moreover, emerging themes such as zero-waste and refillable products are gaining traction in every market, particularly within the premium segment, thereby creating additional niche opportunities for export.

The findings of this study demonstrate that digital marketing serves as a powerful transformational tool for sustainable development, especially during wartime, when

Ukraine must find new ways to preserve and expand its export potential. Across all examined markets, digital marketing enables Ukrainian brands to maintain consumer trust and share their narratives without physical presence; optimize supply chains and logistics to ensure faster, more cost-effective delivery amid mobility constraints; develop digital products and services (e-commerce platforms, virtual showrooms, AR-based trials) that compensate for limited retail outlets; and reinforce environmental and social values through the promotion of organic cosmetics, thereby advancing sustainable-development objectives. Moreover, it functions as a strategic-analysis instrument, allowing exporters to identify high-potential niches and markets, monitor emerging trends, and design targeted SEO and PPC campaigns, critical capabilities for generating much-needed foreigncurrency revenues and underpinning Ukraine's economic resilience during wartime and the post-war reconstruction period. At the same time, the pursuit of aggressive export recovery must be carefully aligned with sustainability principles to avoid compromising long-term ethical and environmental goals. Future strategies should seek to balance urgent economic imperatives with the responsibility to promote equitable, green, and socially conscious development, even in the face of crisis.

5. Discussion

The conducted study confirmed that digital marketing plays a pivotal transformative role in the export development of Ukrainian organic cosmetics, particularly under conditions of war, restricted mobility, and disrupted infrastructure. For Ukraine, which is currently defending its independence while simultaneously seeking to preserve and expand its export potential, this finding carries exceptional significance.

The analysis of international markets for organic and eco-cosmetics (HS 3304) identified the United Kingdom, France, the Netherlands, Belgium, and Canada, as well as the premium segments of Singapore, Australia, and Japan, as the most promising destinations for Ukrainian producers. These markets combine high purchasing power, strong environmental awareness, political stability, and sustained demand for natural, ethical, and technologically innovative products, including eco-friendly solutions, cruelty-free concepts, zero-waste formats, and personalized beauty technologies.

SEMrush/Ahrefs analysis results corroborate a steady demand for organic, vegan, and sustainable beauty themes across all examined markets, with growing interest in niche search queries characterized by low competition and affordable advertising costs. Such dynamics create substantial opportunities for Ukrainian manufacturers, even with constrained budgets, by enabling effective market entry through targeted SEO and paid-search campaigns.

Digital marketing today functions not only as a channel for communication and sales but also as a multifaceted instrument of sustainable development: optimizing logistics, creating digital services, conducting strategic market analysis, and advancing sustainability objectives. Digital platforms: Instagram, TikTok, YouTube, and local ecommerce sites, enable brands to share their stories, build trust, and overcome physical-distance barriers, which is especially vital for Ukrainian businesses during wartime.

The findings of this study carry significant practical implications for Ukrainian producers. First, they provide a clear understanding of which products, ingredients,

packaging formats, and marketing approaches enjoy the greatest demand in each target market, allowing goods and digital strategies to be precisely tailored to local preferences. Second, by leveraging digital tools such as Google Trends, SEMrush, and social-media analytics, Ukrainian companies can markedly reduce their market-research and campaign costs, an essential advantage when resources are constrained by conflict. This approach facilitates rapid testing of new markets and the selection of niches where competition is lower and demand remains consistently high.

Third, entering these prioritized markets can generate substantial foreign-currency inflows, which are urgently needed to support Ukraine's economy and its ongoing reconstruction. Given the high value-added nature of organic cosmetics, even modest export volumes can yield significant hard-currency earnings.

In summary, this research not only delineates consumer trends in key markets but also charts a concrete roadmap for Ukrainian exporters, one that can help preserve jobs, sustain domestic production, and attract foreign currency to rebuild Ukraine's economy. For Ukrainian organic-cosmetics manufacturers, digital marketing thus emerges as both a promotional tool and a guarantor of economic resilience and sustainable growth, even in the most challenging of times.

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