A Review on Digital Transformation: Cosmetic Industry

Aastha Chandel[1], Dr. Namrata Gain[2]

[1]Research Scholar (Management) Bharti Vishwavidyalaya, Durg, Chhattisgarh.
[2]Associate Professor, HOD (Management) Bharti Vishwavidyalaya, Durg, Chhattisgarh.

Abstract

This review paper thoroughly investigates the influence of digital transformation on the cosmetic industry, dissecting the impact of technological advancements, shifts in consumer behavior, and the evolving landscape of marketing and sales strategies within the sector. By synthesizing key findings, the paper offers comprehensive insights into the industry's digital evolution and its ramifications for stakeholders. It explores how digitalization has revolutionized product development, distribution channels, and customer engagement, shaping new opportunities and challenges for cosmetics companies. Furthermore, the paper examines the role of social media, e-commerce platforms, and data analytics in driving innovation and fostering brand-consumer relationships. Through a systematic analysis of industry trends and case studies, the paper illuminates the pathways for success in the digital age while addressing potential pitfalls and areas for improvement.

Keyword: Digital Transformation, Cosmetic, Marketing Strategy, Digital Evolution, Artificial intelligence, Virtual Reality.

1. INTRODUCTION

1. Definition and importance of digital transformation

The last two decades have witnessed an extraordinary socioeconomic transformation. The Internet evolved from a niche communication tool to a dominant presence in most people's lives. Over time, eCommerce has evolved from a mail-order alternative to a formidable global sales platform. As a result, in China and the West, some argue that E-Commerce has reached its saturation point. As a result, some firms are focusing on offline channels to avoid the harsh competition seen online. Cheung et. al (2020)

It's important to note that digital transformation entails more than just setting up an eCommerce platform or implementing digital marketing. Digital transformation is a broad concept that encompasses numerous aspects. Examples include online-offline integration, omni-channel growth strategies, and the use of digital sales methods.

2. Brief overview of the cosmetic industry

Online Face-to-Face Marketing: The makeup and cosmetics industry is well-suited for face-to-face marketing, so it's no surprise that its online version is also gaining popularity. Consumers can view product demos and join video calls to make informed purchasing decisions.

This link between cosmetics and face-to-face marketing has also contributed significantly to KOL marketing's success in this area. Beyond commercial livestreams and KOL marketing, we're seeing this strategy applied on a more personal level. Companies that use or promote social commerce are actively exploring video calls as a sales tactic.

3. Historical Perspective

3.1 Evolution of technology in the cosmetic sector

In response, the sector has introduced artificial intelligence, machine learning, and algorithmic procedures to provide better customer-focused services. A more customized shopping experience has been brought about by the development of cosmetic technology, which includes shade-matching foundations and computerized skin analyses. Choedon et. al. (2020)

Review of Literature

(Kao et al., 2021) Online transactions and e-commerce are gradually taking the place of traditional consumption patterns as information technology advances. Industries proactively engage in digital transformations and e-commerce platform management to gain a competitive advantage. In response to shifts in consumer behavior, online advertising companies and e-commerce platforms aim to increase the amount of time consumers spend on websites and the impact of product advertising by extending the amount of time they browse for. Because clickstream data are not mutually independent and can interject short-, mid-, and long-term data into a time series, estimating time on site is extremely difficult. Such temporal dependence causes confusion and divergence during model formation and makes it harder for standard prediction models to capture or understand the characteristics of website users. In light of this, this study suggested a prediction technique that combines long short-term memory (LSTM) with self-organizing maps (SOM). The LSTM prediction model was then created using the webpage browsing data of each group. Initially, the SOM approach was used to group website users based on similarities in their browsing behavior. By comparing the prediction with the outcomes of three rival methods (SOM with support vector regression, SOM with multilayer perceptron, and single LSTM) on clickstream data provided by a well-known online retailer specializing in selling skin care and cosmetics products in Taiwan, the effectiveness of the suggested method is assessed. The suggested SOM-LSTM model outperforms rival methods in remaining time-on-site prediction, according to the Wilcoxon signed-rank test.

(Rozanova, 2021) Business reality has been profoundly altered by the digital economy. The drastic changes are all around us. The economic behavior of market participants, their interactions, their business strategies, and their market activities are all examples of new patterns. How about rivalry? Which kind of competitive behavior are less relevant in the modern digital economy? And what are the most recent tactics that boost a company's ability to compete? Which digital business strategies might make competition less fierce? And which one of these might incite competition in business? Many, if not all, of our conventional conceptual conceptions about competition, markets, market power, and pertinent market actors have been altered by digitalization. Extensive research is being done on the very nature of competition. From the existing theoretical and empirical assessments of the competition process, what inferences might we make? Initially, we address novel forms. From the existing theoretical and empirical assessments of the competition process, what inferences might we make? We start by addressing new types of competition. The age-old Schumpeterian conundrum of whether competition fosters inventive destruction or only results in the unjust removal of rivals from the market has resurfaced in modern times. There are two very different results from online competition. On the one hand, rivalry is strengthened by reduced transaction costs, increased opportunities to evaluate offerings and pricing, increasing markets across national borders, and low entry barriers. However, by using phantom strategies, phantom products, and phantom plans, as well as new kinds of product differentiation, online activity by the firms might lessen the pressure from competitors. To enhance their overall competitiveness, companies have developed an online-to-offline, or O2O, business model.

(Achsan & Hidayanto, 2023) The global demand for beauty products experiences an annual growth rate ranging from 1.45% to 3.34% due to a rising awareness among individuals about the benefits of using cosmetics. Regrettably, the worldwide COVID-19 pandemic, originating in December 2019, had a detrimental effect on businesses that have direct interactions with individuals, such as the cosmetics industry, which experienced a decline of -7.11 percent in 2020. The objective of this study is to examine the effects of the COVID-19 pandemic on Indonesia's cosmetics industry and analyze the changes in the cosmetics market during the outbreak. This study utilizes the react-cope-adapt (RCA) paradigm to develop a periodization of Indonesia's COVID-19 epidemic. Correlation analysis was conducted to examine the influence of the COVID-19 epidemic on the beauty sector. Moreover, during the COVID-19 pandemic, hidden customer categories and product preferences were discovered through the use of clustering algorithms. According to the study, during the responding phase, COVID-19 instances had a beneficial effect on the sales of cosmetic companies. During

the coping phase, a significant negative correlation was seen between COVID-19 and firm revenue. The detrimental effect of COVID-19 on the company's sales has diminished during the adapt period. The shift in consumer purchasing behavior during the epidemic is further supported by our findings. During the reaction phase, consumers prefer to purchase cosmetics items online rather than in-store. Customers gradually start making in-store purchases throughout the coping phase. In the phase of adaptation, people eventually go back to purchasing cosmetics offline, just like they did before to the pandemic. According to the report, COVID-19 cases increase sales for cosmetic companies. In addition, because government regulations compelled people to work and study from home during the pandemic, skincare items are more popular than makeup products. There are theoretical and practical ramifications to our research. Our findings theoretically corroborate the value of the RCA model and clustering approaches in examining how consumer purchasing patterns shift in times of crisis, like the COVID-19 epidemic. In practice, the beauty industries may foresee this change by focusing on their most popular product to maintain their business and speeding up the digital business transformation.

3.2 Drivers of Digital Transformation

1. Market Trends Influencing Digital Adoption

According to Research & Markets, the global digital transformation market is expected to grow from USD 594.5 billion in 2022 to USD 1,548.9 billion in 2027, representing a CAGR of 21.1% over the projected period.

2. Consumer expectations and behaviour

As a result of altering consumer preferences and market trends, the fashion industry has always been active and evolving. In contrast, the fashion industry has undergone a paradigm shift in recent years: a digital revolution that is reshaping the operational and customer communication strategies of fashion companies. This article explores the multifaceted nature of digital transformation within the fashion industry, encompassing its effects on industry standards, organizational procedures, and consumer conduct. Phillips et. al. (2016)

3.3 Digital Technologies in the Cosmetic Industry

1. E-commerce platforms

Artificial Intelligence (AI) is one such potent instrument that can completely transform the e-commerce industry's consumer experience. Artificial Intelligence (AI) is rapidly advancing e-commerce operations across several domains with its potent data analysis and forecasting algorithms.

2. Augmented Reality (AR) for virtual Reality

Digital transformation is the driving force of contemporary society, particularly since everyone is afflicted with a pandemic. Incorporating a range of services that exploit machine learning, artificial intelligence (AI), and virtual reality (VR) to enhance the purchasing experience has been a component of the transformation process for beauty companies. This includes, among other things, skin consultations, virtual try-ons, diagnostics, and personalization. The sector's consumer experience has been enhanced by technology. "Our objective is to digitize the complete offline experience," stated Deep Ganatra, chief technology officer of direct-to-consumer cosmetics and personal care company MyGlamm. The startup offered a variety of features in 2020, including cosmetics advice, shoppable videos, personalized user-specific products utilizing machine learning algorithms, and QR codes on products that generated incentives. Since the onset of the pandemic, the company asserts that conversion rates for their virtual try-on tool have increased by a factor of five, while usage has increased by a factor of ten. Sharma et. al. (2020)

4. Artificial Intelligence in personalized beauty recommendations

By examining your distinct characteristics, inclinations, and previous purchases, AI is transforming the beauty sector by creating personalized recommendations and goods made just for you. Apps for facial analysis can identify your skin type, tone, and problems to recommend customized skincare regimens.

5. Challenges and Barriers

Some people believe that the following elements are absent from the current cosmetics market: Diversity and Inclusivity: Demand for more diverse and inclusive representation in the cosmetics industry is rising. Products that address a greater variety of skin tones, hair kinds, and cosmetic requirements are in demand.

6. Resistance to change within the industry

Publications & social media: Reading periodicals, blogs, and websites, and keeping up with your preferred brand, manufacturer, artist, or business on Facebook will also assist

you in keeping abreast of developments and trends in the beauty sector. Additionally, you'll observe which trends are gaining traction and which are fading.

6.1 Data security and privacy concerns

The trend of data-driven customization is only going to pick up steam as consumers come to appreciate the benefits of quick and easy buying. However, recent instances of consumer data abuse by well-known organizations continue to raise questions about how beauty brands and merchants may strike the correct balance between customer privacy protection and customization.

7. Future Outlook

7.1 Emerging technologies and their potential impact

New technologies present fresh opportunities for growth and innovation while also exerting a substantial influence on startups. Automation, robotics, artificial intelligence, and machine learning are among the technologies that are transforming the way in which startups compete in a rapidly evolving market.

7.2 Predictions for the future of digital transformation in cosmetics

Brands should eventually transition to a sustainable strategy for using technology to manufacture and deliver goods, thereby making the process safe. The topics of planet-friendly issues will be discussed more.

Conclusion

This review paper has found profound impact of digital transformation on the cosmetic industry. Through a review of technological advancements, changing consumer behavior, and evolving marketing strategies, the paper has highlighted the significant shifts occurring within the sector. The digitalization of product development, distribution channels, and customer engagement has presented both opportunities and challenges for cosmetics companies. Moreover, the integration of social media, e-commerce platforms, and data analytics has played a pivotal role in driving innovation and strengthening brand-consumer relationships. Moving forward, businesses in the cosmetic industry must embrace digital technologies and adapt their strategies to capitalize on emerging opportunities while mitigating potential risks. This paper serves as a comprehensive guide for understanding and harnessing the transformative power of digital technologies in the cosmetic industry.

References

1. Achsan, B. M., & Hidayanto, A. N. (2023). IMPLEMENTATION OF CLUSTERING TECHNIQUE FOR ANALYZING CONSUMER BUYING BEHAVIOR DURING THE COVID-19 PANDEMIC: A CASE IN THE BEAUTY INDUSTRY. Eastern-European Journal of Enterprise Technologies, 3(2(123)). https://doi.org/10.15587/1729-4061.2023.274299

2. Kao, L. J., Chiu, C. C., Wang, H. J., & Ko, C. Y. (2021). Prediction of remaining time on site for e-commerce users: A SOM and long short-term memory study. Journal of Forecasting, 40(7). https://doi.org/10.1002/for.2771

3. Rozanova, N. M. (2021). CONTEMPORARY COMPETITION: PROCESS OR RESULT? World Economy and International Relations, 65(8). https://doi.org/10.20542/0131-2227-2021-65-8-5-13

4. Bilgin, Y. (2018). The effect of social media marketing activities on brand awareness, brand image and brand loyalty. Business & Management Studies: An International Journal, 6(1), 128-148.

5. Cheung, M. L., Pires, G. D., Rosenberger III, P. J., & De Oliveira, M. J. (2020). Driving COBRAs: the power of social media marketing. Marketing Intelligence & Planning, 39(3), 361-376. https://doi.org/10.1108/MIP-11-2019-0583

6. Choedon, T., & Lee, Y. C. (2020). The effect of social media marketing activities on purchase intention with brand equity and social brand engagement: Empirical evidence from Korean cosmetic firms. The Knowledge Management Society of Korea, 21(3), 141-160. 10.15813/kmr.2020.21.3.008.

7. Cohen, J. (1992). Statistical power analysis. Current Directions in Psychological Science, 1(3), 98–101. https://doi.org/10.1111/1467-8721.ep10768783

8. Dahnil, M.I., Marzuki, K.M., Langgat, J., & Fabeil, N.F. (2014). Factors influencing SMEs adoption of social media marketing. Procedia-Social Behavioral Sciences, 148, 119–126. https://doi.org/10.1016/j.sbspro.2014.07.025

9. Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., & Van Wijk, R. (2007). Why pass on viral messages? Because they connect emotionally. Business Horizons, 50(4), 291-304.

10. Elseidi, R. I., & El-Baz, D. (2016). Electronic word of mouth effects on consumers' brand attitudes, brand image and purchase intention: an empirical study in Egypt. The Business and Management Review, 7(5), 268-276.

11. Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods, 39, 175-191.

12. Gautam, V., & Sharma, V. (2017). The mediating role of customer relationship on social media marketing and purchase intention relationship with special reference to luxury fashion brands. Journal of Promotion Management, 23, 872–888.

13. Godey, B., Manthiou, A., Pederzoli, D., Joonas, R., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. Journal of Business Research, 69(12), 5833-5841.

14. Gvili, Y., & Levy, S. (2016). Antecedents of attitudes toward eWOM communication: differences across digital channels. Internet Research, 26 (4), 1030-1051.

15. Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Los Angeles, CA: Sage Publications.

16. Hall-Phillips, A.; Park, J.; Chung, T.-L., Anaza, N.A., & Rathod, S.R. (2016). I (heart) social ventures: Identification and social media engagement. Journal of Business Research, 69, 484–491.

17. Shivani Thakur, Dr. Namrata gain, Chitransh Soni (2023). DIGITAL EMPOWERMENT, DOI – 10.55083/isbn.978-93-94435-05-6.ccedtb112231.