

Digital Transformation Governance Model and Implications for Cosmetic Companies: A Case Study of L'Oreal

Yangyu Xu^{1,a,*}

¹Department of International Business Management, The University of Nottingham Ningbo China, Ningbo, 315100, China

a. hiyyx5@nottingham.edu.cn

**corresponding author*

Abstract: As digital technology advances, more companies are undergoing digital transformation, leading to benefits and profits. The cosmetics industry is also following this trend. This study aims to explore the governance model of cosmetic companies during digital transformation and its impact on the development of the industry, using L'Oreal as a case study for in-depth analysis. By examining L'Oreal's digital transformation case study, this paper reveals the key initiatives and impacts of digital transformation in the cosmetics industry. Specifically, the paper examines L'Oreal's digital transformation initiatives in virtual reality applications, supply chain and operations optimisation, e-commerce platforms and AI product innovation, and analyses the positive impact of these initiatives on the company's business, customer experience and market performance. The study also offers some recommendations for cosmetic companies to address the challenges and risks that may arise during the digital transformation process. By analysing L'Oreal's digital transformation experience in depth, this paper provides a valuable reference for the cosmetics industry to guide other companies to succeed in digital transformation and enhance the overall competitiveness of the industry.

Keywords: Digital transformation, Cosmetic industry, Governance model, L'Oreal

1. Introduction

In recent years, with the rapid growth of digital technology development, increasing numbers of enterprises have developed digital transformation, bringing them benefits and profits [1-3]. The digital transformation of the cosmetics industry has also shown a remarkable trend [4, 5]. For instance, according to data released by Euromonitor International, global cosmetics e-commerce sales have grown rapidly over the past five years, with a compound annual growth rate of more than 20%. Meanwhile, according to survey data from Statista, more than 70% of consumers use social media to get information about cosmetics and refer to reviews and recommendations on social media before making a purchase.

For cosmetic companies, it is important to study their specific governance models and their effects during digital transformation. Through comprehensively exploring these factors, the development of the whole cosmetic industry can be benefited. Firstly, via analyzing the specific measures enforced in digital transformation, other businesses can learn from these methods and take examples from them. Furthermore, it exerts an indicative effect on the industry to analyze the effects caused by those

governance methods, which can provide cosmetic companies with useful experiences and outlook on the next steps.

Currently, some relevant research has been done to explore this territory. For instance, studies have addressed the supply chain of cosmetic products, marketing strategies, and consumer experience in digital transformation [6, 7]. These studies provide an understanding of the impact of digital transformation on cosmetic companies. Nevertheless, those researchers haven't shown precise and comprehensive explorations of the specific steps or effects on the transition process. Therefore, the specific exploration that can motivate the probe in this domain will be demonstrated in this study.

This study is based on the digital transformation case of L'Oreal company, finally aiming at exploring specific steps towards digital transformation of the governance model and its implications for cosmetic companies. The case of L'Oreal will be described, the governance measures and influences will be illustrated, and suggestions will be provided.

2. Case Description

L'Oreal, a global leader in cosmetics and beauty products, has undergone a remarkable digital transformation in recent years. The company has taken various steps to realize digital transformation, including developing VR applications, optimizing supply chain and operation, adopting e-commerce platforms, and using AI for product innovation. Therefore, the analysis of the L'Oreal case can epitomize the impact of digital transformation on the whole of cosmetic companies.

L'Oreal was founded in 1909 by Eugène Paul Louis Schueller, a French chemist. L'Oreal initially specialized in the hair coloring business, but it soon expanded into other cleansing and beauty products. L'Oreal currently sells more than 500 brands and thousands of individual products in the beauty business, including hair coloring, perms, hair styling, body and skin care, cleansers, make-up and fragrances. Their products are distributed through a variety of distribution channels, from hair salons and perfumeries to supermarkets, health/beauty shops, pharmacies, and direct mail [8].

In recent years, L'Oreal company has taken various measures to implement digital transformation and has achieved positive results. It has developed VR applications, optimized supply chains and operations, adopted e-commerce platforms, and used AI for product innovation. L'Oreal has invested significantly in these digitalization procedures to obtain a well-digital company model.

The current status of L'Oreal has been comprehensively digitalized via steps taken. After embracing digital transformation, consumers are more satisfied with its products and services. Additionally, the company witnessed significant growth in sales after digitalization.

3. Analysis of the problems

3.1. VR Application

Firstly, L'Oreal company develops VR applications for digital transformation. Launching the L'Oreal Paris Makeup Genius app is the key initiative in this transformation. This mobile application allows users to virtually try on makeup products before purchasing, providing a unique and engaging shopping experience. The app has achieved a resounding success, with millions of downloads and significant increases in conversion rates [9]. By using it, users can experience the effect of cosmetics on their faces for free and choose the most suitable product more accurately. L'Oreal has recognized that the traditional method of purchasing cosmetics, mostly relying on guesswork and trial-and-error, was ripe for disruption. The app addresses this need by allowing users to virtually trial makeup products before making a purchase. This can eliminate the risk of buying unsuitable products. Moreover, it enhances the shopping experience by providing a fun and interactive platform.

3.2. Supply Chain and Operation Optimization

Beyond enhancing customer experience, the digital transformation of L’Oreal also involves optimizing its supply chain and operations. The company has employed advanced analytics and predictive modeling to forecast demand, inventory management, and production planning. These digital tools have enabled L’Oreal to reduce waste, improve efficiency, and respond quickly to market changes. L’Oreal has implemented a global end-to-end planning system, which has been expanded through a digitalization initiative. By using Platform-as-a-Service, this initiative allows the company to share packaging components and raw material requirements digitally with its extensive supplier base [10]. This initiative, called Demand Sense, aims to utilize the cloud platform.

Consequently, it integrates the daily delivery order mix with real-time consumer demand and e-commerce sales data from L’Oreal’s branded retail shops. By doing so, the company aims to leverage machine learning to automate demand planning calculations. This approach enables L’Oreal to develop a more accurate understanding of consumer demand and make informed decisions regarding its supply chain. The company can automate predicting demand by utilizing machine learning, leading to more efficient planning and reduced costs.

3.3. E-commerce Platforms

A key aspect of L’Oreal’s digital transformation is the adoption of e-commerce platforms. It allows the company to sell its products online and provides a direct channel to interact with customers, gather feedback, and respond to their needs quickly. L’Oreal has collaborated with various e-commerce platforms, such as Amazon and Alibaba, to expand its market reach [11]. These partnerships effectively increase the brand’s visibility and facilitate the sale of its products in emerging markets. Beyond pure sales, L’Oreal has also utilized e-commerce platforms to engage customers via interactive content, such as tutorials and how-to videos. This content educates customers on how to use the products and serves as a form of marketing, indirectly promoting the brand and its products. Furthermore, L’Oreal has invested in technology enabling omnichannel retailing, allowing customers to switch between physical stores and online platforms seamlessly. Integrating online and offline effectively creates a more cohesive shopping journey for customers, enhancing their overall satisfaction.

3.4. AI for Product Innovation

L’Oreal is dedicated to developing ethical algorithms that promote inclusivity and eliminate bias. One example of this commitment is the development of La Roche-Posay’s SpotScan, a free skin analysis tool. This app allows users to analyze their skin through three selfies and uses predictive AI to offer personalized skincare advice. L’Oreal’s team created a comprehensive data set that includes various skin types from the Fitzpatrick scale to ensure inclusivity. Dermatologists reviewed the images and data collected from individuals of diverse skin colors and evaluated each person on the GEA scale (Global Acne Extremity) [12]. By utilizing this inclusive data set, L’Oreal has developed a predictive AI algorithm that can detect and analyze different skin problems more inclusively. This approach helps ensure that the skincare advice the SpotScan app provides is relevant and beneficial to users of all skin types and colors.

4. Suggestions

The case study of L’Oreal shows that digital transformation has brought significant benefits to the company. The digital success achieved by L’Oreal brings effective insights to other companies in the cosmetics industry. Firstly, it is vital for cosmetic enterprises to utilize technology to continuously

catch up with the digital generation. Since current people are used to the digital age and are skilled in using online platforms, they provide great opportunities for companies to interact with them online. The VR application and e-commerce platforms are typical approaches. Additionally, cosmetics companies are inspired to realize digital transformation in the product aspect, which can considerably improve working efficiency and productivity. The supply chain, operation, and the use of AI are efficient instances that have been implemented.

Meanwhile, some potential risks are present in digital transformation as well. Several suggestions are helpful for companies in the digital transformation process. The first suggestion is to establish a strict data access mechanism. Since a large amount of data is stored on the internet, it threatens data security and causes private data and information breaches. Therefore, the confidentiality of data and information is going to need fixing. For instance, LinkedIn, posted data related to 700 million users on a dark web forum in 2021, which affects more than 90 percent of its user base. Using data-scraping techniques, a hacker nicknamed “God User” took advantage of the site’s API and dumped the first information set on an estimated 500 million customers [13]. Thus, it is necessary to build up a strict data access mechanism., which can protect data security and identify external personnel with purposes of data theft.

The second suggestion is to implement digital training for employees. With the development of the digital society, upskilling is the most effective way to respond to changing technology. This can help companies adapt to changing business environments by helping teams learn new skills and use the latest digital tools [14]. Thus, employees equipped with advanced digital skills can bring profits and benefits for corporations, which indicates the significance of digital training for employees.

5. Conclusion

This study uses the CAS methodology and finally finds that L’Oreal, a typical cosmetic company, has enforced VR application, digital supply chain and operation, e-commerce platform, and AI technology in the digital transformation. Meanwhile, each of these measures has exerted positive effects on the company. Lastly, several recommendations are provided to the companies in the digital transformation process. The case study of L’Oreal provides valuable insights into the implications for cosmetic companies in the rapidly evolving digital landscape. The research highlights the significant impact of digitalization on the cosmetics industry and emphasizes the importance of embracing technological advancements to stay competitive and meet changing consumer expectations.

L’Oreal’s digital transformation journey, including the adoption of VR applications, optimization of supply chain and operations, utilization of e-commerce platforms, and integration of AI for product innovation, has proven successful in enhancing customer experience, improving operational efficiency and driving sales growth. These strategic initiatives have enabled L’Oreal to adapt to the digital age, engage with customers more effectively, and innovate in product development.

The study underscores the importance of cosmetic companies leveraging technology and digital capabilities to connect with customers in the digital era. Implementing VR applications, e-commerce platforms, and AI-driven innovations can significantly enhance customer experience and drive business growth. Moreover, the research highlights the need for cosmetic companies to establish robust data security measures and provide digital training for employees to mitigate potential risks associated with digital transformation.

Overall, the case study of L’Oreal serves as a roadmap for other cosmetic companies looking to embark on their digital transformation journey. By following the footsteps of L’Oreal and adopting innovative digital strategies, cosmetic companies can position themselves for success in the digital age and unlock new opportunities for growth and competitiveness in the industry.

References

- [1] Vaz, N. (2021) *Digital business transformation: How established companies sustain competitive advantage from now to next*. John Wiley & Sons.
- [2] Zhai, H., Yang, M., & Chan, K. C. (2022) Does digital transformation enhance a firm's performance? Evidence from China. *Technology in Society*, 68, 101841.
- [3] Jeza, S., & Lekhanya, L. (2022) The influence of digital transformation on the growth of small and medium enterprises in South Africa. *Problems and Perspectives in Management*, 20(3), 297-309.
- [4] Choi, E. (2022) A paradigm shift in beauty education in response to the digital transformation era based on analysis of cosmetics and beauty industry trends. *Journal of the Korean Society of Cosmetology*, 28(4), 675-688.
- [5] Xin, F. (2020) Online Internet Influencers: Reshaping the Digital Business in the Cosmetics Industry in China. In *2020 2nd International Conference on Economic Management and Cultural Industry (ICEMCI 2020)* (pp. 106-110). Atlantis Press.
- [6] Ponomareva, E., & Nozdrenko, E. (2021) Digital Transformation of Marketing Strategy of Western Firms in Chinese Cosmetic Market. *Digital Strategies in a Global Market: Navigating the Fourth Industrial Revolution*, 229-241.
- [7] Anisa, F. M. (2023) The implementation of halal supply chain in the cosmetics industry: case study of product sales in Indonesia. In *Handbook of Research on Promoting Logistics and Supply Chain Resilience Through Digital Transformation* (pp. 286-297). IGI Global.
- [8] Wikipedia. (2024) L'Oréal. Retrieved April 5, 2024, from <https://en.wikipedia.org/wiki/L%27Or%C3%A9al>
- [9] Paris, L. (2024) Makeup genius-from day to night. Retrieved April 5, 2024, from <https://www.lorealparisusa.com/beauty-magazine/makeup/makeup-looks/makeup-genius-from-day-to-night>
- [10] Ralf, W., & Seifert, R. M. (2024). L'Oréal: The beauty of supply chain digitalization. Retrieved April 5, 2024, from <https://www.imd.org/ibyimd/innovation/loreal-the-beauty-of-supply-chain-digitalization>
- [11] L'Oreal Groupe. (2020) Decoding digital transformation. Retrieved April 6, 2024, from <https://www.loreal.com/en/beauty-science-and-technology/beauty-tech/digital-transformation/>
- [12] Wired Brand Lab. (2023) How L'Oréal uses tech to transform the world of beauty. Retrieved April 6, 2024, from <https://www.wired.com/sponsored/story/how-loreal-uses-tech-to-transform-the-world-of-beauty/>
- [13] Hill, M., & Swinhoe, D. (2022) The 15 biggest data breaches of the 21st century. Retrieved April 10, 2024, from <https://www.csoonline.com/article/534628/the-biggest-data-breaches-of-the-21st-century.html>
- [14] Box Communications. (2023) The importance of employee training and upskilling in digital transformation. Retrieved April 15, 2024, from <https://blog.box.com/importance-of-employee-training-and-upskilling-in-digital-transformation>