

# DIGITAL TRANSFORMATION AND SUSTAINABILITY IN THE COSMETICS INDUSTRY: ENHANCING ANTIFRAGILITY

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**Abstract:** This paper examines the integration of digital transformation and sustainability within the cosmetics industry, focusing on their role in enhancing antifragility—a concept where systems benefit and grow from disorder. As the cosmetics sector faces rapid market evolution and increasing regulatory and consumer pressures, embracing digital and sustainable practices offers a strategic advantage. Through mixed-methods research, including case studies of industry leaders like Shiseido and Coty, this study explores how these companies have incorporated digital innovation and environmental considerations into their core strategies to not only mitigate risks but also seize growth opportunities during disruptions. The findings indicate that digital tools and sustainability practices not only help in adapting to immediate market changes but also in driving long-term organizational resilience and competitive advantage. By aligning digital capabilities with sustainable development, cosmetics companies can thrive in an uncertain business environment, turning potential challenges into vectors for innovation and market leadership.

**Key words:** antifragility; digital transformation; sustainability; cosmetics industry; competitive advantage

**JEL Classification:** M10; O32; Q55; L65; M15

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## **References:**

1. Bharadwaj, A., El Sawy, O.A., Pavlou, P.A. and Venkatraman, N.V., 2013. Digital business strategy: toward a next generation of insights. *MIS Quarterly*, 37(2), pp.471-482. <https://doi.org/10.25300/MISQ/2013/37.2.3>.
2. Bocken, N.M., Short, S.W., Rana, P. and Evans, S., 2014. A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, pp.42-56. <https://doi.org/10.1016/j.jclepro.2013.11.039>.
3. Clark, G.L., Feiner, A. and Viehs, M., 2015. From the stockholder to the stakeholder: How sustainability can drive financial outperformance. Available at SSRN 2508281. <https://doi.org/10.2139/ssrn.2508281>.
4. Coty, 2020. Annual Report 2020 (Form 10-K). [online] Available at: [https://s23.q4cdn.com/980953510/files/doc\\_financials/2020/ar/Annual-Report-to-Stockholders-2020.pdf](https://s23.q4cdn.com/980953510/files/doc_financials/2020/ar/Annual-Report-to-Stockholders-2020.pdf) [Accessed 23 August 2024].
5. Coty, 2021. Annual Report 2021 (Form 10-K). [online] Available at: [https://s23.q4cdn.com/980953510/files/doc\\_financials/2021/ar/COTY-Annual-Report-2021\\_Final.pdf](https://s23.q4cdn.com/980953510/files/doc_financials/2021/ar/COTY-Annual-Report-2021_Final.pdf) [Accessed 23 August 2024].
6. Coty, 2022. Annual Report 2022 (Form 10-K). [online] Available at: [https://s23.q4cdn.com/980953510/files/doc\\_financials/2022/ar/COTY-Annual-Report-2022.pdf](https://s23.q4cdn.com/980953510/files/doc_financials/2022/ar/COTY-Annual-Report-2022.pdf) [Accessed 23 August 2024].
7. Eccles, R.G., Ioannou, I. and Serafeim, G., 2014. The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), pp.2835-2857. <https://doi.org/10.1287/mnsc.2014.1984>.
8. Eagar, R., van Oene, F., Boulton, C., Roos, D. and Dekeyser, C., 2011. The future of innovation management: the next 10 years. *Prism*, 1, pp.21-37.
9. Elgazzar, Y., El-Shahawy, R. and Senousy, Y., 2022. The role of digital transformation in enhancing business resilience with pandemic of COVID-19. In: *Digital Transformation Technology: Proceedings of ITAF 2020*. Springer, pp.323-333.
10. Elkington, J. and Rowlands, I.H., 1999. Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(4), pp.42-43.
11. Euromonitor International, 2021. World Market for Beauty and Personal Care. [online] Available at: <https://www.euromonitor.com/>

- article/world-market-for-beauty-and-personal-care-2 [Accessed 23 August 2024].
12. Hart, S.L. and Milstein, M.B., 2003. Creating sustainable value. *Academy of Management Perspectives*, 17(2), pp.56-67. <https://doi.org/10.5465/ame.2003.10025194>.
  13. Kane, G.C., Palmer, D., Phillips, A.N., Kiron, D. and Buckley, N., 2015. Strategy, not technology, drives digital transformation. *MIT Sloan Management Review*, 14(1), pp.1-25.
  14. Lacy, P. and Rutqvist, J., 2015. *Waste to Wealth: The Circular Economy Advantage*. Springer.
  15. Matt, C., Hess, T. and Benlian, A., 2015. Digital transformation strategies. *Business & Information Systems Engineering*, 57(5), pp.339-343. <https://doi.org/10.1007/s12599-015-0401-5>.
  16. Melville, N.P., 2010. Information systems innovation for environmental sustainability. *MIS Quarterly*, 34(1), pp.1-21. <https://doi.org/10.2307/20721412>.
  17. Porter, M.E. and Kramer, M.R., 2018. Creating shared value: How to reinvent capitalism—And unleash a wave of innovation and growth. In: *Managing Sustainable Business: An Executive Education Case and Textbook*. Springer, pp.325-345.
  18. Sarkis, J., Zhu, Q. and Lai, K.H., 2011. An organizational theoretic review of green supply chain management literature. *International Journal of Production Economics*, 130(1), pp.1-15. <https://doi.org/10.1016/j.ijpe.2010.11.010>.
  19. Shiseido, 2020. Annual Report 2019. [online] Available at: <https://corp.shiseido.com/report/en/2019/> [Accessed 23 August 2024].
  20. Shiseido, 2021. Integrated Report 2020. [online] Available at: <https://corp.shiseido.com/report/en/2020/> [Accessed 23 August 2024].
  21. Shiseido, 2022. Integrated Report 2021. [online] Available at: <https://corp.shiseido.com/report/en/2021/> [Accessed 23 August 2024].
  22. Taleb, N.N., 2012. *Antifragile: Things That Gain from Disorder*. Random House.
  23. Westerman, G., Bonnet, D. and McAfee, A., 2014. *Leading Digital: Turning Technology into Business Transformation*. Harvard Business Press.