

LEVERAGING ANTIFRAGILITY: STRATEGIC RESPONSES IN THE COSMETICS INDUSTRY DURING ECONOMIC UNCERTAINTIES

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Abstract: This paper examines how major cosmetics companies – L’Oréal, Estée Lauder, and Procter & Gamble – have applied antifragility principles during recent periods of economic turbulence. Using a qualitative multi-case design based solely on secondary sources, it analyzes corporate reports, financial data, and market indicators from 2018–2023 to understand how these firms transform external shocks into opportunities for growth and innovation. The assessment focuses on sales dynamics, market positioning, and innovation activity as markers of antifragile performance. The analysis shows that companies investing in digitalization, sustainability, and flexible supply chains navigated the COVID-19 crisis more effectively, reducing vulnerability while accelerating strategic development. Their ability to adapt proactively supported stable expansion and strengthened competitive advantages. The study contributes a structured perspective on antifragility within a rapidly evolving industry, offering both conceptual clarification and practical guidance for organizations facing volatile market environments.

Key words: antifragility; economic resilience; cosmetics industry

JEL Classification: L65; M21; O32

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References:

1. Adobor, H. and Kudonoo, E.C. 2025. Antifragility and organizations: an organizational design perspective. *Leadership & Organization Development Journal*, 46(2), pp. 351–375.
2. Aven, T. 2015. The concept of antifragility and its implications for the practice of risk analysis. *Risk Analysis*, 35(3), pp. 476–483. <https://doi.org/10.1111/risa.12279>.
3. Bardey, A., Almaguer Buentello, D., Rogaten, J., Mala, A. and Khadaroo, A. 2023. Exploring the post-COVID lipstick effect: A short report. *International Journal of Market Research*, 14707853231201856. <https://doi.org/10.1177/14707853231201856>.
4. 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.
5. Corsaro, D. and Frizzo, M. 2024. Antifragile crisis communication: an exploratory study. *SINERGIE – Italian Journal of Management*, 42(3), pp. 131–155. <https://doi.org/10.7433/s125.2024.07>.
6. Corvello, V., Verteramo, S., Nocella, I. and Ammirato, S. 2023. Thrive during a crisis: the role of digital technologies in fostering antifragility in small and medium-sized enterprises. *Journal of Ambient Intelligence and Humanized Computing*, 14(11), pp. 14681–14693. <https://doi.org/10.1007/s12652-022-03816-x>.
7. Danchin, A., Binder, P.M. and Noria, S. 2011. Antifragility and tinkering in biology (and in business): flexibility provides an efficient epigenetic way to manage risk. *Genes*, 2(4), pp. 998–1016. <https://doi.org/10.3390/genes2040998>.
8. Elkington, J. and Rowlands, I.H. 1999. Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(1), pp. 42–45.
9. Estée Lauder 2018. Annual Report (Form 10-K) [online]. Available at: https://otp.tools.investis.com/clients/us/estee_lauder4/SEC/sec-show.aspx?FilingId=12934016&Cik=0001001250&Type=PDF&hasPdf=1 [Accessed: 15 February 2025].
10. Estée Lauder 2019. Annual Report (Form 10-K) [online]. Available at: https://otp.tools.investis.com/clients/us/estee_lauder4/SEC/sec-show.aspx?FilingId=13609402&Cik=0001001250&Type=PDF&hasPdf=1 [Accessed: 15 February 2025].

11. Estée Lauder 2020. Annual Report (Form 10-K) [online]. Available at: <https://media.elcompanies.com/files/e/estee-lauder-companies/universal/investors/investor-resources/toolkit/form-10k-2021.pdf> [Accessed: 15 February 2025].
12. Estée Lauder 2021. Annual Report (Form 10-K) [online]. Available at: https://otp.tools.investis.com/clients/us/estee_lauder4/SEC/sec-show.aspx?FilingId=15192921&Cik=0001001250&Type=PDF&hasPdf=1 [Accessed: 15 February 2025].
13. Estée Lauder 2022. Annual Report (Form 10-K) [online]. Available at: https://otp.tools.investis.com/clients/us/estee_lauder4/SEC/sec-show.aspx?FilingId=16037879&Cik=0001001250&Type=PDF&hasPdf=1 [Accessed: 15 February 2025].
14. Estée Lauder 2023. Annual Report (Form 10-K) [online]. Available at: https://otp.tools.investis.com/clients/us/estee_lauder4/SEC/sec-show.aspx?FilingId=16875427&Cik=0001001250&Type=PDF&hasPdf=1 [Accessed: 15 February 2025].
15. Gardner, K. 2021. *Beauty during a pandemic: the impact of COVID-19 on the cosmetic industry*. University Honors College, Middle Tennessee State University.
16. Holbeche, L. 2023. *The agile organization: how to build an engaged, innovative and resilient business*. London: Kogan Page Publishers.
17. Iannuzzi, A. 2024. *Greener products: The making and marketing of sustainable brands*. Boca Raton: CRC Press.
18. Jiang, Y. and Stylos, N. 2021. Triggers of consumers' enhanced digital engagement and the role of digital technologies in transforming the retail ecosystem during COVID-19 pandemic. *Technological Forecasting and Social Change*, 172, 121029. <https://doi.org/10.1016/j.techfore.2021.121029>.
19. Jones, K.H. 2014. Engineering antifragile systems: A change in design philosophy. *Procedia Computer Science*, 32, pp. 870–875. <https://doi.org/10.1016/j.procs.2014.05.471>.
20. L'Oréal 2021. L'Oréal 2020 Annual Report [online]. Available at: <https://www.loreal.com/-/media/project/loreal/brand-sites/corp/master/lcorp/documents-media/publications/annual-reports/loreal2020annualreport.pdf> [Accessed: 15 February 2025].

21. L'Oréal 2022. L'Oréal 2021 Annual Report [online]. Available at: https://www.loreal-finance.com/system/files/2022-03/LOREAL_2021_Annual_Report_o.pdf [Accessed: 15 February 2025].
22. L'Oréal 2023. Universal Registration Document [online]. Available at: https://www.loreal-finance.com/system/files/2024-03/LOREAL_2023_Universal_Registration_Document_en.pdf [Accessed: 15 February 2025].
23. L'ORÉAL. 2023. *L'Oréal 2022 Annual Report* [online]. Available at: https://www.loreal-finance.com/system/files/2023-03/LOREAL_2022_Annual_Report.pdf [Accessed: 15 February 2025].
24. Nikoogar, E., Stevenson, M. and Varsei, M. 2024. Building an antifragile supply chain: a capability blueprint for resilience and post-disruption growth. *Journal of Supply Chain Management*, 60(1), pp. 13–31. <https://doi.org/10.1111/jscm.12250>.
25. Nikoogar, E., Varsei, M. and Wieland, A. 2021. Gaining from disorder: Making the case for antifragility in purchasing and supply chain management. *Journal of Purchasing and Supply Management*, 27(3), 100699. <https://doi.org/10.1016/j.pursup.2021.100699>.
26. Pineda, O.K., Kim, H. and Gershenson, C. 2019. A novel antifragility measure based on satisfaction and its application to random and biological Boolean networks. *Complexity*, 3728621. <https://doi.org/10.1155/2019/3728621>.
27. Procter & Gamble 2018. Annual Report 2018 (Form 10-K) [online]. Available at: https://s1.q4cdn.com/695946674/files/doc_financials/2018/7185c9ee-94ab-d9fd-a414-8c443b92941c.pdf [Accessed: 15 February 2025].
28. Procter & Gamble 2019. Annual Report 2019 (Form 10-K) [online]. Available at: https://s1.q4cdn.com/695946674/files/doc_financials/2019/c81a4a01-2a87-aa2b-eaaf-3280af2dcb05.pdf [Accessed: 15 February 2025].
29. Procter & Gamble 2020. Annual Report 2020 (Form 10-K) [online]. Available at: https://s1.q4cdn.com/695946674/files/doc_financials/2020/ar/FY1920-10-K-A-Report.pdf [Accessed: 15 February 2025].
30. Procter & Gamble 2021. Annual Report 2021 (Form 10-K) [online]. Available at: https://assets.ctfassets.net/oggad6svuzkv/3qbxcfyzNo4dDEnoYM7Pzj/6c7ae1393e16a9f182fec90d6478ed15/2021_form_10k.pdf [Accessed: 15 February 2025].

31. Procter & Gamble 2022. Annual Report 2022 (Form 10-K) [online]. Available at: https://s1.q4cdn.com/695946674/files/doc_financials/2022/ar/1a1b8ef0-7de1-4b8e-be29-46b22c2dd110.pdf [Accessed: 15 February 2025].
32. Procter & Gamble 2023. Annual Report 2023 (Form 10-K) [online]. Available at: https://s1.q4cdn.com/695946674/files/doc_financials/2023/ar/f3672cf9-5f0c-4352-aa0f-044f80466073.pdf [Accessed: 15 February 2025].
33. Raza, M., Khalid, R., Loureirco, S. M. C. & Han, H. 2024. Luxury brand at the cusp of lipstick effects: Turning brand selfies into luxury brand currency to thrive via richcession. *Journal of Retailing and Consumer Services*, 79, 103850.
34. Redmond, A. M., Grizos, K., Vlachopanagiotis, T., Manthos, E., Moschopoulou, K., Rezgui, Y. and Cardif, W. U. 2024. Antifragile Cities—Decision Support Tools to Support the Implementation of the Climate-neutral and Smart Cities. *Modern Systems Design & Applications*, 1, pp. 1–10.
35. Russo, D. and Ciancarini, P. 2017. Towards antifragile software architectures. *Procedia Computer Science*, 109, pp. 929–934. <https://doi.org/10.1016/j.procs.2017.05.426>.
36. Taleb, N.N. 2012. *Antifragile: Things that gain from disorder*. New York: Random House.
37. Taleb, N.N. and Douady, R. 2013. Mathematical definition, mapping, and detection of (anti) fragility. *Quantitative Finance*, 13(11), pp. 1677–1689. <https://doi.org/10.1080/14697688.2013.800219>.
38. Teece, D.J. 2018. Dynamic capabilities as (workable) management systems theory. *Journal of Management and Organization*, 24(3), pp. 359–368. <https://doi.org/10.1017/jmo.2017.75>.