CHAPTER 6

BIBLIOMETRIC ANALYSIS OF PUBLICATIONS ON FURNITURE INNOVATION

Nadir ERSEN¹

INTRODUCTION

Innovation stands out as a decisive factor in businesses achieving sustainable competitiveness in today's knowledge-based economies. Since Schumpeter's (1934) theory of creative destruction, it has been recognized that innovation is not limited to technical inventions; it also manifests itself in product, process, marketing, and organizational areas. Accordingly, innovation is not limited to high-technology sectors but has also become a fundamental strategic element in traditional industries characterized by low technology, such as furniture, textiles, and footwear (Lindman et al., 2008; Ratnasingam et al., 2018; Kesdi, 2019).

The furniture industry has become one of the rapidly developing sectors of strategic importance, especially in Turkey and international markets, thanks to the integration of traditional cultural motifs with modern production techniques and the widespread use of information and technology (Korkmaz, 2019).

Innovation in the furniture sector often emerges through design-based product innovation, the digitalization of production processes, the implementation of flexible production systems, and customer-focused marketing strategies, rather than technological breakthroughs. In this context, the role of design is at the forefront and a decisive factor in creating competitive advantage for companies. For example, research conducted in the Turkish furniture sector reveals that industrial designers employed by large-scale companies play a key role in new product development processes (Kesdi, 2019).

Innovation also has an impact on sectoral development. For example, in Canada, the furniture sector has successfully pursued an innovation strategy focusing

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Assoc. Dr., Artvin Çoruh University Artvin Vocational School, nadirersen20@artvin.edu.tr, ORCID iD:0000-0003-3643-1390

Analyses of collaborations between authors and countries show that A.P. Barcic is the author with the most collaborations and the England is the country with the most extensive international collaborations. Particularly close publishing collaboration has been observed between the US and China. Sydor et al. (2022) found similar results in the study on bilometric analysis of furniture design. The UK has produced the most research on furniture design, while China and the US have the most collaboration. However, in recent years, countries such as the Philippines, South Korea, Ireland, Egypt, and Palestine have become active in the field. This demonstrates the expansion of furniture innovation research into a global scope.

According to the keyword analysis, concepts such as "design," "sustainability," and "competitiveness" are used as frequently as "innovation" and "furniture." This demonstrates that design, sustainability, and competitiveness are among the core themes in the furniture innovation literature. Among the prominent trends in recent years are entrepreneurial orientation, Industry 4.0, circular economy, sustainable design, the Kano model, and social innovation. These trends demonstrate that furniture innovation research is no longer limited to product development but rather sits within a broader systemic and social framework.

The increase in the number of publications, collaborations between authors, country-specific influences and thematic trends indicate that the field is developing. However, the fact that citation levels do not parallel productivity reveals the importance of conducting quality-oriented studies in the future.

Productive countries like China should be encouraged to publish in more influential journals to increase their citation levels. Collaborations should be particularly important with countries with high citation rates (e.g., Italy and Sweden). Focusing on emerging themes such as entrepreneurship, digitalization, and sustainability can increase both the visibility and impact of publications.

REFERENCES

- Abu, F., Gholami, H., Saman, M.Z.M., Zakuan, N., Sharif, S., & Streimikiene, D. (2021). Pathways of Lean Manufacturing in Wood and Furniture Industries: A Bibliometric and Systematic Review. *European Journal of Wood and Wood Products*, 79, 753–772. https://doi.org/10.1007/s00107-021-01713-2
- Alhola, K., Ryding, S.O., Salmenperä, H., & Busch, N.J. (2019). Exploiting the Potential of Public Procurement: Opportunities for Circular Economy. *Journal of Industrial Ecology*, 23(1), 96-109. https://doi.org/10.1111/jiec.12770
- Alsharif, A. H., MD Salleh, N. Z., & Baharun, R. (2020). Research Trends of Neuromarketing: A Bibliometric Analysis. *Journal of Theoretical and Applied Information Technology*, 95(15), 2948-2962.
- Asheim, B.T., & Coenen, L. (2005). Knowledge Bases and Regional Innovation Systems: Comparing Nordic Clusters. *Research Policy*, 34(8), 1173-1190. https://doi.org/10.1016/j.respol.2005.03.013 Bayazıt, E. (2024). Academic Traces of Urban Furniture: A Bibliometric Perspective. *Journal of Ur-*

- ban Studies, 45(16), 1403-1434.
- Bock, T. (2015). The Future of Construction Automation: Technological Disruption and the Upcoming Ubiquity of Robotics. *Automation in Construction*, 59, 113-121.
- https://doi.org/10.1016/j.autcon.2015.07.022
- Bornmann, L., & Daniel, H.D. (2008). What do citation counts measure? A review of studies on citing behavior. *Journal of Documentation*, 64(1), 45–80.
- Dangelico, R.M., Pontrandolfo, P., & Pujari, D. (2013). Developing Sustainable New Products in the Textile and Upholstered Furniture Industries: Role of External Integrative Capabilities. *Journal of Product Innovation Management*, 30(4), 642-658. https://doi.org/10.1111/jpim.12013
- Demirel, S., & Eyüboğlu, H. (2024). A Bibliometric Evaluation on Furniture Joints Studies. *Turkish Journal of Forestry*, 25(1), 56-63.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to Conduct a Bibliometric Analysis: An Overview and Guidelines. *Journal of Business Research*, 133, 285-296. https://doi.org/10.1016/j.jbusres.2021.04.070
- Drayse, M. H. (2011) Globalization and Innovation in a Mature Industry: Furniture Manufacturing in Canada. *Regional Studies*, 45(3), 299-318. https://doi.org/10.1080/00343400903241501
- Fuchs, C., & Schreier, M. (2011). Customer Empowerment in New Product Development. *Journal of Product Innovation Management*, 28, 17-32. https://doi.org/10.1111/j.1540-5885.2010.00778.x
- Gemser, G., & M.A.A.M., Leenders, (2001). How Integrating Industrial Design in the Product Development Process Impacts on Company Performance. *Journal of Product Innovation Management*, 18(1), 28-38. https://doi.org/10.1016/S0737-6782(00)00069-2
- Grzegorzewska, E., & Więckowska, M. (2016). Selected Aspects of Innovation in The Furniture Industry Empirical Research Findings. *Drewno*, 59(198), 147-161. https://doi.org/10.12841/wood.1644-3985.175.12
- Hassan, W., & Duarte, A. E. (2024). Bibliometric Analysis: A few Suggestions. *Current Problems in Cardiology*, 49, 102640. https://doi.org/10.1016/j.cpcardiol.2024.102640
- Jaussi, K.S., & Dionne, S.D. (2003). Leading for Creativity: The Role of Unconventional Leader Behavior. Leadership Quarterly, 14(4-5), 475-498. https://doi.org/10.1016/S1048-9843(03)00048-1
- Kesdi Başar, N. (2019). New Product Development in the Turkish Furniture Industry: Experiences of in-House Industrial Designers. Master Thesis, Middle East Technical University Graduate School of Natural and Applied Sciences, Ankara.
- Korkmaz, B. (2019). Competition Analysis in the Furniture Industry: A Qualitative Research on Düzce Furniture Industry. Master Thesis, Düzce University Institute of Social Sciences, Düzce.
- Lindman, M., Scozzi, B., & Otero-Neira, C. (2008). Low-tech, Small and Medium Sized Enterprises and the Practice of New Product Development: An International Comparison. *European Business Review*, *20*(1), 51–72. https://doi.org/10.1108/09555340810843690
- Lin, Z., & Kosenko, D. Y. (2025). Research Hotspots and Trends in Children's Furniture Design: Literature Review Using Citespace. *Theory and Practice of Design, 34*, 447–457. https://doi.org/10.32782/2415-8151.2024.34.49
- Li, S., Lyu, J., Chen, M., Guo, H. (2022). Visual Analysis of Bamboo Furniture Research Based on CiteSpace. In K. K. Chong & Z. Liu (Eds.), *Energy Revolution and Chemical Research* (pp. 360-365). CRC Press.
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital Transformation and Customer Value Creation in Made in Italy SMEs: A Dynamic Capabilities *Perspective. Journal of Business Research*, 123, 642-656.
- https://doi.org/10.1016/j.jbusres.2020.10.033
- Maulana, F. I., Kurniawan, B. K., Pramono, A., Purnomo, A., Bin Zainal Abdullah, M. E., & Mohamed, M. (2024). Trends in Scientific Research in Smart Furniture: A Bibliometric Analysis in Decade from 2014-2023. 2024 International Conference on ICT for Smart Society (ICISS), 394-400.
- Mesquita, & Lazzarini, (2008). Horizontal and Vertical Relationships in Developing Economies: Im-

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- plications for SMEs' Access to Global Markets. *Academy of Management Journal*, 51(2), 31-66. https://doi.org/10.1007/978-1-4419-0058-6_3
- Passas, I. (2024). Bibliometric Analysis: The Main Steps. *Encyclopedia*, 4, 1004–1025. https://doi.org/10.3390/encyclopedia4020065
- Phuoc, D. M., Tai, D. Q., Phuong, V. H., Hung, T. X., & Tung, V. V. (2023). Product Innovation among Furniture Firms: The Case of the Private Economy Area. *Journal of Law and Sustainable Development*, 11(11), 1-17.
- Ratnasingam, J., Ark, C. K., Ab Latib, H., Subramaniam, H., & Khoo, A. (2018). Innovation in the Malaysian Furniture Industry: Drivers and Challenges. *Bioresources*, *13*(3), 5254-5270. https://doi.org/10.15376/biores.13.3.5254-5270
- Sydor, M., Kwapich, A., Lira, J., & Langova, N. (2022). Bibliometric Study of the Cooperation in the Engineering and Scientific Publications Related to Furniture Design. *Drewno*, 65(209), 1-16. https://doi.org/10.12841/wood.1644-3985.389.05
- Teplitskiy, M., Duede, E., Menietti, M., & Lakhani, K:R: (2022). How Status of Research Papers Affects the Way They are Read and Cited. *Research Policy*, 51(4), 104484.
- https://doi.org/10.1016/j.respol.2022.104484
- Xu, G., Zhang, X., & An, Q. (2025). Comparative Study on the Visualization of Knowledge Graphs of Beijing Opera Furniture and Chinese Furniture Based on CiteSpace and VOSviewer. In Stephanidis C, Antona M, Ntoa S & Salvendy G. (Eds.), *HCI International 2025 Posters* (pp. 415-423). Springer. https://doi.org/10.1007/978-3-031-94165-8_45
- Verganti, R. (2006). Innovating Through Design. Harvard Business Review, 84(12), 114-122.
- Zhu, L., Yan, Y., & Lv, J. (2023). A Bibliometric Analysis of Current Knowledge Structure and Research Progress Related to Sustainable Furniture Design Systems. *Sustainability*, 15(11), 8622. https://doi.org/10.3390/su15118622