



A comprehensive study on sustainable practices incorporated by the furniture retail industry

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1. Introduction:

Recent years have seen a growing globalization of the furniture industry. This is mostly the outcome of large manufacturers and merchants establishing international manufacturing networks to save costs in a highly competitive industry. Technology advancements and the global lowering of trade and investment barriers have aided in the globalization of the industry (Drayse, 2008). Furniture-producing regions in the US are going through turbulent upheaval. Because of the outsourcing trend, it is seen that China currently accounts for roughly half of all furniture imports into the United States (Ong, 2023). Similarly, the UK and Europe are also sourcing furniture mostly from Asian countries. Over the last few years, the trend of sourcing furniture and handicraft items from developing countries has increased. India is known for its low-cost production facility, but the problem is that very few standard regulations are in place to bind the wooden product manufacturers for the unethical cutting of trees. According to a report published in Times of India (Delhi Edition) in February 2021, most of the timber dealers do not have the trail of wood that is being sourced and supplied. On the other hand, most of the developed countries have made it mandatory for business organizations to import wooden furniture from FSC-certified companies



across the globe. This report will try to understand what steps are been taken by the furniture retail industry for a sustainable future.

2. Literature Review:

The study done by Robert B. Handfield uses the findings from five environmental managers in the furniture industry to create a taxonomy of best practices for operations management that are environmentally friendly (or "green"). This taxonomy was expanded to create a set of hypotheses on how management might encourage ecologically beneficial behaviours. The findings imply that for environmental management methods to be effective, they must be integrated throughout the entire value chain, which encompasses all steps in the creation of a product, including design, sourcing, manufacturing and assembly, packaging, shipping, and distribution. All companies in the report showed 'pockets' of environmentally friendly practices (EFP) in various parts of their individual value chain activities, even though there is room for improvement in the environmental performance of all five of the organizations. The ideas and conclusions drawn from the analysis also imply that simply responding to regulations is no longer sufficient. A world-class EFP must foresee and avoid shifting environmental laws and customer expectations, and it must proactively adapt its goods, processes, and infrastructure for these changes without jeopardizing its competitive edge (Robert B Handfield, 2015). Despite what was said in theory, there are some obstacles that restrict recycling activities in the furniture sector in practice. The geographical location of the waste resources is one of them, and it prevents the integration of the businesses that produce the garbage and those who finally consume it. To design an application for internet-based geographic information systems (or internet GIS) as a decision support system in the analysis of geospatial data for wood waste collection and transportation in the furniture business is the goal of this study based on this circumstance. Through the facilitation of the collection and transportation of wood waste for recycling, the application aims to promote the adoption of green



supply chain management (GSCM) practices in the furniture industry. The Software Development Life Cycle (SDLC) process was employed in this study to build the suggested online GIS application. As a preliminary object for the application, the suggested application included a number of Small and Medium Enterprises (SMEs) in the furniture sector and collectors of wood waste in the Jepara and Surakarta districts. According to the study's findings, SMEs in the furniture industry and collectors of wood waste can use the internet of GIS to describe the geographical location of each party. Then, using a set of criteria, the system will rank the suggested SMEs as the producers of wood waste based on the least expensive means of gathering and transporting the wood waste from each SME (Susanty, 2016). Another study examines the ecosystem services related to furniture, one of the most popular secondary wood product categories produced globally. It examines and summarizes the research on the environmentally friendly design, use, and disposal of wood furniture and associated goods in international marketplaces. It considers cutting-edge design approaches for wood (such as biomimicry) as well as subjects that have gained popularity recently (such as eco/environmental labelling and related commercial communications). An overall theme is to think about how green design methods and associated consumer messaging might affect or even improve a company's competitiveness. The role of design may be altering due to a trend in the secondary wood product industry toward greater personalization. However, design is still a crucial component of product creation in contemporary markets, and designers are in a good position to influence the use of sustainable materials and extend the lifespan of furniture products. (Matthew Bumgardner, 2020). Another study makes an effort to assess how sustainable the Asian wooden furniture market is. The furniture business is plagued by stagnant productivity despite strong exports. As other less expensive manufacturers arise, the growth attributed to increasing exports of low-value contract furniture is not long-term sustainable (Ioras, 2003). A study showed that 1,081 wood goods and furniture producers in Malaysia participated in an online poll as the world ramps up efforts to lessen the impact of climate change. The major goal was to



assess the manufacturers' degree of knowledge, the breadth of their adoption, and the difficulties they encountered in implementing environmental, social, and governance (ESG) principles. According to the poll, large-sized businesses were more open to implementing ESG practices than medium-, small-, and micro-sized businesses. It appears that respondents were more receptive to environmental standards than governance, social issues, or both. The use of certified and legal wood and wood products, waste management, and adherence to emission norms were all praised by respondents as environmental best practices. Market forces and legal requirements were found to be the two main factors that encouraged respondents to follow ESG requirements; among those respondents who did not, lack of awareness, the lack of a direct benefit from adopting ESG, and the high cost involved were found to be the main deterrents (Ratnasingam, 2023). Over the past few decades, sustainable lean manufacturing (SLM) practices have been promoted for use in emerging economy industries to increase productivity while reducing operational costs, eliminating waste, conserving resources, and improving customer satisfaction. The critical success factors (CSFs) promoting the furniture manufacturing industry's adoption of SLM have not yet been the subject of any studies. In a growing country like Bangladesh, this study looked into the CSFs for implementing SLM in the furniture manufacturing sector. The first step was to identify the sixteen most important CSFs for adopting SLM in the furniture business. Based on the recommendations from the experts, the detected CSFs were then grouped into three criteria groups or clusters: organizational and governmental cluster, supply chain, inventory, and resource management cluster, and performance and technical cluster. Finally, to assess the significance of these CSFs, it used the Bayesian Best-Worst method (BWM). This study demonstrates that adopting disruptive and emerging technologies, receiving adequate support from top management, and sustainable resource utilization and management are the top four essential CSFs for implementing SLM successfully in the furniture manufacturing sector (Binoy, 2023). As per a study conducted in US, the natural resource depletion caused by global industrialization has been



used in marketing to differentiate products. Programs for environmental certification are becoming more widely acknowledged as important market-based tools for connecting production and consumer purchasing. This study looks at the connections between innate environmental motivations and the willingness to pay more for wood items that have received environmental certification. The impacts of perceptions, knowledge, and price on customer willingness to buy and pay a premium for environmentally certified forest products are captured by a conceptual model that is put forth (Richard P. Vlosky, 1999). A report published in Digital Commerce 360 said that online furniture sellers want their clients to be concerned about how their couch contributes to global warming. According to data, about half of Americans are concerned about how their purchasing decisions affect the environment, although only 32% claim that this directly influences their purchasing decisions. Sabai and Inside Weather, two stores, hope to win over clients who care about ecology and sustainability by offering made-to-order furniture. These furniture retailers aim to reduce waste without sacrificing aesthetic appeal by limiting alternatives and utilizing domestically sourced materials when it is practical. These retailers employ reselling to offset landfill consumption when a piece is worn out or it's time for a new look, and/or they provide repair services to encourage customers to buy less (Salois, 2022). A book titled Broken: Mending and Repair in a Throwaway Society was released in May 2023. It addresses the fact that we live in a "single-use society," as the author Katie Treggiden puts it, where fashion is quick, disposability is the standard, and it's simpler to replace than to fix. She argues that, for the benefit of our world and ourselves, the linear take-make-waste model that has dominated Western economies since the Industrial Revolution must be changed to a more circular one (Youens, 2023).

3. Research Methodology:

This paper will collate and analyse the secondary data from published research. Also, the data to understand the current market trends will be collected through the latest reports, news articles, and



online furniture-selling websites. The collected data will be reviewed and evaluated, and the latest trends will be discussed.

SUSTAINABLE PRACTICES IN THE RETAIL FURNITURE INDUSTRY

After reviewing the secondary data this paper has depicted the following points, which the buyers and furniture retailers are trying to do to eliminate their carbon footprint.

Buy Back a way to be green!

Sabai, a direct-to-consumer furniture firm with a focus on sustainability, was just founded a little over a year ago, but its creators are already looking far into the future. Currently, the company is launching Sabai Standard, a repurchase program for their sofas that aims to drastically reduce landfill trash while giving consumers a more inexpensive way to acquire their products and extend their lifespan. Two pillars support the closed loop program: Customers can sell their sofas directly to the brand under the first option for up to 20% of the second-hand price (starting models start at a little over \$1,000), after which they can purchase the sofas at a reduced price through Sabai Revive, the company's pre-owned line. The second program, Repair Don't Replace, offers new slipcovers, legs, cushions, and pillows to customers who want to avoid buying a brand-new sofa to replace any worn or broken components (Sabai, 2023).

Furniture Restoration

Pepperfry.com, a furniture and home goods store with its headquarters in Mumbai, recently introduced Furniture Restoration Services, a first for any furniture shop in the nation. Due to Pepperfry's love of furniture and understanding of the value of heirloom furniture, this new service will allow customers to restore their antique furniture nearly in accordance with its original form



and function. Over time, Pepperfry has enlisted some of the nation's most accomplished furniture artisans, and this extraordinarily gifted group of artisans will take part in Pepperfry's marketing approach for its furniture restoration business (Bureau, 2016).

Sourcing sustainable materials

Furniture businesses are increasingly looking for sustainable materials, such as wood from managed forests. Additionally, they are buying fabrics derived from materials like cotton, wool, and soybeans in place of synthetic fabrics made with chemicals that harm the environment. Natural, recycled, or manufactured sustainable materials can be used to make a wide range of furniture styles and designs. Bamboo, recovered wood, recycled plastic, natural rubber, and organic cotton are a few examples of sustainable materials utilized in the production of furniture. Utilizing sustainable materials helps to reduce waste, encourage resource conservation, and lessen the negative environmental effects of the creation of furniture. Furthermore, sustainable materials can have distinctive textures, hues, and features that can give furniture items personality and value.

Sourcing from a certified supplier

Most organizations across the world have made it mandatory to procure wooden items from FSC and PEFC-certified suppliers. FSC is a worldwide non-profit, multistakeholder organization called the Forest Stewardship Council. It was founded in 1993 to promote responsible management of the world's forests through timber certification. This group approaches international environmental policy from a market-based perspective. On the other hand, the non-profit umbrella group PEFC, which has its headquarters in Switzerland, incorporates the global sustainability benchmark criteria into its standards for land management. The nonprofit caters to the unique requirements of smaller, family- and community-owned woods to support rural development and livelihoods.

Green Supply Chain

Business organizations are now more focused to make the supply chain more efficient and effective to reduce the carbon footprint. By opting out for green choices on elements of supply chain the industry is setting its footprint towards a sustainable future. For e.g., companies like Swoon Editions from the UK are coming up with minimalist designs in order to reduce the use of different materials. Also, various companies use recycled materials from plastics to do the upholstery and avoid pure leather or artificially made fabrics. Similarly, manufacturers are using cutting-edge technology to reduce wastage while manufacturing a product. Transportation companies are switching to electric vehicles to reduce their carbon footprint. The main elements of the supply chain in the furniture industry are shown in the following figure:



GLOBAL MARKET TRENDS FOR ECO-FURNITURE

The size of the world market for eco-friendly furniture was estimated at USD 43.26 billion in 2022, and it is anticipated to increase at a CAGR of 8.6% from 2022 to 2030. The market is projected to

be driven by expanding consumer awareness of sustainability and the increasing use of sustainable raw materials in different types of furniture. Additionally, the need for comfort in the home has increased demand for furniture, especially eco-friendly pieces, due to better spending power and enhanced infrastructure amenities (Grand, 2023).

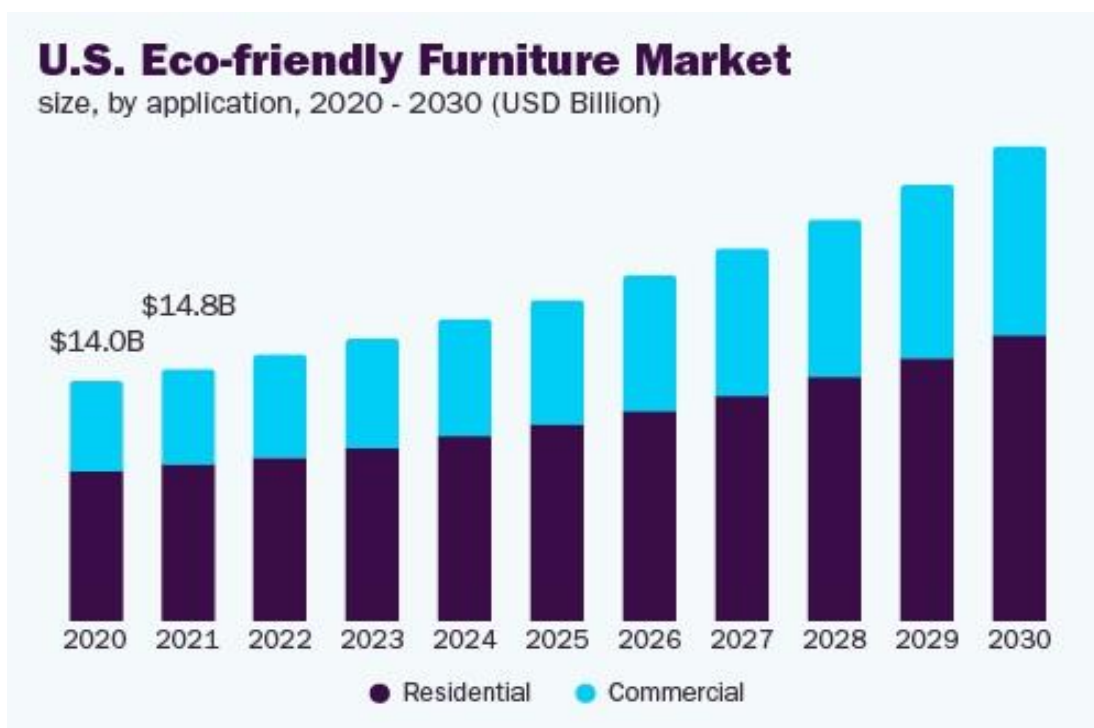


Fig 1: Eco friendly furniture Market

Source: <https://www.grandviewresearch.com/industry-analysis>

With a 65.3% market share in 2022, the offline segment held the majority of the market. Customers who shop at offline stores have the chance to physically feel and see the furniture, which helps them choose pieces that suit their needs. Customers who shop at retail establishments that sell furniture are assisted in visualizing the furniture in their own home or office by the creation of a demo setting in the store. Additionally, the store's product selection of eco-labeled and certified

furniture enables customers to contrast the benefits and aesthetics of eco-friendly and conventional furniture (Grand, 2023).



Fig2: Furniture distribution channel offline vs online

Source: <https://www.grandviewresearch.com/industrys>

From 2023 to 2030, the Asia Pacific region is anticipated to grow at a CAGR of 10.5%. Infrastructure development in emerging nations like China and India has boosted the hospitality industry, notably hotels and resorts. It encourages consumers to pay more attention to cutting-edge furniture and its adoption in daily life. Additionally, the rising demand for eco-friendly furniture in the region is fueled by the increasing use of outdoor furniture in both residential and commercial spaces, such as bamboo chairs, teakwood centre tables, and beach beds (Grand, 2023).

**4. Conclusion:**

The furniture business is working to be more environmentally friendly as we fight to deal with a direct climate issue. Businesses all over the world are emphasizing the need to utilize sustainable materials to address the issue. The awareness of buying green furniture has been anticipated to show a growing trend. Organisations around the world have understood the benefits of going sustainable and are trying to incorporate various sustainable methods in order to lure customers and reduce the carbon footprint.

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