

E-BOOK OF EXTENDED ABSTRACT

THE 14TH INTERNATIONAL INVENTION, INNOVATION & DESIGN COMPETITION 2025



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DESIGN COMPETITION 2025

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JELEBOARDCO: A SUSTAINABLE DESIGN INITIATIVE ROOTED IN TROPICAL CRAFTSMANSHIP AND SUBMERGED HARDWOOD RECOVERY

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ABSTRACT

Through the creation of handcrafted skateboards from submerged tropical hardwoods, JELEBOARDCO, a sustainable design initiative based in Malaysia, skillfully combines ecological conservation, cultural heritage, and social entrepreneurship. The initiative, which was started in Perak in 2019, mostly uses timber that has been maintained underwater in floodplains, riverbeds, and dam reservoirs. These waterlogged logs, which are frequently decades old, are an appealing and environmentally friendly substitute for traditional logging since they still have exceptional structural integrity and eye-catching natural grain patterns. Through employment and skill development, the project seeks to empower rural craftspeople and turn these heritage timbers into high-end, sustainable lifestyle goods. Fundamentally, JELEBOARDCO connects customers to larger stories of biodiversity, resource recovery, and cultural identity by using product storytelling to promote environmental consciousness. Through the combination of circular material innovation and traditional craftsmanship, the project shows how design may achieve social and ecological goals. In Malaysia, JELEBOARDCO is a scalable model for eco-innovation and rural entrepreneurship that has a high chance of being replicated in other areas dealing with comparable economic and environmental issues.

Keyword: Submerged wood, sustainable design, tropical hardwood, circular economy, Malaysian craft, eco-tourism

1. INTRODUCTION

The first known effort in Malaysia to manufacture skateboards solely from reclaimed submerged tropical hardwoods is from JELEBOARDCO. A sustainable and non-destructive substitute for conventional logging methods, these premium woods are responsibly collected from floodplains, dam, reservoirs, and buried log sites. JELEBOARDCO, which was founded in Perak, skillfully combines cultural preservation, rural community development, and environmentally conscious material use. As a social company, the project trains and employs young people in the area, teaching them traditional carpentry techniques and fostering an awareness for biodiversity and craft heritage.

JELEBOARDCO's primary goal is to create and produce useful lifestyle goods that uphold cultural integrity, inclusivity, and sustainability. The project specifically aims to empower marginalized communities through economic engagement and skill development; reuse submerged tropical hardwoods as renewable resources and include environmental storytelling into product design. The brand name "*Jebebor*," which is derived from a local dialect phrase for the endangered giant terrapin, represents the project's enduring dedication to ecological and cultural conservation. Each skateboard is painstakingly handcrafted employing heritage carpentry traditions.

2. METHODOLOGY

By using salvaged submerged tropical hardwoods, which are all manually processed in JELEBOARDCO's local workshop, the initiative embraces a zero-waste production ethic. Because each skateboard is painstakingly handmade by craftspeople utilizing age-old equipment and techniques, the production process has a little negative impact on the environment. Local wood recovery experts with expertise in underwater logging and recovering sunken logs from rivers and reservoirs work together to source materials. Each timber slab's natural grain is organically incorporated into product designs to create unique boards with aesthetic and practical value. To increase its impact and encourage community involvement in sustainability, the project incorporates eco-tourism activities and educational workshops in addition to product creation.

JELEBOARDCO tackles several interrelated environmental and socioeconomic issues. The project promotes resource circularity, lessens the strain on living forests, and lowers carbon emissions by recovering submerged timber. Every skateboard transforms from a product into a vehicle for environmental storytelling, including younger generations and eco-conscious consumers in conversations about sustainability, biodiversity, and Malaysian identity.

JELEBOARDCO is distinctive because of its creative fusion of traditional craftsmanship, the utilization of salvaged materials, and grassroots economic development. It distinguishes itself from mass-produced plastic or composite boards as the first known Malaysian endeavor to employ 100% submerged wood in the production of skateboards and associated lifestyle items. The unique character of each JELEBOARDCO skateboard is derived from its recovered timber origin and is further enhanced by a production process based on ecological and community principles. JELEBOARDCO contributes meaningfully to the global sustainable design movement by integrating sustainability, cultural storytelling, and design ethics.

JELEBOARDCO's approach also aligns with broader scholarly understandings of craft as a form of skilled, quality-driven labor that transcends traditional industry boundaries (Adamson, 2007; Luckman & Tower, 2023). Craft firms often span a range of organizational forms, from heritage artisanship to innovation-driven design (Kroezen et al., 2021; Blundel & Smith, 2013). This expanded field of craft reflects the growing diversity of practice in both contemporary and heritage contexts (Harrod, 2018; Bell et al., 2018) JELEBOARDCO exemplifies how such craft knowledge can be embedded in sustainable product development, engaging with local materials, traditional skills, and new market opportunities

There are several ways in which the project will benefit society. In terms of the environment, it encourages responsible consumption by revitalizing depleted natural resources and halting additional deforestation. In terms of society, it revives traditional crafts and fosters rural economic growth by opening doors for local jobs. Through regional dialects, indigenous artifacts, and narrative, it

strengthens Malaysian identity culturally. Additionally, JELEBOARDCO supports several Sustainable Development Goals (SDGs) set forth by the UN, including SDGs 8 (Decent Work and Economic Growth), 12 (Responsible Consumption and Production), and 15 (Life on Land).

JELEBOARDCO reimagines skateboarding as a platform for constructive ecological and social impact from an innovative and entrepreneurial standpoint. It embraces ethical sourcing, local independence, and narrative-driven branding while turning waste into profit. Through partnerships with community networks, direct-to-consumer marketing, and limited-edition collections, the company has established a niche identity that appeals to Gen Z and millennial consumers who are concerned about sustainability.

Additionally, there is a great chance that the project will be commercialized. Both lifestyle and collector markets are drawn to JELEBOARDCO's product line, which includes cruisers, longboards, surf skates, and electric skateboards. Due to the workshop's close vicinity to Perak's main tourist destinations, eco-craft tourism opportunities, including as immersive learning experiences and hands-on studio visits, are made possible. Additionally, Sabah, Sarawak, and other Southeast Asian countries with comparable submerged wood stocks can easily replicate the idea. The project's appeal to impact investors, sustainability funds, and innovation grant programs is increased by its conformity to new ESG (Environmental, Social, and Governance) frameworks.

3. CONCLUSION

JELEBOARDCO is a prime example of how sustainable product design can effectively and holistically address social, cultural, and environmental issues. In addition to conserving natural resources, the project empowers rural communities and revives traditional craftsmanship by turning submerged tropical hardwood into useful lifestyle goods. Being a leading brand in design-led circular economy activities, JELEBOARDCO provides a repeatable blueprint for other areas with comparable ecological and socioeconomic conditions.

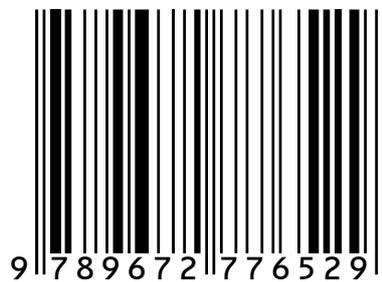
In conclusion, JELEBOARDCO is an example of how deliberate, goal-oriented design can act as a stimulant for social innovation, cultural revitalization, and environmental preservation. Once lost under rivers and dams, it reinterprets buried wood as a representation of tenacity, environmental stewardship, and business potential. Sustainability is now a lived, constructed experience that is steeped in heritage and intended for Malaysia's and the world's future thanks to this project.

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