

Research Article

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Crowdsourcing Digital Interior Design Platform as Green Business: A Business Model Canvas Analysis

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Abstract: *The rise of digital technology has created new opportunities in the interior design industry, particularly through crowdsourcing-based platforms that support green business innovation. This study aims to analyze the business model of a digital interior design platform that connects clients and professional designers using a sustainable and collaborative approach. This research employed qualitative methods, including in-depth interviews, direct observations, and document analysis. The Business Model Canvas (BMC) framework was used to map and analyze the platform's nine key components: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structures. The analysis reveals that the platform targets eco-conscious clients and digitally savvy designers, offering value through accessible green design solutions, verified designer portfolios, and transparent transactions using features like ratings, reviews, and escrow payments. Social media and digital communities serve as the main communication and marketing channels. The study concludes that this crowdsourcing-based digital platform has strong potential to become a scalable and sustainable green business. By aligning environmental goals with digital innovation, the platform can meet the demands of modern consumers while promoting sustainable interior design practices. The BMC approach provides a practical tool for designing, evaluating, and improving the platform's business model.*

Keywords: *Business Model Canvas, Crowdsourcing, Digital Platform, Green Business, Interior Design.*

Introduction

The rise of digital technology has many impacts on every industry, and interior design is no exception. It is a shift that doesn't just change how design is done digitally, but also how business is done digitally. Through digital interior design services, designers and clients can remotely communicate with each other, allowing them to tap into new markets and to enhance project effectiveness (Wisata & Putra, 2023).

An emerging business model in the digital space is crowdsourcing. Crowdsourcing is a business approach that relies on contributions from a large group of individuals, where production is not limited to one creator but involves the broader community. In this model, consumers may also act as producers (Mekari Journal Editorial, 2025). Crowdsourcing has been successfully implemented in global platforms such as Upwork, Fiverr, Shutterstock, and by major Indonesian companies like Gojek and Tokopedia. This model shifts the lines between service providers and service users and encourages cross-sectoral collaboration. However, in the interior design industry, the application of crowdsourcing remains relatively new and underexplored, particularly from a sustainability perspective.

Over the past two years, environmental awareness and sustainability have become central issues, both nationally and internationally. Millennials and Gen Z are becoming increasingly selective in their consumption behavior, favoring brands and services aligned with environmental values (Salsabila, 2023). A report by Tirto.id (2022) states that 89.7% of Indonesian millennials and Gen Z prefer environmentally responsible products and services. This growing awareness has fueled the development of green business innovations, business practices that not only aim for economic gain, but also strive to reduce negative impacts on society, communities, and the environment.

In the interior design industry, the concept of green interior design is an answer to these challenges. It emphasizes the use of eco-friendly materials, energy efficiency, and sustainable design strategies. However, despite the increasing demand, digital interior design platforms based on crowdsourcing still face challenges in creating, delivering, and capturing value effectively. These limitations are primarily due to the lack of a structured and in-depth analysis of the business model being applied.

This research, therefore, is a task of urgent necessity. It sets out to fill the blank in our understanding by examining what are the main components of a crowdsourcing-based digital interior design platform as a form of green business innovation. By using the Business Model Canvas (BMC) approach, this research aims to develop and provide a structured framework for creating, delivering, and capturing value in a systematically complete manner.

Literature Review

Crowdsourcing is a business model that utilizes contributions from a large number of people to solve problems or generate innovative ideas collaboratively. Harahap and Wijayanti (2022) explain that crowdsourcing connects users through web-based platforms, allowing broad societal participation in producing value. Originally derived from the concept of outsourcing, crowdsourcing has evolved with advancements in information technology. According to Howe (2008), crowdsourcing consists of four primary categories: crowd wisdom, crowd creation, crowd voting, and crowdfunding. These approaches provide businesses with flexible strategies to adapt and build digital platforms.

Digital business involves the use of digital technology across every aspect of a business and includes customers and their transactions. Riswanto et al. (2024) argue that the development of the digital economy has transformed consumer habits and led to more online transactions, rendering user experience and data-oriented decisions more prominent as well. In industries such as interior design, this model also means we can access the broader market and do so by delivering our services in a remote and digital manner.

In the meantime, green business incorporates sustainable practices in operations, incorporating environmentally friendly technologies, waste treatment, energy efficiency, and renewable materials (Noor, 2025). Octavia (2012) notes that the market potential for green products in Indonesia is increasing, with consumer awareness, government backing, and environmental pressure as its key drivers.

In the context of interior design, Rachmayanti and Roesli (2014) emphasize the importance of green design principles, such as optimizing natural lighting and ventilation, using sustainable materials, and ensuring space flexibility to reduce long-term maintenance costs. However, despite increasing environmental awareness, few studies have focused on the integration of digital systems and green strategies into a unified business model.

The Business Model Canvas (BMC) is a visualization of how a business creates, delivers, and captures value described by Osterwalder and Pigneur (2010). It includes nine building blocks: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structures.

The proponents of BMC (Becker & Bröcker, 2021) claim that BMC is an agile approach that fits times of rapid business change. It enables visual mapping, works well in collaborative settings, and can be used in multiple phases of product and service development processes.

While many studies have adopted BMC to analyze business startups and innovations, its application in the context of crowdsourced, green-based digital platforms is still limited. This study contributes by

applying BMC to a specific case that combines digitalization, sustainability, and user-generated content, thereby offering a unique and integrated framework for innovation in the interior design industry.

Method

This study employs a qualitative research method. This method is used to describe and analyze phenomena, events, social activities, attitudes, beliefs, perceptions, and thoughts of individuals and groups (Sari et al., 2022). Data used in this study are qualitative through interviews, observation, and document studies. This method was preferred because it enables a deep dive into the phenomena and business components under research, especially when operating on the basis of adopting Business Model Canvas (BMC). The goal is to have a comprehensive analysis of green business models that were themes with respect to its business models structure, value-creation strategy, and its contributions to environmental sustainability through green business practices.

Data will be entered, calculated, and analyzed based on the BMC framework, which includes nine building blocks: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structures. Each element of the BMC will be analyzed to illustrate how the crowdsourcing business model creates value for customers and partners, applies sustainability principles, and identifies business challenges and opportunities in the digital and green business contexts.

Results and Discussion

Interviews and Observations Results

Based on the research conducted using qualitative methods through interviews and observations, the findings linked to the components of the Business Model Canvas (BMC) are as follows:

1. Customer Segments

This platform targets two main customer segments: interior designers as service providers and clients as service users. Clients are people, companies, and retail customers that require interior design services for homes or commercial premises. Interior designers, meanwhile, are looking forward to leveraging the platform to work with furniture makers, suppliers, and contractors. Both user groups are overall digitally literate and are educated in the field of green business and sustainable interior design. So, they hope that the platform will take them one step further, providing more insight and easier access to eco-friendly design practices.

2. Value Propositions

Customers understand the concept of crowdsourcing and its benefits for growing a business as a service provider and for finding services as a user or client. They also recognize that green interior design aligns with green business principles in the form of digital businesses supporting sustainability. The platform is expected to provide transparency in communication systems, transactions, and features that increase client trust in designers, such as verification systems, ratings, reviews, portfolio showcases, progress tracking, and escrow payments.

3. Channels

Interior designers perform personal branding through social media such as Instagram and TikTok by showcasing their previous design works. Some also display their portfolios on LinkedIn or Behance for networking purposes. Besides social media, they build public relations through interior design communities and word-of-mouth referrals.

4. Customer Relationship

Both designers and clients expect open and transparent communication throughout the project. However, designers sometimes feel overwhelmed responding to general inquiries, so they hope for a chatbot feature to handle FAQs and customer service support for specific cases. Clients can give ratings and reviews to enhance service transparency through feedback. Designers also build relationships by joining interior design communities and participating in sustainability-based design events. Clients want to find designers who match their personal needs, so the platform should provide a preference feature to adjust the matching algorithm.

5. Revenue Streams

The platform takes commission from the transactions between interior designers and clients. Designers are looking for a premium subscription service to showcase their portfolios at the top of search results, offering another revenue stream for the platform. The platform may also include advertisement and sponsorship for furniture suppliers, building materials companies, and contractors.

6. Key Resources

The platform's key resources include the website and application, developed by a technical team consisting of developers, UI/UX designers, and supported by a secure digital system and an escrow payment mechanism. Furthermore, the platform requires an active and credible network of professional interior designers as its primary user base.

7. Key Activities

Main activities include managing and developing the crowdsourcing platform, verifying and validating interior designers, and conducting digital marketing campaigns to attract users. On the customer side, the key activity is the matching process between designers and clients. Interactions between the platform and users can take place through a resolution center and customer support.

8. Key Partners

Key partners include service providers that support platform operations, professional interior designers as core users, partners from material and service companies, interior design and green business communities, as well as investors and startup business incubators.

9. Cost Structures

The costs to maintain the platform comprise the costs to build and maintain digital infrastructure, the costs for digital marketing and promotions, operating and customer support costs, expenses for security and technology infrastructure, and commissions paid to partners and the platform's interior designers.

Document Study Analysis

In addition to interviews and observations related to BMC, document analysis was conducted as supporting data using a triangulation method. The results of the document study are as follows:

Table 1. Document Study Analysis

No	BMC Component	Document Study Findings	Document References
1	Customer Segments	Demographics: Aged 25–45, minimum bachelor's degree, urban residents, middle to upper income. Psychographics: Entrepreneurial-minded individuals who value flexibility and autonomy; creative, independent, and digitally savvy; interested in green interior design concepts	Vinella (2024); Sofiati et al. (2023); Solomon et al. (2018)

		such as sustainability, minimalism, and biophilic design; apply LOHAS (Lifestyles of Health and Sustainability) principles. Behavior: Clients search online for designers applying green concepts; designers knowledgeable in green business actively seek clients through the internet.	
2	Value Propositions	Offers sustainable solutions through green design, especially in Southeast Asia. The crowdsourcing platform as a digital business enables designers to explore sustainable design concepts and showcase their portfolios. Provides easier access for designers and clients to meet on one platform.	Tahir et al. (2017); As (2018)
3	Channels	Social media platforms like Facebook, Instagram, and TikTok are used for personal branding and ongoing communication. Behance and Pinterest are used for showcasing design portfolios. Paid online advertising and search engine optimization (SEO) increase platform traffic. Participation in interior design communities and events spreads awareness of sustainability.	Kapoor et al. (2021); Siregar & Selwendri (2020) Konhäusner et al. (2021);
4	Customer Relationship	Builds trust and reputation through features such as reviews, ratings, certifications, and portfolios. Encourages long-term relationships with special offers for repeat projects. Engages customers via social media and collects feedback through community surveys, voting, forums, and webinars. The platform offers sustainability certification programs for qualified designers.	Murtono & Soewardikoen (2017); Lubis et al. (2021); Castillo (2022); Champagne & Gianfrate (2020)
5	Revenue Streams	Uses escrow payments to build transactional trust by holding funds until the project is completed. Revenue comes from commissions or fixed fees per successful transaction, similar to freelance platforms and online marketplaces. Monetizes visibility through premium ads and profile promotions, often bundled with analytics.	Susanti et al. (2024); Rao (1999); Bansal et al. (2018); Mini (2019)
6	Key Resources	A responsive, user-centric platform for both desktop and mobile. Software developers manage the backend, features, and APIs for payments and file sharing. UI/UX designers ensure an intuitive interface, appealing aesthetics, and seamless interactions.	Scolere (2017); Akter et al. (2023); Ritter & Winterbottom (2017)
7	Key Activities	Core activities include sustainable system upgrades, functionality implementation, and hosting infrastructure management. The platform uses intelligent matching algorithms to connect designers with suitable projects. Platforms focused on sustainability should integrate green design metrics and support eco-friendly work.	Ma et al (2024); Mini (2019); Akter et al. (2023); Okoche, Li, & Tang (2024)

8	Key Partners	Partnerships with sustainable material suppliers support the platform's green business goals. Collaborations with sustainability certification institutions (LEED, EDGE, etc.) enhance user trust and reputation among environmentally conscious customers.	Ma et al (2024); Champagne & Gianfrate (2020); Okoche, Li, & Tang (2024)
9	Cost Structures	Costs focus on digital infrastructure development and continuous feature updates to meet evolving user needs. Marketing efforts target both designer and client segments, especially in promoting environmental values. Sustainability depends on managing an active contributor community through onboarding, curation, incentives, and reputation systems. Green businesses also allocate additional budgets to ensure environmental compliance, such as certified eco-material databases and transparent reporting.	Susanti et al (2024); Mini (2019); Kapoor et al. (2021); Scolere (2017); Okoche, Li, & Tang (2024)

Finalized Business Model Canvas

Based on qualitative analysis through interviews, observations, and document study, the findings are mapped into the Business Model Canvas as follows:

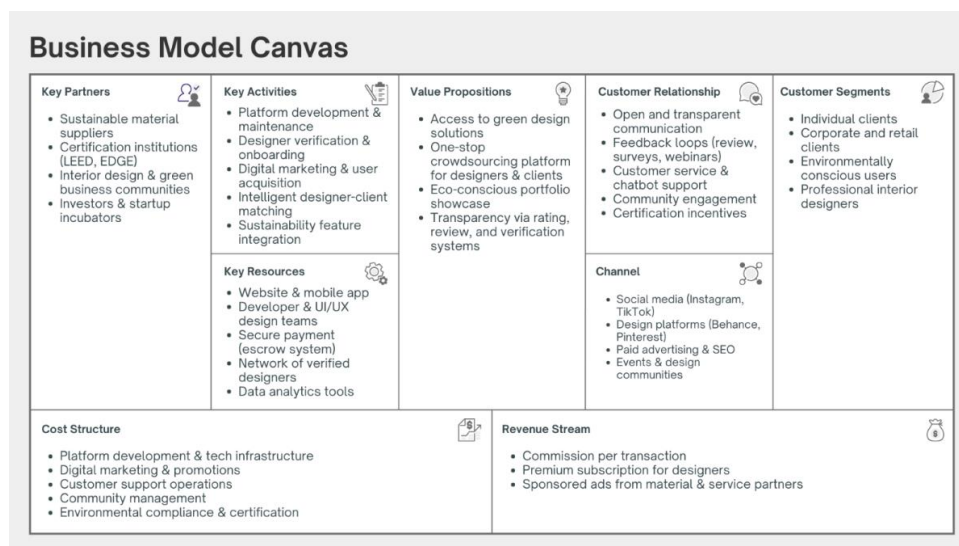


Image 1: Finalized Business Model Canvas

This visual canvas serves as a strategic blueprint to align the platform's operations with its goal of fostering sustainable interior design through crowdsourcing and digital innovation.

The proposed platform operates with a dual focus: enabling collaboration between interior designers and clients through a digital interface and promoting sustainability through green design practices. At its core, the platform targets two primary customer segments: professional interior designers and environmentally conscious clients, including individuals, corporations, and retail customers. These users are generally tech-savvy, urban-based, and highly interested in sustainable lifestyle choices and green interior design solutions.

The value propositions offered include easy access to eco-friendly design services, a digital space for showcasing sustainable design portfolios, and a trustworthy transaction system supported by features like

designer verification, user reviews, progress tracking, and escrow-based payments. These features enhance transparency and build client confidence while also supporting designers in growing their digital presence.

To maintain strong customer relationships, the platform emphasizes transparent communication, real-time support through chatbots and customer service, and active engagement with users through feedback surveys, webinars, and sustainability certification programs. These interactions help foster loyalty and ensure alignment with the platform's green mission.

For channels, designers and clients interact mainly via social media platforms such as Instagram, TikTok, and Pinterest, as well as through design networks like Behance. Traffic and visibility are enhanced through paid advertising, SEO strategies, and participation in community design events that advocate sustainable practices.

On the operational side, key activities include the development and continuous improvement of the platform, onboarding and validating qualified designers, implementing recommendation algorithms for accurate designer-client matches, and integrating sustainability metrics. The platform also supports digital marketing campaigns to expand its user base.

Its key resources consist of a responsive website and mobile app supported by a dedicated team of software developers and UI/UX designers. A secure payment gateway using escrow ensures financial safety. Moreover, a network of verified, professional designers forms the platform's core user base, further enriched by analytics tools that optimize platform performance.

The platform builds strategic key partnerships with sustainable material suppliers, certification institutions (e.g., LEED, EDGE), green business communities, and startup investors. These partnerships reinforce the platform's credibility and alignment with eco-conscious values.

The revenue streams are generated from transaction commissions, premium subscriptions for designers wishing to boost visibility, and advertising or sponsored listings from building material and service partners. These diverse income sources ensure business sustainability.

Lastly, the cost structure includes expenses related to technology development, customer service, marketing, and environmental compliance. Additional budget is allocated for community engagement, onboarding systems, and transparent sustainability reporting to maintain user trust and legal adherence.

Conclusion

In conclusion, the analysis of the crowdsourcing-based digital interior design platform using the Business Model Canvas framework demonstrates its strong potential as an innovative green business model. By combining digital technology, sustainable interior design practices, and crowdsourced collaboration, the platform effectively meets the needs of environmentally conscious clients and professional designers. It creates value through transparency, accessibility, and trust-building features while maintaining financial viability through diverse revenue streams. The platform also aligns with the growing digital behavior and sustainability awareness of modern consumers, especially Millennials and Gen Z. This model offers a strategic pathway to promote sustainable design while fostering inclusive and collaborative growth in the digital creative industry.

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