Upcycling Inovation and Corporate Sustainability Value Creation : A Multi-Site Netnographic Study of the UBUKI Program

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Abstract. This article investigates corporate green accounting and innovation through examination of UBUKI programs of PT Pertamina Hulu Mahakam (PHM). UBUKI is an example of green economy operationalisation, using industrial upcycling by transforming obsolete industrial workwear into sustainable fashion. A multi-site netnographic approach was adopted by examining how UBUKI's narratives and performances appeared on Instagram and other online spaces: communications and interpretations of sustainability and profitability within the digital environment. Digital ethnographic observation of uploads, comments and media articles (January–June 2025) will be conducted for data collection. Thematic analysis revealed three dimensions of green economic performance: (1) Environmental brand identity: forming an identity as a green company; (2) Community empowerment: creating social and economic value; and (3) Profitability through sustainability: developing a positive corporate reputation and trust of stakeholders as a green company. And it contributes to the sustainable accounting by showing that the qualitative digital data is representative of the non-financial value aspects, and also shows that green innovations can enhance the profitability and life cycle of the product.

Keywords: green innovation, upcycling, green economics, netnography, corporate sustainability

1 Introduction

Global environmental degradation and the waste produced by industrial oil and gas pose a severe threat and require an immediate response through corporate green innovation for the sustained economic transformation. Almost 10 percent of global carbon emissions come from the textile industry, which produces more than 92 million tonnes of waste annually [1]. Such data calls for a change from the linear ``take-make-dispose'' model of production to one that prioritizes resource efficiency, reuse, and responsible consumption within a circular economy [2].

In this context, PT Pertamina Hulu Mahakam (PHM), one of the State-Owned Enterprises, initiated the UBUKI (Untuk Bumi Kita) program as a green innovation. Ubuki is a model for the practical implementation of the upcycling concept that transforms used industry work clothing into new, fashion, and more durable items. This effort not only economically adds value to work clothing, but also reduces the environmental

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impact of discarded clothing, and demonstrates the principles of a green economy by integrating environmental preservation, social, and sustainable economic [3].

From a sustainable accounting perspective, UBUKI is a great example of how intangible values, such as caring for the environment and empowerment of communities, can be turned into tangible outcomes. Traditional accounting practices tend to overlook such externalities, while sustainable accounting attempts to capture such impacts in performance assessments and stakeholder reporting [4]. UBUKI shows that by combining the innovation of upcycling with profit-making, sustainability is been fully integrated and also becomes a moral and economic motivator within the company's operations.

At this particular point in time, the digital dimension of this transformation is also very relevant. In the current business scenario, UBUKI is one of the few companies that actively practices and communicates sustainable practices through digital means, as social media and online news are platforms where sustainability stakeholders can define and redefine 'environmental responsibility', 'transparency', and 'corporate legitimacy' [5]. This particular research is the first of its kind to be conducted using a multi-site netnographic methodology to study UBUKI's digital footprint on Instagram and other curated online media.

This research is focused on the value of corporate sustainability in the environmental, social, and finance streams facilitated by the digital narratives and stakeholder engagements, with particular emphasis on lengthening the lifecycle of products as a result of the upcycling innovation achieved within the UBUKI program.

The two topics covered are the development of green economics and the corporate integration of sustainability accounting, and the refinement of netnography as a qualitative approach for the study of digital narratives related to corporate sustainability and the use of sustainability in corporate practice.

2 Review of Literature

2.1 Green Economy and Sustainability Accounting

By contrast, environmental sustainability is not defined as were environmental harm. Economic growth must go hand in hand ecological and social protection: both are seen as neceserry to green development [6]. Environment the idea of a green economy encourages an internalization of sustainability into corporate activities to bring business profits while also contributing toward a sustainable environment [7].

From this perspective, sustainability accounting offers the most support for the assessment and disclosure of sustainability related, non-financial performance. Accounting as a discipline has over the years focused on profit, and in most cases, the financial accounts do not factor in the environmental and social costs. Green accounting is one of the most recent initiatives that seeks to extend the accounting framework to include the costs of the environment, the social value created, and the benefits of circular economy innovations[4].

When organizations couple upcycling initiatives with various economic benefits, they may show ownership of the consequences of their actions. In conjunction with

Musova's views [5], , sustainable consumption behavior, along with brand loyalty, is influenced by the level of corporate responsibility and sustainability claim transparency. This aligns with the Triple Bottom Line (TBL) approach which assesses corporate performance on the social, environmental, and economic level, and, therefore, offers a more balanced view of corporate performance [8].

PT Pertamina Hulu Mahakam incorporates upcycling processes most efficiently, demonstrating the principles of the green economy, where waste reduction, social value, and profit seeding are synergistically integrated within an eco-efficient business model.

2.2 Circular Economy and Upcycling Innovation

In economic models, the circular economy aims to replace the traditional linear model of production which is characterised by a take, make, and dispose system with the aim of reducing waste and improving the efficiency of resource use [9]. As quoted from the Literature [10], "In a circular economy, everything is designed to be reused, repaired, and recycled where materials are added to the economy rather than detracted from it.

Upcycling is changing the circular economy from simply turning 'trash' into high-value products to expanding beyond basic recycling, which is just processing trash into products of inferior quality. This not only extends the lifecycle of a product but also creates new profitable opportunities through the product's smart redesign and the company's sustainable branding [11]. In the industrial world, upcycling has risen from being just a 'nice to have' creative activity to becoming a valuable sustainability tool of choice. It has helped organisations meet their environmental goals while improving their competitive position in the marketplace and their reputation.

Studies show end consumers view upcycled products as premium sustainable products and are willing to pay a premium for products with a conscience and for products that positively affect the environment [12]. This is great as it confirms that upcycling projects can be economically feasible while ensuring environmental sustainability. An example is the UBUKI programme which upcycles waste coveralls and industrial workwear into fashionable products. This illustrates the economic and symbolic power of circular innovation while improving the reputation of PT PHM as an environmentally responsible company.

2.3 Netnography in Sustainability and Corporate Communication

Netnography, developed by Kozinets [2], is one of the modifications of ethnography applicable for the online world that enables researchers to explore virtual communities, online social interactions, and the respective online cultures. In the area of sustainability, netnography makes it possible for researchers to understand the meanings that the various stakeholder groups, such as the public, consumers, and employees, create and express about the environmental actions of the firm.

As social media platforms evolve to become the primary centers of dialogues on sustainability, netnography will help understand the digital narratives that shape the business sustainability and trust of stakeholders [13]. Heinonen dan Medberg [14] note that digital ethnography helps to understand the emotional and symbolic dimensions of

customer engagement with corporate sustainability via narrative, hashtag, and other forms of participatory engagement.

The application of netnography in corporate green innovation (for example, UBUKI) enables scholars to explore the phenomenon of digital sustainability and the integrated communication, media, and social response of the stakeholders to create a collective understanding of the firm's green economic practices. This is also relevant to the field of sustainability accounting, where the qualitative dimensions of the less tangible aspects of the firm's impact, such as reputation, trust, and self-identity, are becoming more recognized and are of greater value.

2.4 Conceptual Framework

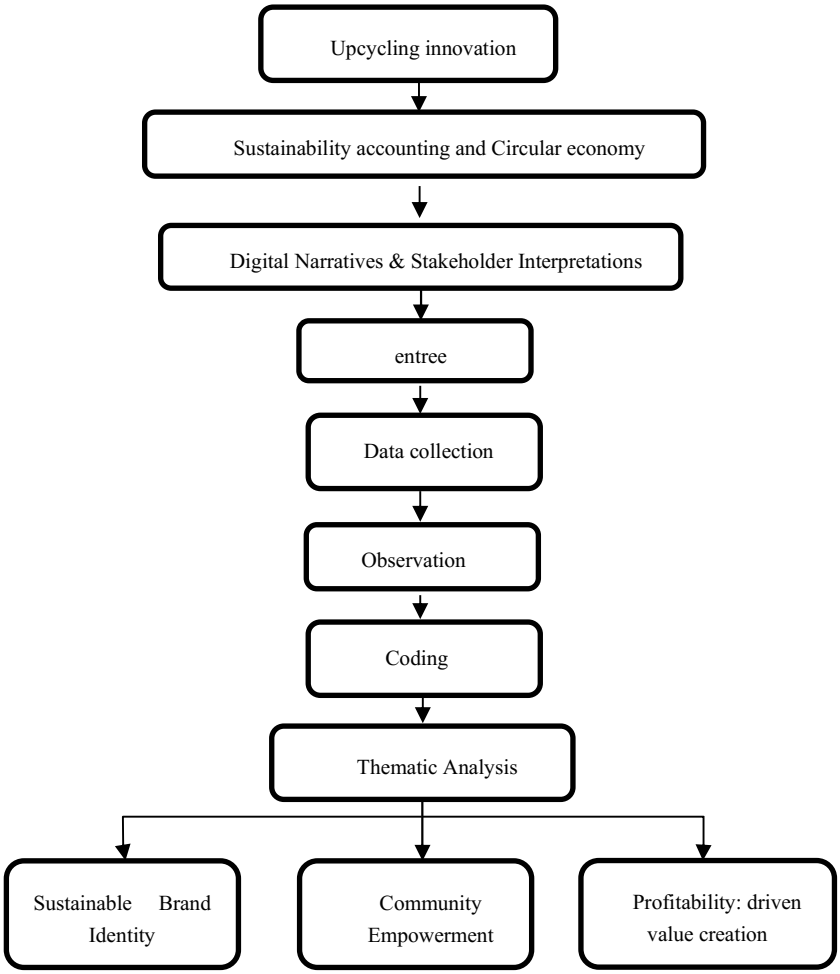


Fig.1 conceptual framework

Figure 1 shows that the conceptual framework places Upcycling innovation at the center of the relationship between the theoretical foundations and the practical application. The top section of the flowchart shows the relationship between these three theories-green economy, sustainability accounting and circular economy- in the advancement of the concept of corporate green innovation. The central section describes the steps of netnography, which helps in the collection and analysis of UBUKI's online stories. In the framework's bottom section, three new analytical areas that emerged from thematic synthesis are described: (1) Sustainable Brand Identity - digitally building and maintaining environmental credibility and legitimacy; (2) Community Empowerment - creating social and economic value structurally and locally; and (3) Profitability through Sustainability - integrating environmental responsibility with competitive advantage over time in business.

3 Methodology

3.1 Research Methodology

This study employs a multi-site netnography method where UBUKI's digital presence and framework conceptual framework (Figure 1) from Section 2.4 are used as primary sources.This study uses a qualitative approach with a multi-site netnography method.

Netnography, as Kozinets [15], describes it, is a type of ethnographic research that studies the meanings, interactions, and responses of individuals in online communities. The multi-site variation enhances this study by providing a more comprehensive examination of digital phenomena across multiple sites for the purposes of data triangulation and contextual richness.

This study focused on two digital sites: specifically the account @ubuki.untukbumikita as a community space for visual storytelling and engagement with the audience, and (2) Online news media, including kompas.com, kaltimpost.com, jurnalpatrolinews.com, isafetymagazine.com, sumbernusantara.com, situsenegri.com, and ruangenergi.com, as well as other press articles focusing on the recent development of green technology and the accomplishments of PHM.

In this study, the two sources are combined in order to provide a comprehensive account of the company’s internal narrative (branding) and the external narrative (media coverage and the reactions of the stakeholders).

3.2 Anaysis Data

Data was collected between January and June 2025, following ethical guidelines for digital observation outlined by Kozinets [15] and Heinonen & Medberg [13]. From Instagram (@ubuki.untukbumikita), 30 posts, including captions and hashtags such as #ubuki, #SustainabilityJourney, #UpcycleInnovation, #UpcycleMovement, and #TogetherForEarth, as well as 50 comments, were collected. From the online media, 8 articles about UBUKI’s environmental initiatives and awards were analyzed

As explained in the previous section, the data collected was analysed using thematic analysis [16] in order to identify recurring themes in the collected data from the paltform. The data was collected ethically from the public domain, thus no interaction or manipulation of the data was performed. For the protection of privacy during the analysis, usernames and personal identifiers are anonymized.

As was already mentioned, the data was analysed using thematic analysis. Starting from once the data was familiarized; open coding of the Instagram posts, captions, hashtags, and comments as well as the media articles about the UBUKI Program, was conducted. Coding was done in order to capture the meanings, actions, and stories of the recurrence, if any, of the practices that related to the innovation of upcycling and corporate sustainability. The initial codes that were created were, through constant comparison across the data, refined, and consolidated into higher order analytical categories that articulate and approximate the value and perception of sustainability in the digital context.

Tabel 1. Coding structure and Thematic Development

Data Source	Open Coding	Analytical Categoris	Final Themes
Instagram Comments	Reuse of workwear, circular fashion, eco-design	Circular production practice	Sustainable brand identity
Instagram hashtags	#ubuki #upcycleinnovation #sustainabilityjourney #forourplane	Symbolic representation of sustainability	Sustainable brand identity
Online New Articles	Industrial waste transformation, circular economy initiative	Environmental responsibility narratives	Sustainable brand identity
Online Media report	Partnership with local communities	Sosial inclusion and local engagement	Community Empowerment
Instagram storytelling	“from waste to value”, collaborative production	Share value creation	Community Empowerment
Online news coverange	Sustainability awarad, circular economy recognition	Institutional validation	Sustainability Driven Value Creation

Media Narratives	Corporate reputation, long term sustainability strategy	Reputational capital	Sustainability Driven Value Creation

Table 1 provides the results of the analysis which show three interrelated themes: sustainable brand identity; community empowerment; and value creation driven by sustainability. These themes should not be considered linear or separate results, but rather interconnected dimensions of the value of corporate sustainability that upcycling innovation through the UBUKI program can be considered. The themes constitute the analytical framework of the next section, where each is examined to show more clearly the interplay of environmental, social, and financial value through digital narratives and interactions with stakeholders.

3.3 Research Ethics and Credibility

The study strengthened analytical credibility within the framework of triangulation by combining the two sites of observation analyses of the social media and online media digital platforms. Although the study was limited to two data sources, the two domains of community-based (social media) and institutional (online publications) data sources were sufficiently different to provide adequate cross-validation for the thematic coherence.

4 Finding and Analysis

4.1 Sustainable Brand Identity : Establishing Corporate Credibility on Environmental Matters

The results of multiple site netnography analysis show that the digital narratives around the UBUKI program are aligned with PT Pertamina Hulu Mahakam (PHM)'s green innovation goals and green economy principles. Interpreting Thematic Research showed three main themes in Instagram and online press: recognition of sustainable brands, community and social empowerment, and sustainable value creation.

UBUKI's Instagram posts and the stories it conveys, with the #sustainabilityjourney, #forourplanet, #upcycledmovement, and #ubuki, suggest a commitment to the environment and reflect the transformation of old industrial garments into new high fashion items. The caption of the post is focused on teamwork for the planet, creativity, and the reduction of waste.

Individuals such as "proud of Pertamina's environmentally friendly products" is a testament to the positive recognition of the company's stated and reported positions on the environment. This story validates the media reporting about PHM and the circular economy of innovation and the 3R's (Reduce, Reuse, Recycle) Environmental Commitment of PHM.



Fig.2 Capture from Instagram @ubuki.untukbumikita

4.2 Community Empowerment : Creating Social Value Through Local Collaboration

The he second of the three themes is UBUKI's strategy of community integration, where for social-economic value, and community empowerment, the social environment and eco-sustainability is of primary concern. UBUKI's sponsorship of cloth, repurposed, and hand-sewn items with the local community-based organization, Yayasan Langkah Bumi Sirkular, started with the sewing training of coveralls.

Media reports from sites like jurnalpatrolinews.co.id and sumbernusanta-ra.co.id give more depth to the concept and describe the partnerships between PHM and local cooperatives within the company's operational area. The UBUKI slogan "From Waste to Value" keeps branding this initiative a socially responsible green innovation – one that integrates the protection of the environment with the strengthening of local competencies.



Fig.3 Document from @pijakbumi

4.3 Sustainability : Driven Value Creation

The The third aspect reflects that the company views sustainability as more than an ethical responsibility, but as a driver for sustained profitability and sustained growth of competitive advantage. UBUKI markets its recycled products on Instagram, in particular, shoes that feature a minimalist design and images that speak to quality and eco-friendliness.

The posts speak to the quality and affordability of the products and the impact slogan “Together Untuk Bumi Kita” and “Small steps from upcycled shoes towards a more sustainable future.” to call out the ethical nature of the products. These comments, and the promotional materials, articulate the green industry’s emerging market in Indonesia and the ethical consumption trend.

In an article published on Jurnalpatrolinews.co.id, the achievement was a Gold recognition in the best circular economy project category at the Indonesia Corporate Sustainability Award (ICSA 2024). UBUKI products are a warranty for eco-minded patrons and are in accord with PHM's corporate social responsibility goals. This inter-gra-tion x case study demonstrates narrative that profit and loss, in sustainability terms, become mutually exclusive for a positive green corporate branding

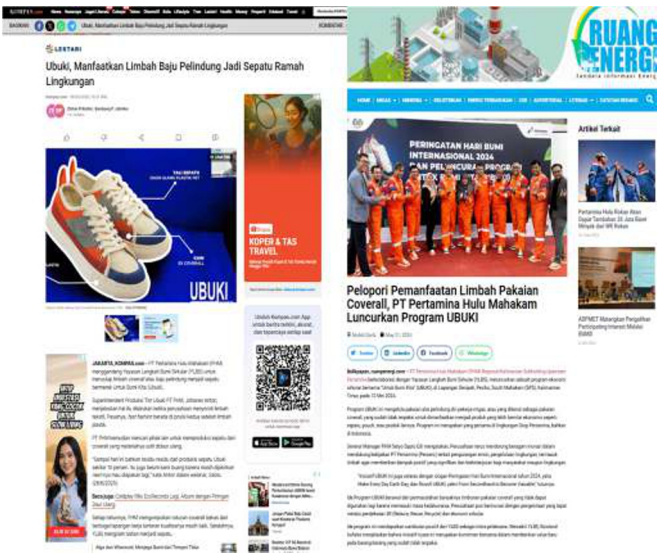


Fig.4 Capture from kompas.com and ruangenergi.com

5 Discussion

The outcomes from the multi-site netnography reveal that UBUKI is a case study for corporate green innovation at PT PHM. For one, through its upcycling processes, UBUKI is extending the lifecycle of industrial waste, in this case, used coveralls, while at the same time, enhancing PHM's image as a more sustainability-oriented company. Three interrelated themes; sustainable brand identity, community empowerment, and

profit through sustainability, demonstrate the significance of digital communication and stakeholder interaction in the field of green economics.

5.1 Upcycling Innovation within a Sustainable Economic Framework

Project UBUKI is an exemplary model for demonstrating the practical application of upcycling corporate waste within the constructs of a green economy by integrating the environmental, social, and economic triple bottom linegoals [1]. PHM, by upcycling waste industrial workwear, was able to reduce its`s operational waste while creating a social and economic benefit, which is in alignment with M. Sillanpää and C. Ncibi's [12] perspective of sustainable innovation supplementing ecological efficiency with economic feasibility.

UBUKI projects demonstrate the first practical attempt, within the flexible corporate accounting system, to integrate ecological and sustainable accounting. By inserting environmental accomplishments, such as waste and carbon footprints, into PHM's accounting system, it provides the flexibility to incorporate its accounting system with social and operational performance indicators, thereby, sustaining the pillars of green economic governance.

5.2 Circular Economy and Product Lifecycle Extension

UBUKI's unique approach to product life cycle management aligns with the circular economy principle of resource regeneration [9]. UBUKI's unique approach to product life cycle management aligns with the circular economy principle of resource regeneration.

5.3 Sustainability Accounting as Profitability : Consequences for Sustainable Accounting

In the end, profitability through sustainabil-ity provides finality. It shows that ecological commitment and financial profit are not opposing goals, but are rather mutually reinforcing goals, in current company strategy. This finding aligns with the Triple Bottom Line (TBL) Theory, which evaluates company performance with social, ecological, and financial components [6].

This aligns with the need for a reporting framework that integrates both financial and non-financial reporting, in terms of accounting profitability and sustainability. As R. Padilla-Lozano and P. Collazzo [17], state, companies that align their accounting systems with sustainability goals will gain enduring competitive advantages and will secure stakeholder trust. 5.4 The Role of Digital Stories in Corporate Legitimacy.

5.4 The Role of Digital Narratives in Corporate Legitimacy

Findings support the role of digital communication as a legitimizing tool for sustainability-oriented companies. Digital storytelling, stakeholder engagement through storytelling, and UBUKI media coverage, combined with Instagram posts, facilitate the

construction of a PHM digital persona that embodies the ecological and social commitments of PHM .

This aligns with Bourdieu's concept of symbolic capital [14], where legitimacy and trust are built through social recognition and how a company presents itself. It also supports Kozinets [15] view that netnography can uncover cultural patterns in corporate communication—showing how online stories help strengthen an organisation's legitimacy and create lasting value.

6 Conclusion

This study explores how the UBUKI program—PT Pertamina Hulu Mahakam's (PHM) upcycling initiative —extends product lifecycles and embeds green economic principles into corporate sustainability practice. Using multi-site netnography to examine Instagram and online media, we found that UBUKI is more than just a waste reduction effort: it's a model for transforming businesses to balance environmental care, social impact, and economic goals.

The thematic analysis yielded three key takeaways:

(1) Sustainable brand identity : through digital stories highlighting innovation and environmetal commitment, UBUKI builds PHM's reputation as a responsible organisation—fostering trust and legitimacy among stakeholders.
(2) Empowerment of the Community : the program promotes creates shared social value by involving local artisans and providing skills training, proving that sustainability can be a powerful tool for lifting up communities.
(3) Profitability : driven value creation environmental stewardship boosts the company's competitiveness, brand recognition, and long-term value creation—strengthening the link between doing good and doing well.

7 Limitation and Future Research Directions

The findings of this study are well worth and value-laden; however, the methodology can still have its limitations that require some consideration as to why the findings can be interpreted. First, the study is qualitative and interpretive, and involves multi-site netnography of open access digital contents across Instagram and online media. While this enables us to study some of the ways sustainability value is established and articulated, it does not quantify the direct environmental or financial impact of UBUKI in a quantitative manner. We are not measuring performance outcomes as such; rather our findings demonstrate how perceptions of value are conveyed and told through narratives.

Second, we studied a single initiative, which was the UBUKI program at PHM. Such deep-dive provides rich contextual understanding, but may restrict generalizability of findings to other sectors, organisations or countries. So can corporate sustainability practices and where and how they get shared online in response to sector, regulation and stakeholder expectation.

Third, our study focuses on external digital portrayals and stakeholder interactions, omitting internal views such as company managerial decisions and reporting of

sustainability. Because of that, we do not fully reflect how the digital values we communicate are reflected in the business in practice. These deficiencies point to fruitful avenues for subsequent studies. It would be possible that studies could also be conducted to triangulate the digital narratives, (interviews, surveys or internal document analyses) with organisational practices through the use of netnographic analysis. Cross-industry comparisons and longitudinal studies which record changes over time would also contribute to understanding how upcycling innovation and corporate sustainability progress across diverse contexts.

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