Chapter 16
The Use of Sustainable Archetypes in Financial Entities: A Comparison of Developed and Emerging Economies

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Abstract The aim of this article is to examine how sustainable archetypes are reflected in the business activity of financial entities in both developed and emerging economies, as delineated in their integrated reports. The paper shows that sustainable archetypes are better reflected in the business activity of financial entities in developed economies, although the difference between developed and emerging economies is slight. The most common archetype among financial entities in both types of economies is "substitution with digital processes," which includes digitalization, virtual reality, and artificial intelligence. This not only facilitates transactions but also encourages customers to make more frequent use of digital platforms.

Keywords Corporate social responsibility · Integrated reports · Sustainable development · Sustainable archetypes

16.1 Introduction

Sustainable development for an organization means caring for its various stakeholders as well as the triple bottom line. In terms of financial activity, it also refers to meeting the needs of clients and protecting the environment while generating profit—not just doing no harm but actively using finance to do good. Financial entities hold a distinct intermediary role within sustainable development, as they do in the public domain, commerce, and industry. For example, banks assess and price risks during the credit approval process. Through such differentiation in prices, banks can support sustainability (Yip & Bocken, 2018) (cf. Adeel-Farooq et al., 2020; Gerasimov et al., 2020). Sustainable development in financial entities involves a variety of sustainable archetypes (cf. Karwowski, 2018). The aim of the research underlying the results presented in this article is to identify which of these archetypes are reflected in the business activity of financial entities in developed and emerging

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economies, as presented in their integrated reports. For this purpose, the scope of the information disclosed in the integrated reports of each of the subject financial entities was examined.

This paper contributes to the accounting literature by illuminating the disclosure of sustainable archetypes by financial entities, thus raising the usefulness of accounting, primarily by increasing its relevance. It also demonstrates that each archetype is reflected in the business activities of financial entities to varying degrees.

16.2 Data and Methodology

The empirical study was based on a content analysis of the integrated reports. Initially, the integrated reports of financial entities were downloaded from http://examples.integratedreporting.org/. The final sample included 27 reports of financial entities, as shown in Table 16.1.

The integrated reports were produced by companies from a range of financial entities—primarily banks (16 companies) and insurance institutions (six)—and from various regions—Africa (12 companies), Europe (nine), and Asia (three).

Then relevant data were collected—revenues, assets, and number of employees. Table 16.2 presents a summary of the research sample divided between developed and emerging economies.

Finally, a content analysis was conducted relating to the eight sustainable archetypes illustrated in Table 16.3 (Yip & Bocken, 2018) (cf. Bocken et al., 2014).

The foregoing information can typically be found in chapters with titles containing wording such as "business model" or "value creation."

16.3 Results

Table 16.4 illustrates the percentages of companies from the research sample that disclose the adoption of each of the sustainable archetypes—calculated separately by the type of economy and the weighted average of the subject entities.

The overall combined mean of the archetypes is 51.4%—i.e., overall, 51.4% of the 27 subject reports disclosed the use of one or more of the archetypes. The mean is slightly higher among just the integrated reports of the financial entities from developed economies (52.5%), compared to those from emerging economies (50.7%).

The archetypes that are the most common among the ten financial entities in developed economies are "maximizing material and energy efficiency" and "substitution with digital processes" at 70.0%, while "encouraging sufficiency" and "creation of inclusive value" appear in 60% of the reports. The least common are "adopting a stewardship role" and "repurpose for society/environment" at 30%.

Table 16.1 Research sample

Company	Region	Year
ABSA	Africa	2019
Aegon	Europe	2017
Bankmecu	Australasia	2012
Barclays Africa	Africa	2017
Capricorn Group	Africa	2017
DBS	Asia	2019
DBSA	Africa	2016
Eurazeo	Europe	2016
FMO	Europe	2019
FNB Namibia	Africa	2017
Garanti	Europe	2019
Generali	Europe	2019
Hammerson	Europe	2014
IDLC Finance	Asia	2016
ING	Europe	2016
Itaú Unibanco	S. America	2017
Lloyds Banking Group	Europe	2017
Liberty	Africa	2016
Nedbank	Africa	2019
People's Leasing & Finance	Asia	2019
Road Accident Fund	Africa	2015
Sanlam	Africa	2015
Standard Bank	Africa	2019
Sasria	Africa	2017
Stockland	Australasia	2013
Strate	Africa	2017
TSKB	Europe	2016

Source: Own study based on analyzed reports

Table 16.2 Summary of the research sample

Type of economy	Number of entities	Median		
		Revenues (USD mln)	Assets (USD mln)	Employees
Developed	10	20,827	290,386	25,954
Emerging	17	1514	45,782	18,486
Total	27	8757	136,376	21,252

Source: Own study based on analyzed reports

In the emerging economies, the most frequently disclosed archetypes among the 17 financial entities are "substitution with digital processes," mentioned in 79.6% of the reports, followed at 64.7% by "encouraging sufficiency" and "adopting a stewardship role"—the latter being the least employed in developed economies at 30%. The least common are "resilience in establishing cooperation" at 29.4% and

Table 16.3 List of sustainable archetypes employed in financial entities

Archetype	Characteristics of the archetype
Maximizing material and energy efficiency	Optimizes the use of resources (doing more with fewer resources) and tries to generate less waste, emissions, and pollution
Substitution with digital processes	Focuses on service innovation by using digital means
Encouraging sufficiency	Concentrates on the effective utilization of services and avoiding their overprovision in order to increase loyalty and reputation
Adopting a stewardship role	Engages with all stakeholders to ensure their long-term health and well-being
Creation of inclusive value	Focuses on providing and/or improving access to innovative services to underserved and vulnerable customers
Repurpose for society/the environment	Centers on prioritizing the delivery of social and environmental benefits instead of profit maximization
Resilience in establishing cooperation	Focuses on cooperating with those parties that do not negatively impact the environment and/or society
Providing sustainable financial products	Allows more customers to participate in the potential growth opportunities of sustainable businesses

Source: Based on Yip and Bocken (2018)

Table 16.4 Percentages of companies disclosing the adoption of sustainable archetypes—divided between developed and emerging economies

Archetype	Developed (%)	Emerging (%)	Combined (%)
Maximizing material and energy efficiency	70.0	35.3	48.1
Substitution with digital processes	70.0	70.6	70.4
Encouraging sufficiency	60.0	64.7	63.0
Adopting a stewardship role	30.0	64.7	51.9
Creation of inclusive value	60.0	47.1	51.9
Repurpose for society/the environment	30.0	52.9	44.4
Resilience in establishing cooperation	50.0	29.4	37.0
Providing sustainable financial products	50.0	41.2	44.4
Total	52.5	50.7	51.4

Source: Own study based on analyzed reports

"maximizing material and energy efficiency" at 35.3%—the latter being the most common at 70% among the sample from developed economies.

When considering the total sample, "substitution with digital processes" is the most common archetype at 70.4%. This refers to digitalization, virtual reality, artificial intelligence, and all related elements. Digitalization means delivering secure, personalized, and relevant experiences, plus a full range of solutions—continuously and in real time. This is ensured by establishing a digital strategy within the financial entity developed to identify and create the appropriate capacity to build a channel of continuous and innovative solutions. Such strategy allows the entity to be much closer to customers and helps it better understand them, respond to their needs, and build lasting customer loyalty while still providing clients the option of conducting transactions by telephone or face to face.

The core of a digital strategy is appropriate infrastructure, including Wi-Fi, loyalty apps, and social media channels, providing connection with customers to ensure their visits are tailored to their individual needs. Digital technology involves the frequent use of devices, emphasizing communication via a private social network. These digital possibilities have the power to transform experiences, improve people-to-people connectivity and knowledge sharing, create access, and improve customers' experiences.

Digital transformation is helpful in measuring progress in the following:

- Developing meaningful relationships with ecosystem partners and generating results from these partnerships
- Using digital channels to acquire new customers and increase the entity's share of digital channels
- Eliminating paper and driving automation to ensure immediate delivery
- Driving customer engagement, conversion, and contextual marketing cross-buy across digital assets

E-solutions, process solutions, and mobile solutions not only drive internal efficiency but also enable customers to increase their wealth by helping them improve their own lives. A dedicated staff is available to inform customers about the possibilities of e-channels. Digital platforms are particularly extended by launching applications specifically designed for customers to address their individual needs. Adopting a digital platform ensures the secure management of customer database and provides employees with customer information at their fingertips.

By serving clients predominantly online, processing in the cloud, and leveraging open innovation driven by data and insights, financial entities provide services, solutions, and capabilities that clients and employees need to achieve growth, prosperity, and fulfilment.

"Encouraging sufficiency" is the second-ranking archetype, important in both types of economies at 63.0% combined. Remuneration for employees, including the executive team, is divided into fixed and variable components, together with short-term incentive schemes, which motivate and reward the achievement of annually agreed individual, business unit, and group performance objectives and strategic priorities. Specific quantitative performance measures include but are not limited to the following:

- Return on equity
- Earnings in increase and net income after capital charge
- Performance within overall group risk appetite
- Quality of earnings
- Audit findings
- Operational losses

The remuneration policy is fully aligned to ensure similar salary scales for investment and risk functions and to avoid bonus structures that encourage excessive risk taking. Consequently, the balance between guaranteed and variable remuneration is appropriately structured and should not reward risk taking beyond management-approved risk mandates.

A higher weighting toward financial outcomes is applied primarily to the most senior individuals who are able to influence these outcomes. Junior individuals with limited ability to influence such outcomes have little or no weighting assigned to financial achievements.

The two other archetypes above the overall mean are “adopting a stewardship role” and “creation of inclusive value,” both at 51.9%.

“Adopting a stewardship role” addresses issues focused on women, students, and persons with disabilities among both employees and customers. A diverse workforce broadens prospects and enhances resilience and performance. Such diversity includes gender, race, age, disability, experience, religion, values, and beliefs. Points are given for recruitment and the retention of females at senior, middle, and junior management levels and for attracting individuals with disabilities. Employees are encouraged toward personal giving and volunteering. In such situations, a personal volunteering leave allowance is possible.

Efforts are undertaken to provide employees with disabilities the best possible resources in terms of accessibility and minimizing constraints on the performance of their job functions. The aim is to offer conditions for personal development and equal opportunities to utilize their competencies fully. As health conditions or disabilities can make getting to a branch difficult for some customers, digital access has transformed the nature of customer services.

There are also benefits in programs aimed at recognizing new entrepreneurs as attracting and investing in the country’s young and upcoming future leaders is considered worthwhile. Scholarships are awarded to promising and talented students studying in various specialized fields, providing full financial support and covering expenses such as accommodation, books, travel, and monthly allowances. The support of financial entities helps millions of low- and middle-income individuals attend university.

Financial entities also contribute to meeting the national and regional demands for energy generation capacity, including renewable energy, as well as for the construction of schools and residences and the maintenance of health facilities. Each strategic imperative is supported by a series of strategies centered on acting as a socially responsible corporate citizen in addressing national priorities as well as those of the local communities and the environment.

One goal underlying the sustainable archetype “creation of inclusive value” is to help small and medium-sized enterprises (SMEs) develop and grow, particularly by reinventing and expanding the boundaries of their activities through the long-term investments of both operational knowledge and financial resources. Thanks to such partnerships, many small businesses are expected to receive loan approvals. Such loans provide support to female entrepreneurs, renewable energy projects, and small companies located in regions that are less developed and most affected by refugee migration. The main goal of such projects is twofold. The first is to increase access to finance in underdeveloped regions and for the most underserved segments of the economy, SMEs in the least developed regions that are most affected by the refugee influx. The second is to increase the economic activity of vulnerable groups in these areas that are most impacted by migration and the resulting increased social and economic challenges.

Financial entities are particularly interested in the SME value proposition in the form of a dedicated fund targeted at future SMEs that have business ideas but lack sufficient collateral or capital to set up businesses. The purpose of such financing is to support, develop, and expand the SME sector by providing necessary funding while continuing partnerships with external contractors to provide technical assistance and education on a sustainable basis.

The other four archetypes fall below the overall mean.

"Maximizing material and energy efficiency" (48.1%) involves the responsible use of natural resources, including energy sources (electricity, solar, and gas), air, water, paper, and fuel, and the management of impacts, including carbon emissions and waste. Financial entities consume energy, paper, and water and are required to reduce their environmental impact over time. Although they are not significant consumers of natural resources, they try to minimize their direct or indirect impact and adapt investment criteria to assess the responsible use of these resources when investing both shareholder and customer capital. Initiatives are implemented to make branches more environmentally friendly and reduce their carbon footprints. They also invest in increasing the energy efficiency of their premises.

Among other aspects, the reduction of environmental impact may focus on water, energy, CO^2, waste, air, and fuel consumption in a variety of ways, as illustrated in Table 16.5.

The "repurpose for society/environment" archetype (44.4%) contributes toward community resilience, housing, and international development, as well as the environment by supporting the renewable energy sector and offering other climate-related solutions through research into opportunities such as financing water and energy infrastructure development projects. Financial entities intensify their strategy to support renewable energy projects that are economically, environmentally, and socially viable and play a key role in the diversification of electricity supply, as

Table 16.5 Ways of reducing environmental impact

Focus	Ways of reducing environmental impact
Water	Installation of flow restrictor devices, rainwater collection, campaigns for conscious use of water, careful selection of fixtures and fittings, and ensuring the best possible use of each drop of water
Energy	Reduction of energy consumption for lighting, installation of LED bulbs, replacement of high-energy-consuming equipment, as well as thermal insulation and glazing, thanks to which it is cooler in summer and warmer in winter
CO^2	Direct emissions mainly arising from diesel oil combustion, indirect emissions from electricity consumption, and emissions arising from employees' transport and business trips
Waste	Minimizing the amount of waste destined for landfills and the generation of solid waste
Air	Continuous monitoring of air quality, optimization of natural light, reduction of toxins from materials
Transport	Providing cycling facilities for employees, residents, and visitors to help reduce transport emissions and support an active lifestyle

Source: Own study based on analyzed reports expressed in the national development plans of many of the economies in which they operate. This archetype constitutes a value proposition for companies developing energy-efficient products and fights against climate change by prioritizing renewable investments, applying detailed environmental and social due diligence, promoting energy-efficient buildings and electric and hybrid cars, as well as raising awareness among stakeholders.

The main thrust of this archetype is to finance various ventures, such as renewable energy and energy-efficient projects, green buildings, and waste management development initiatives that ensure the safety and protection of workers. This also includes organic farming, renewable energy generation, sustainable construction, and the reuse of waste materials.

As part of "providing sustainable financial products" (44.4%) and the growing global awareness of the negative impact of fossil fuels and other conventional energy sources, green business should be identified as one of its major priority sectors and be recognized as one of the market leaders in promoting this concept. Financial entities sell their investments in coal and invest more in green bonds and new, cleaner technologies. They provide customers with green loans or bonds, as well as loans related to renewable and clean energy, offering support in improving environmental performance. In particular, they provide the following:

- Loans linked to sustainability, which are structured to allow customers to pay less interest when they achieve a set of preagreed environmental, social, and governance (ESG) performance targets, which are validated by an independent ESG rating agency or other verification party
- Green loans or bonds that exclusively finance eligible green projects in areas such as energy efficiency and pollution prevention
- Renewable and clean energy loans that finance renewable and clean energy projects (e.g., solar and wind), rooftop solar systems, and energy-efficient buildings

"Resilience in establishing cooperation" (37.0%) considers strict social, ethical, and environmental risk criteria in order to finance activities that have a positive impact on the environment and society. While this influence initially focused on the positive environmental impact of financing, a structured approach was later developed to allow the positive social impact of funded projects to be considered as well.

Financial entities are committed to adhering to the principles of responsibility as a global guide in the projects they finance. They evaluate projects against nonfinancial criteria relating to environmental and social risks or impact, as well as financial parameters regarding these principles.

Under this archetype, financial entities acknowledge the growing local and international pressure on them to withdraw their lending from resource-intensive sectors, in particular the coal mining sector. They try to avoid any negative social or environmental consequences as a result of investing their clients' money. Financial entities also do not invest customer savings in an unethical or socially and environmentally disruptive manner.

Financial entities also help their commercial clients understand and manage their sustainability risks and conduct an environmental risk assessment at the beginning of each new client relationship. Including sustainability factors in investment decisions demonstrates commitment to responsible environmental stewardship.

16.4 Conclusion

This study explored the disclosure of sustainable archetypes of financial entities, whose products are both intangible and inseparably linked to the customer interface (Yip & Bocken, 2018). To investigate this, a content analysis of the integrated reports of 27 financial entities was conducted.

At the aggregate level, the sustainable archetypes are better reflected in the business activity of financial entities in developed economies, although the difference between developed and emerging economies is slight. An interesting insight comes from the analysis at a disaggregate level in terms of the disclosure of sustainable archetypes. This analysis shows the sustainable archetype "substitution with digital processes" to be the most common, followed by "encouraging sufficiency," "adopting a stewardship role," and "creation of inclusive value." These archetypes fall above the overall mean value. At the lower end of the scale, archetypes "resilience in establishing cooperation," "repurpose for society/environment," and "providing sustainable financial products" attract the least interest among the subject financial entities.

All the interrelated archetypes have the potential to and do actually change the value proposition toward the environment and society, either by creating new value or by significantly reducing negative impacts on the environment or society.

References

Adeel-Farooq, R. M., Abu Bakar, N. A., & Raji, J. O. (2020). Financial sector development and economic growth: A co-integration analysis for ASEAN countries. *International Journal of Economic Policy in Emerging Economies, 13*(3), 195–208. https://doi.org/10.1504/IJEPEE.2020.109056

Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production, 65*, 42–56. https://doi.org/10.1016/j.jclepro.2013.11.039

Gerasimov, A. N., Azhieva, I. A., Kurbatov, V. I., Kartashevich, E. V., & Salogub, A. M. (2020). Management efficiencies in Russian banking: Specificity of the transition to socially-oriented management. *International Journal of Economic Policy in Emerging Economies, 13*(5), 471–482. https://doi.org/10.1504/IJEPEE.2020.110435

Karwowski, M. (2018). Wpływ modelu zrównoważonego biznesu na kształt raportu biznesowego. *Studia i Materiały. Miscellanea Oeconomicae, 22*(4/2), 125–136.

Yip, A. W. H., & Bocken, N. M. P. (2018). Sustainable business model archetypes for the banking industry. *Journal of Cleaner Production, 174*, 150–169. https://doi.org/10.1016/j.jclepro.2017.10.190