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Reconceptualization of Sustainability Using the Medical Wheel and Maslow's Pyramid

[1]Hajaina Ravoaja*
Corresponding Author: *hajaina.r@iscam.mg
[1] ISCAM Business School, Madagascar

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ABSTRACT

This multidisciplinary study revises the concept of sustainability. It aims to provide a more holistic view of this notion. It develops a model that provides a frame of reference for ensuring the sustainability of decisions taken. Comparative analyses of the Sustainable Development Goals (SDGs), a definition of sustainability and its components, the pyramid of needs, and the medical wheel were carried out. Sustainability encompasses the economic, social, ecological, governance, political, technological, legal, and spiritual spheres. The SDGs and this pyramid can be complemented by the need to find meaning in one's life and work through spirituality. This makes it possible to balance the components of sustainability and to consider all the needs. The aspiration to find meaning or purpose in life through spirituality could be added as the 18th SDG. Sustainability is about meeting the physical, mental, emotional, and spiritual needs of current and future generations. Thus, managers will be able to monitor progress in meeting these needs, strike a balance between the components of sustainability, and consider all the needs of their employees. This article provides a missing piece about the needs addressed by the SDGs and those we have categorized into the four strands of the medical wheel that evoke aspects of the human: physical, mental, emotional, and spiritual.

Keywords
Medical Wheel
SDGs
Spirituality
Sustainability

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Introduction

Sustainability is a concept that is widespread throughout the world and is a current and future issue of concern to humanity. Different meanings are attributed to this notion. The practice of sustainability is an essential tool for companies and organizations to respond to the growing need for transparency on the part of stakeholders: investors, consumers, political decision-makers, and society as a whole [1]-[3]. It has also been examined in terms of its social, economic, environmental, and governance components. Each author has drawn on this concept in her or his way. However, one definition of sustainability has stood out, even though it has often been seen from the point of view of organizations. It has also been linked to the SDGs.

However, the latter is not complete and differs for each country, and sustainability is specific depending on the perspective: institutional, organizational, or individual. So it's time to rethink sustainability. To keep these objectives uniform at the global level, they need to be supplemented. According to the medicine wheel, health is conceived in terms of a state of well-being achieved through the balance of the physical, mental, emotional, and spiritual realms [4]. As the human being has four physical, mental, emotional, and spiritual - the latter is absent from these objectives and the idea of sustainability. We still need to strike an equilibrium between these facets. This conceptual paper does not propose strategies to ensure the sustainability of organizations, it offers a frame of reference for managers and for those who have room for maneuver to aim for sustainability.

On the one hand, a comparative analysis was carried out between the SDGs and the needs. Secondly, the medical wheel has been analyzed about these needs to ensure that they are complete. In this article, the economic component of sustainability will be discussed first. Then the need for balance between the components will be set out, followed by human sustainability, the SDGs, and the notion of sustainability, linking these SDGs to needs and combining the medical wheel with these needs. The concept of sustainability is open to several disciplines, which will be explored in this article. Following several analyses, the model that will be shown at the end of this article will add to our understanding of sustainability.

Predominance of economic concerns

Originally, sustainability meant long-term viability in the financial sense [5]. Its subsequent association with the principles of sustainable development has offered companies

the opportunity to reconcile environmental protection and socio-economic development with improved business performance [6],[7]. With 75% of global large and mid-cap organisations reporting on their sustainability performance in 2017, sustainability has truly become mainstream [8],[9]. Anyway, for many organizations, sustainable development is additional to their core interests or activities [10]. Many organizations take a fragmented and reactive approach to sustainability, considering environmental and social initiatives as a way to improve their brand, reputation, and competitive advantage, comply with regulations, or deal with emergencies. These organizations do not see sustainability as an issue that has a direct impact on the organization's ability to create value and overcome long-term risks [11-17].

Corporate sustainability has been limited by the business case in which sustainability has been recognized and initiated. By pursuing eco-efficiency and social responsibility, companies are only reducing unsustainability [18]. Although these initiatives have had positive impacts, they have concentrated predominantly on the short-term financial sustainability of the company, in that they have enabled an organization to achieve better growth and cost savings, improve its brand and reputation, strengthen stakeholder relationships, and increase its bottom line [10], [12].

This highlights the fact that corporate sustainability remains disconnected from the state of degradation of the Earth's natural and supporting systems [10], [19]. There is a conflict between seeking sustainability for the financial benefit of a company or for the persistence and stability of the social and ecological systems on which organizations operate and depend [18-26]. These two aspects of sustainability can be combined. The rapid pace of global change and the recognition that the associated challenges are interdependent in terms of complexity and non-linearity calls for a re-examination of the systemic foundations of sustainability by business [10], [19]. The current business case for sustainability should promote sustainability as a system concept. Sustainability practices should aim to maintain the structure and function of the interconnected social and ecological system on which a business depends so that it can continue to provide the resources necessary for the economic viability of the business [19],]26]-[28].

Balancing the sustainability strands

The economic, environmental, and social issues should be treated simultaneously to achieve the ultimate goal [29]. These three aspects are called the “triple bottom line (TBL)” [30]-[32], a concept that has become popular with stakeholders. As major players, companies have had to integrate sustainable development into their activities. They had to link their activities with social values [33]-[35]. Subsequently, the concept of sustainability has gained a lot of ground as it allows companies to reduce information gaps and stimulate the transparency

of their sustainability efforts, whether they have positive or negative impacts [36]. Therewithal, it can be used to strengthen the company's reputation and identity [30]. The discussion that is spreading is that with greater transparency, investors can make more informed decisions about socially responsible investment and better direct their capital to companies that have a more positive societal impact [36]. Resultantly, companies that manifest their social commitment, accountability, and long-term behavior to gain legitimacy and societal acceptability will amplify their competitive advantage and market benefits and will have more success.

To be sustainable, organizations must act in a socially and environmentally responsible manner while pursuing their financial goals [37]. Organizational sustainability depends on the combination of economic, environmental, and social performances. Corporate sustainability can be dealt with by a business strategy in what respect environmental, social, and governance (ESG) issues are incorporated into the firm's business model to bolster long-term firm value and performance. The setting up of a sustainability committee encourages the publication of sustainability reports that push companies to commit to socially responsible actions. It shows stakeholders that these companies are working hard to address sustainability issues [37]. Likewise, scores and ratings provided by independent organizations such as the Carbon Disclosure Project (CDP) (which has become Disclosure Insight Action) enable investors to encourage companies to adopt ESG management processes and implement sustainability strategies [38],[39]. Solving the world's environmental and social problems is an important condition for sustainability. This includes tackling climate change and environmental degradation, resolving conflict and injustice, and reducing poverty and inequality [40]. The 2030 Agenda for Sustainable Development shows the way to global sustainability [41]. This forms frameworks and guidelines that help in the planning of activities [42],[43].

In recent decades, future sustainability has been defined as requiring equality between societal, environmental, and economic interests [44]. Sometimes referred to as "people, planet, and profit", these interconnected dimensions have served as the classic framework for three pillars guiding sustainability, including sustainable management education and triple-bottom-line corporate reporting [45]-[47].

From an economic point of view, sustainable development is based on the global economy, which nevertheless generates commercial activities with negative environmental and social impacts such as industrial pollution and unsustainable consumption [48]. It was concluded that future sustainability requires educating governments, businesses, and consumers to equate positive environmental and societal results with financial outcomes [49]. Financial targets have often been achieved by reducing production costs. This comes from an

excessive consumer culture that demands low prices. While environmentally friendly manufacturing practices and related sustainable products are generally more expensive and less convenient, governments, businesses, and consumers cannot put them first [50].

The environmental pillar of sustainable development is not prioritized by governments, businesses, and consumers, including through poor waste management and pollution. Climate change induced by greenhouse gas (GHG) emissions has been identified as the most urgent sustainable development challenge [51], linked to rising global temperatures and increased drought frequency. Water insecurity includes water quantity and quality [52]. Preventing climate change by reducing GHG emissions is a key future sustainability goal for educators in sustainable management [53].

On the social side, sustainable development is confronted with the increase in the world population from 7.5 billion in 2020 to 9.8 billion in 2050 according to forecasts [54]. As populations rise sharply in emerging markets where energy and product consumption keep pace, they are likely to generate significant waste and pollution [50]. Poor lifestyle choices, including the consumption of harmful products such as tobacco, alcohol, and junk food, are another barrier to societal sustainability. The consumption of harmful products is driving the epidemic of non-communicable diseases (NCDs), which is the leading cause of chronic disease and death in the world [55], far outpacing COVID-19 [56].

SDGs and Sustainability

As ecological and societal problems worsen, it is felt that there is a necessity to examine the impact of past and present corporate sustainability initiatives on the achievement of SDGs [10],[57]. To help all sustainability actors establish and fulfill their social and environmental responsibility obligations [58] and to improve the balance between the pillars of sustainable development, the United Nations introduced 17 SDGs in 2015 [41]. These are a revision of the former Millennium Development Goals, which were more concentrated on the developing world, and global sustainability goals that address all human activities. 193 countries signed up to the related 2030 Agenda for Sustainable Development, which included the 17 SDGs [41], organisations around the world have been encouraged by governments to report on how they support these goals [59]. CSR has consequently evolved into corporate sustainability strategies that seek to demonstrate organizational commitment and contributions to global sustainability.

Particularly since the Paris Agreement in 2015, companies have become more attentive to sustainability goals [60],[61]. Sustainability and ecological transformation are gradually permeating society and influencing companies. In particular, the commitment to the United Nations Sustainable Development Goals (SDGs), created in Paris in 2015, has led to an awareness of corporate social responsibility (CSR) and the demand for sustainable

development [10],[62]. Companies are thinking even more about how to cope with the transformation towards sustainability [10],[63[,[64]. Sustainability is about preserving the ability of humans to satisfy their needs [65]. Sustainability alludes to development that meets the needs of the present without compromising the aptitude of future generations to meet their own needs [66]. Ecological transformation refers to the evolution of companies and organizations towards reducing the exploitation of valuable resources and ecosystems and towards extracting resources at a level that does not exceed sustainable yields. Sustainability encompasses the mechanisms of sustainable practices, the antecedents, the consequences for economic, interpersonal, and social performance, and the possibilities [67]-[70]. While policy decisions have promoted pro-environmental changes in companies, their actions are proactive and reactive toward ecological transformation [63],[71]. Proactive actions can secure a company's strategic advantage, for instance, as companies with a good CSR reputation outperform others [72].

Research has identified four main motives and areas for organizational ecological transformation [63],[66],[69]: external pressures such as political policy and societal changes, environmental competitiveness, demands for ecological aspects in legitimization, and internal ecological responsibility, especially the commitment of the management team. External stakeholders influencing the government's regulatory framework impose sustainable business practices [71]. As a result, companies call to comply by developing and implementing changes toward ecological sustainability while balancing economic and environmental objectives [66]. These changes are often associated with compliance-oriented adaptations, which indicate organizations' passive response to formal institutions and potential sanctions.

Environmental competitiveness results from firms increasing their competitive advantages or long-term profitability through their ecological responsiveness and environmental strategies, for example by adopting more environmentally friendly innovations [69],[71]. The growing inclination of consumers towards environmentally friendly goods and services opens up opportunities for companies to expand into eco-product markets. This pushes them to strategically amplify their means to find new sources of competitiveness [73].

A "green" reputation can extend to other company products. For example, in the food production and agriculture sectors, a good environmental image can improve the reputation of companies and their green marketing skills. With an environmental strategy based on ecological transformation, mastering internal and external forces strengthens environmental competitiveness. The desire and actions of companies to gain environmental legitimacy are signs of legitimating motivation. This translates into conforming to an established set of regulations, norms, values, or beliefs prevailing in the business environment [69]. Legitimacy

comes from more informal institutions that shape organizational and individual sustainability trends about external pressures. For example, climate change is driving the automotive industry to design and produce more environmentally friendly cars. Legitimization motivation reveals organizations' fear of disappointing stakeholders or failing to meet their expectations to motivate more proactive adaptations [74].

Motivation for ecological responsibility can have an internal origin, for example, the environmental awareness of the managers or the company's vision [75]. It represents the intrinsic motivation of the leader that drives the ecological transformation of the company [70], [76]. That being the case, companies invest resources in environmental initiatives, such as developing greener products, organizing green events, or making discreet donations to environmental protection associations.

As a result, external pressure, business requirements, and internal motivations are driving organizations toward sustainability and ecological transformation. Sustainability and ecological transformation can shape "an essential component of corporate identity" [77]. Ecological transformation can be distinctly sustainable and holistic when it penetrates the identification of an individual, a group, and an organization. Some contemporary educators in sustainable management have incorporated a fourth component into the framework that guides sustainable development, which points out the role of governments. This policy pillar or governance scope of sustainability emphasizes the roles of government decisions and associated community engagement in shaping sustainable societies [58],[78].

In sum, the most generalized definition of sustainability is Brundtland's which describes sustainability "as a development that meets the needs of the current generation without compromising the needs of future generations to meet their own needs" [79]. Sustainability is a compounded fact that covers ESG problems, often known as TBL [30]-[32]. It embodies the idea that human society should function using industrial and biological processes that can be maintained indefinitely [80].

SDGs and Needs

In doing so, sustainability is about meeting the needs of the current and future generations. To do this, it is necessary to start by identifying these needs. While previous explanations have focused on organizations and institutions, the basis for sustainability lies at the level of the individual. One business and marketing study, for example, looked at how to satisfy six generations of customers in the USA: Pre-Depression Generation (Before 1930), Depression Generation (1930-1945), Baby-Boomers (1946-1964), Generation X (1965-1976), Generation Y (1977-1994), and Generation Z (After 1994). It turned out that each generation has its aspirations [81]. A study of a sample of 570 people from the Baby Boomer, Generation X, and Millennial generations showed that their needs for competence, autonomy, and

relatedness in social networking are different, which does affect their engagement. In this research, relatedness includes affinity, belonging, interactivity, and innovativeness [82]. According to the self-determination theory (SDT), autonomy is about experiencing choice and volition in one's actions. Competence makes a person successful in challenging tasks and it influences desired outcomes. Relatedness includes connection, mutual respect, caring, and reliance on relationships with others. The satisfaction of these three wishes together will facilitate people's self-motivation and effective functioning [83]. Additionally, psychological needs for improvement, prosocial impact, and beneficence promote well-being and fulfillment [84]-[87].

An update of the Maslow hierarchy of needs, which encompasses the essentials listed formerly, revealed the following: physiological, safety, love and belongingness, esteem (which are deficiency needs), cognitive, aesthetic, self-actualization, and transcendence (which are growth needs). Biological and physiological needs are, for example, air, food, drink, shelter, warmth, sex, and sleep. Safety needs relate to protection against threats, security, order, law, stability, and the absence of fear. Love and belongingness needs are friendship, affiliating, being part of a family, group working life, intimacy, reliance, welcome, receiving and giving affection and love. Esteem needs are, on the one hand, the need for self-esteem, incorporating dignity, achievement, mastery, and independence, and, on the other, the need to be accepted and valued by others because of status or prestige. Cognitive needs are skills, information, knowledge and understanding, curiosity, exploration, need for meaning, predictability, and attitudes. This enables people to function very effectively in various social contexts. People generally want to express themselves pleasingly to satisfy their aesthetic needs. This is manifested in appearance, appreciation, and search for beauty, balance, and form. Self-actualization needs consist of realizing personal potential, self-fulfillment, seeking personal growth, and peak experiences. At the level of transcendence, people focus on goals higher than themselves, as self-transcendence is about serving society, nature, other species, and the cosmos. It is a motivation by values that transcend beyond the personal self [88]. On the other hand, spirituality responds to the need to find meaning or purpose in life [89],[90] and to support the will to contribute to the common good [91]. It links work to a broader transcendent life purpose beyond the self [92]. Tensions between spiritual practices and organizational, institutional, and societal constraints are important elements in the process of negotiating meaning-making [93]-[95]. Spiritual traditions form subjective and normative perceptions of the meaning of work [96],[98]. These traditions shape understandings and interpretations of meaningful work [99]. The meaning of work differs according to philosophical and theological attitudes [100]. Spiritualism has been defined as the presence of the spirit in the workplace. It

raises awareness of an inner life and makes work meaningful within a community. Spirituality in the workplace is translated into inner life, a sense of community, and meaningful work [101]. Inner life is about knowing one's influence and abilities and how to use them effectively in the workplace. The sense of community relates to an employee's relationship with her or his colleagues. The usefulness of work is specific to the type of work and reflects the importance attached to it by the employee in question. Whereas religion is an organized belief system, spirituality in the workplace is about finding meaning and purpose in work [102]. Through spirituality, work is seen as a cult. From this perspective, values and beliefs are about organizational climate, positivity, creativity, engagement, improving job satisfaction, and reducing unethical behavior [103],[104]. As follows, the SDGs can be linked to the longings listed in the update of the Maslow hierarchy of needs.

Table 1. SDGs and associated needs

SDGs	Needs
1. No poverty	Physiological
2. Zero hunger	Physiological
3. Good health and well-being	Physiological
4. Quality Education	Cognitive
5. Gender equality	Esteem
6. Clean water and sanitation	Physiological
7. Affordable and clean energy	Physiological
8. Decent work and economic growth	Self-actualization
9. Industry, innovation and infrastructure	Physiological, safety, aesthetic
10. Reduced inequalities	Self-actualization
11. Sustainable cities and communities	Physiological, safety, love and belongingness, esteem, aesthetic
12. Responsible consumption and production	Physiological, safety
13. Climate action	Physiological
14. Life below water	Physiological
15. Life on land	Physiological
16. Peace, justice, and strong institutions	Safety, esteem, transcendence
17. Partnership for the goals	Esteem, transcendence

This shows that all the obligations in the hierarchy mentioned earlier are represented in the 17 SDGs. This demonstrates the importance of physiological concerns, which are mentioned 11 times out of 17 SDGs. Next, the needs for esteem and security are mentioned 4 times each. The needs for self-actualization, aesthetics, and transcendence are mentioned twice each. The others were addressed only once each. However, these have not addressed the need to find meaning or purpose in life through spirituality. While these needs may be political, economic, socio-cultural, technological, ecological, legal, and spiritual, respondents could bring other categories. Speaking of needs, it is essential to know the motivating factors of the people studied. While research on motivation has been extensive within organizations, goals in the above areas differ between individuals and change over time.

The medical wheel needs

The following figure classifies needs according to the four components of the medical wheel.

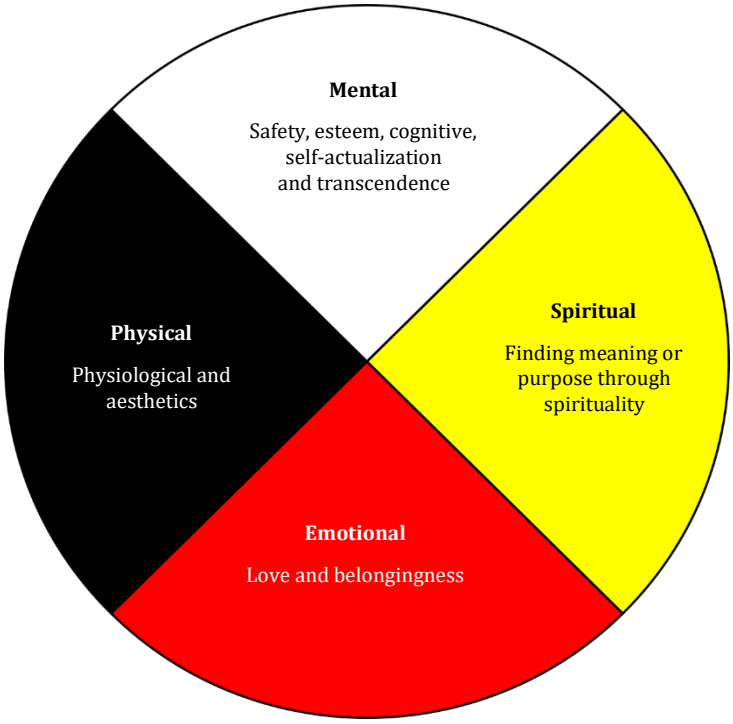


Figure 1. The medical wheel and analogous needs

When we combine the medical wheel with the eight needs of Maslow's pyramid, we also see an imbalance in the distribution of these needs between the four parts of the wheel. The physical part corresponds to two needs: physiological and aesthetic. The mental part is linked to four needs: security, esteem, cognition, self-actualization, and transcendence. The emotional part relates to the need for love and belonging. Finally, the spiritual part is not associated with any of the needs in this pyramid. However, this could be seen as the need to find meaning or purpose in life and work through spirituality [89],[90].

Ultimately, this model helps managers to look beyond the needs identified by motivation theories. While motivation is about seeking to satisfy these needs, it is also about sustainability, which extends to future generations. Sustainability is therefore about meeting the physical, mental, emotional, and spiritual needs of current and future generations. This model provides a holistic vision that includes spirituality. Many organizations do not allow their employees to discuss spirituality and religion, yet these are an important element of sustainability and help build mutual understanding. For this reason, sustainable management requires all four aspects to be considered equally. Management decisions should depend on this. These four components help us to understand behavior.

Conclusion

Sustainability was about leaving the earth's natural resources to future generations. We spoke of environmental, economic, and social sustainability. It involves meeting people's current needs without compromising future generations. Sustainable development refers to the processes leading to improvements in economic well-being and quality of life over the long term while making provision for the needs of future generations. While meeting the needs of current and future generations is a challenge, achieving the 17 SDGs provides a basis. So far, these SDGs are the reference, but these objectives could be rearranged to achieve a balance between the types of needs in Maslow's pyramid update. The target corresponding to the aspiration to find meaning or purpose in life through spirituality could be added as the 18th SDG. This absence of spirituality also applies to the intersection between the medical wheel and these eight needs. Spirituality plays a major role in convincing us to think about future needs in terms of natural resources. This implies that managers should adopt this medical wheel to categorize the needs of their employees and that they should also consider spirituality. They should ensure a balance between the four components of this wheel. Sustainability means meeting all these needs. Incidentally, this article gives a more complete view of the concept of sustainability by classifying the needs to be met under the physical, mental, emotional, and spiritual headings. In this way, managers' ethics can be opened up to all these facets to improve their relations with their colleagues. This increases mutual understanding of behavior. Managers should monitor progress in meeting these needs since sustainability is about development that meets them.

Conflict of Interest

There is no conflict of interest.

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Authors



Dr. Hajaina Ravoaja is a distinguished professional in the field of management sciences, currently affiliated with ISCAM (*Institut Supérieur de la Communication, des Affaires et du Management*) Business School in Madagascar. Over the years, he has contributed significantly to numerous organizations, leveraging a wealth of experience that, though sometimes brief, is remarkably diverse and rich. This blend of academic and professional experiences has honed Hajaina's ability to be both reactive and efficient in various roles. (email: hajaina.r@iscam.mg).