

ORIGINAL ARTICLE

A conceptual framework combining environmental worldview, organizational learning, and strategic planning contributing to sustainable development

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ABSTRACT

This study aims to develop a framework that helps organizations to fulfill their environmental and social responsibility amid constraints in selecting which stakeholders' interest comes first and the essential to have an evolved strategic planning that can accommodate broader systemic planning and practice that will yield authenticity in business sustainability with components of environmental worldview of its leaders and organizational learning in the framework. This research uses the method of literature review with the data from interviews and content analysis of the report from one organization that has successfully implemented social and environmentally friendly practices. Based on an in-depth review of literatures on worldview, organizational learning, and strategic planning, and with empirical study from one organization, a conceptual framework by combination of the existing concepts is produced to enable an integration of theories in a range of possible actions for organizations to achieve sustainable development. The result from this research's framework will allow further study to be carried out in the future to verify associations between existing concepts or variables within the framework, and to produce next empirical results in supporting those theories being reviewed in this paper.

KEYWORDS

environmental worldview; organizational learning; strategic planning; sustainable development framework

1. Introduction

Adam Smith in the work of Hasibuan (2005) explained six motives in human behavior, one of which is self-love motive. Based on this motive, humans are free to consider and do what is deemed appropriate for their own interests. Smith's view to include this moral philosophy which according to him is arranged by invisible hand that will bring natural balance is relevant with the current situation in which organizations face dilemmas related to the issues of sustainable development. The concept of sustainable development itself emerged about 50 years ago covering sustainability

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in the aspects of economics, environment, and society. Since then, many organizations have been brought to awareness that there are interrelatedness, complementarity, and trade-offs among the three aspects (Pham et al., 2021). As the phenomenon of trade-offs in business, Damodaran (1999) explains afterward, most decisions have social implications and the challenge of how to best manage these interactions is not simple. If the only objective in decision making is to maximize firm wealth, there is a potential for substantial side-costs to society that may drown out the benefits from wealth maximization. The objective of maximizing a firm's wealth will assume only two ways, namely the social side-costs arise are unimportant and they might be ignored, or they can be simply charged to the firm. The problem with the latter is, for years, responding to the dynamics of financial performance within the sustainable development concept has always been a no-win game for environmental and social issues (Walley and Whitehead, 1994). In today's new economy, the dilemma of choosing which way for both interests to be addressed should not face contrast positioning currently. Scholars agree that what is important is to provide a strategic plan to equip organizations' leaders and staff with the awareness of environmental and social crisis, so that they might make decisions that aim to strike a balance between economic growth and sustainability while taking the position of its various stakeholders' interests into account. Building awareness is fundamental and relates to human beings itself with their belief system or worldview about sustainability, and human self as learning individual. It is essential to consider worldviews in the context of global environmental issues especially in uniting conservation with growth (Hedlund-de Witt, 2014).

A worldview is the core cognitive orientation of a person or group regarding the world and life, encompassing a set of values and beliefs which influence how they interpret their role in society and deal with it (Chuang et al., 2020). In his study of mobility, Chuang et al. (2020) unravel that worldviews embody our awareness of the social and natural world, which in turn, reflect how we define good quality of life and link our present to the future that we envision. Environmental worldview is how people think the world works and what they believe their role in the world should be. Part of this worldview is determined by an individual's environmental ethics like what people believe about what is right and what is wrong in their behavior toward the environment (Miller and Spoolman, 2010). Human response to environmental issues is frequently in conflict with particularly the expanse and growth associated with economic. Organizations that participate in environmentally friendly practices must increase their budget and that will be an extra cost as aggravating their financial condition which successively will affect their ability to achieve positive financial performance. According to Friedman's (1970) Shareholder Theory, this is not the priority for a company's goal where managers who invest efforts and funds not for the purpose of generating returns for the owner are viewed the same as being irresponsible in managing organization resources. This theory conveys that the only social responsibility of a business firm is to increase profit, and the fundamental commitment of the company's manager is to return profits to shareholders. We also consider Freeman's Stakeholder Theory (Freeman and Dmytriiev, 2017) which asserts that organizations have responsibility to operate in the interests of all their stakeholders. Stakeholders are interdependent that creating value for one stakeholder creates value for the others; this idea can be helpful for the design of social responsibility although there has been controversy using corporate resources to solve non-business "social" problems. The stakeholder view is also supported by Argandoña (2011) who describes how economic value can be achieved not only for the owners, but also for all stakeholders in the form of "social (economic) value". The

goal is not a scarcity of resources that must be fought over between stakeholders, but rather how to produce non-exclusive value that is needed by all parties, a value creation for all interests, namely for owners, employees, customers, society, and the environment.

While this topic has come to a long debate, previous research has studied how a company can be more sustainable with the help of certain strategic conceptual structures and approaches. Baumgartner (2013) introduces a framework that distinguish three management levels namely normative, strategic, and operational management, and uses contextual factors and instruments like incentive system, budgeting, scenario analysis, KPI, and cost accounting, to contribute to sustainable development of the organization. Hussain et al. (2018) use regression models with variables in the Framework of Sustainability Performance Measurement Reporting to provide results for the direction of the relationship between Sustainability Engagement and Firms' Performance. Pham et al. (2021) highlight new engagement between environment and economics that show going green is no longer a predicament in doing business by empirically verifying the influence of sustainability practices on the financial performance of 116 listed Swedish companies. Hillman and Keim (2001) find the increase of shareholder wealth using market value analysis and regression analysis of the relationship between shareholder value, stakeholder management, and social issue participation variables. Brem and Ivens (2013) explain how frugal and reverse innovation can contribute to improvements of sustainability performance and describe a positive link between the three dimensions of sustainability management. Lin et al. (2019) analyze green innovation strategy (GIS) concept and correlated it with corporate financial performance (CFP) where they found a dynamic correlation between the GIS and the CFP with regards to the firm size with data collected from 163 international automotive firms. Yumashev and Mikhaylov (2020) contribute to the field of material science by developing a polymer film coating which can lead to the creation of more durable and long-lasting products in various industries such as automotive, aerospace, and manufacturing for companies to be able to operate more efficient and save time and money. Jusuf et al. (2020) use higher education institutions in Indonesia to develop a theory for implementing the concept of sustainability and present the way to establish a more sustainable university organization although with limitation in discussing its financial sustainability. Mahsud et al. (2018) bring out analysis from system thinking point of view, combining blue ocean strategy emphasis on value innovation (Kim and Mauborgne, 1999) and integrating sustainable business practices (SBP) with sustainable competitive advantage (SCA) through a win-win perspective for reconciling economics, environmental and social goals. Iqbal (2018) studied the green human resources management (GRHM) as a new way of performance in organization and confirmed that GRHM not only reduces the operating and business expenses but also enhances the relationship of employees' green behaviors with environmental sustainability.

Corporate Social Responsibility (CSR) concept often seen as the easiest way despite its criticism but helping communities should not be treated as a redemption for misconduct in business, and when it is used only for that purpose, then CSR is just to cover wrongdoing towards other stakeholders (Freeman and Dmytriiev, 2017). Meantime, the conflict that arises between organizations and society keeps escalating due to continuous misconduct on the environmental issues and lack of commitment in dealing with the burdensome stakeholder relations particularly with the community. Diverse stakeholders such as government, public, and nongovernment organizations are forcing business to perform sustainably in the highly complex environment (Smith and Ramirez, 2012).

Environmental dynamics like global warming, cultural clashes, or economic integration have even led to the emergence of new leadership known as sustainable leadership (Avery and Bergsteiner, 2011), the leadership that considers a comprehensive scope of complex interconnections among business community, natural environment, and global demands of social values and preservation of the ecosystem (Burawat, 2019). Even though previous researchers have found number of ways to achieve the equal opportunity for success in all elements of sustainable development concept, there are still fragmented concepts and the results are still ambiguous and different in presenting the solutions. This study aims to develop a framework that helps organizations to fulfill their environmental and social responsibility amid constraints in selecting which stakeholders' interest comes first and the essential to have an evolved strategic planning that can accommodate broader systemic planning and practice that will yield authenticity in business sustainability with components of environmental worldview of its leaders and organizational learning in the framework.

2. Literature review

2.1. Structural conceptualization and analytical tools for sustainable development

Organizations need a framework that their leaders can rely on with the goal to achieve sustainable development. Scholars have two main theoretical sources that discuss it but regrettably, the two normative theories of social responsibility (namely Shareholder Theory and Stakeholder Theory) are very much at cross purposes regarding what is right. Frameworks developed by previous researchers incorporated with the strategic planning concept have much support on Stakeholder Theory view with creating shareholder value. The type of this framework is suggested by Baumgartner (2013), which consists contextual factors that clustered into general business environment factors, sector-specific factors, and stakeholder factors. It starts with normative management in the company with vision and mission as focus, then developing an effective strategy which becomes the focus of strategic level and followed by the implementation of the strategy as domain of the operational level. These three distinctive management levels form a framework for incorporating sustainability management with the above clustered instruments as enhancement factors.

The other type of studied framework discussed in the article of Broman and Robèrt (2015) is called Framework for Strategic Sustainable Development (FSSD). This research describes the overall model of FSSD which ranges from system for functioning, success level, strategic guidelines, concrete actions, to the tools or supporting methods. They expect more research to be developed on how FSSD and other conceptual framework can be together supplementary. Lloret (2015) develops a model for companies' sustainability concept pertaining to the market-based view and elements of the competitive strategy using Porter's (1987) cost leadership and differentiation strategies with its observable laws of supply and demand. Recommended by the resource-based view where companies use their strategic resources based on tangible and intangible assets to reduce waste, integrating stakeholders in decision-making, and innovating in new products and technologies (Hart, 1995). This model resumed by the institutional-based view where institutional vision serves as its most fundamental aspect and essential occurrence for understanding corporate sustainability. This concept leads to the fulfillment of strategic objectives set out in the corporate governance framework to face future sustainability challenges. Both internal and external

stakeholders will push the company to take environmentally and socially friendly practices with the leaders pursuing shared value for all stakeholders (Porter and Kramer, 2011).

The following framework is a concept by Mahsud et al. (2018) who elaborated how to overcome limitations in strategic management constructs by introducing what in their literature is called authentic sustainability. Their findings tell that existing construct lacks of authenticity in business sustainability, largely on the account of sustainable business practice (SBP) in gaining sustainable competitive advantage (SCA). The practical implications are when SBP and SCA apply to certain industries, they shore up a form of inauthentic sustainability. Certain companies can still comply with SBP and obtain SCA by their huge economic gains while its products or services keep on harming the stakeholders including the environment and society. From the above structural concepts, we can learn that on the one hand, many researchers attempt at developing a unifying framework for sustainable development and hope that will help organizations to succeed with the multiplex tasks of transforming usual way of doing business to an ecological friendly practical, but on the other hand, some frameworks are quite sophisticated and advance that require a horizon to arrive at a comprehension where the subtle understanding come to the practice.

This research also takes important steps to include the role of strategic planning to understand how organizations manage to integrate and make consistent of all aspects in the framework for it to be able to contribute to sustainable development goals. The most acknowledged article discussing the concept of strategic planning is from Porter (1987) who concisely describes his view on strategic planning process. Organizations have always had overall strategies, but this remains implicit and largely intuitive. As organizations grow and become more complex, they need a systematic approach for setting strategies, and strategic planning emerged as the solution. To be effective, strategic planning must use a proper process because strategies cannot be detached from implementation. Many organizations established long-term planning by top level managers, but real strategic thinking rarely occurs as day-to-day concerns tend to prevail. Organizations often fail in techniques and process; strategic planning needs to be improved, otherwise, strategic thinking is crowded out by day-to-day pressure. To this relevant, Kaplan and Norton (2001b) introduce the balance scorecard (BSC) to answer the practical question “what is the strategy”. As a framework for organizing strategic objectives into four perspectives, BSC emerges from performance measurement to strategic management; it emphasizes the linkage of identifying and improvement with strategy, and the cause-and-effect linkages and a more “balanced” metric system besides its useful purpose for a general framework to describe and implement strategy. Stakeholder scorecards are often a first step on the journey to a strategic scorecard.

The application of the sustainability concept has also been subsidence by other reinforcing measurement tools and modeling. Li et al. (2022) in their study about renewable energy (RWG) constructed a novel model on bipolar and q-ROFSs with golden cut to measure the levelized cost of RWG alternatives with results of increasing the performance of power plant project cost management. The same q-ROFSs technique but equipped with multi-SWARA (sustainability indicator for RWG systems) and TOPSIS method is also used by Dincer et al. (2022) to conclude the importance of reduction of emission in green project investments as the most essential priority. Dayong et al. (2019) using algorithm modeling shaped a reconstruction in the design of production systems in catering enterprises that allows saving up to 80% of the total energy costs, achieving optimization and improving the overall environmental friendliness of the food industry. Ntanos et al.

(2018) discussed the use of New Ecological Paradigm Scale or NEP as one of the most widely used scales to record the degree of environmental worldview from respondents; NEP is succeeded to be a measure of environmental beliefs or worldview and becomes a novel tool for learning in school. Ziegler (2019) further stated that the use of NEP has become a standard and increasingly accepted in economic literature revealing strong correlation between NEP scales and economic preference, as well as social preference with the trust for individual behavior. According to Anderson (2012), the NEP Scale is considered a measure of environmental worldview or framework of thought. It had some strengths, making it a reliable and valid tool for measuring a group's environmental worldview and has widely spread to the business field. Dunlap (2008) mentioned that the most challenging issue of the NEP Scale is focusing on worldview changes and how to reestablish momentum for societal adoption on a broad scope of socio-economic and organizational reforms. Putrawan (2015) underlines that the NEP is the socio-evolving term of the initially established NEP due to its improvement of people's environmental attitudes (EA) from anti-ecological to mid-ecological and finally to pro-ecological. Another tool is the Sustainability Compass (1997) (the Compass) that orients people to sustainability with its "direction" of nature, economy, society, and wellbeing. Hebinck et al. (2021) use the Sustainability Compass to provide a comprehensive framework that fully covers a wide range of possible stakeholders' interest through its area of concern in their research of sustainable food systems policy navigation.

More initiatives that underwrite the advancement of sustainable development concept are the engagement in Carbon Emission Disclosure movement which is the global emission reduction program that organizations can take part in voluntarily but receive benefit in economic value from the resulting of emission reductions where they get certified of it (Irwhantoko, 2016). Link to this is the other voluntarily certification program called the CCB Standard whose objective is to assist organizations to integrate climate change, community engagement, and biodiversity conservation into their operation especially related to land management projects. It provides businesses with a framework for managing their land in a way that benefits local communities, conserves biodiversity, and reduces greenhouse gas emissions (CCB Standards, 2017). With these augmenting tools and programs, organizations would be able to diagnose their current state of environmental awareness and equip their environmental worldview needs with impartation plan and engagement in programs to demonstrate their responsibility top-down all the way to operations across activities. In this practice, communities and other stakeholders are involved in the project through full and effective participation, including access to information, participation, and implementation. Information is accessible in a language and procedure understood by the communities and other stakeholders.

2.2. Drawback to setting foot on sustainable development and its bright side

Constraints in organizational management in achieving sustainable development lay on the relationship between organizations and their stakeholders. Damodaran (1999) showed this problem in his work of corporate finance, that every decision a business makes has financial implications. While with single-minded focus of value maximization, corporate finance develops a model about the "right" way to operate. His study shows that information going along into financial markets is delayed, incorrect, and misleading and there is no guarantee of what appears as the market price will be an unbiased appraisal of the true value. He explains this in two figures (**Figures 1 and 2**).

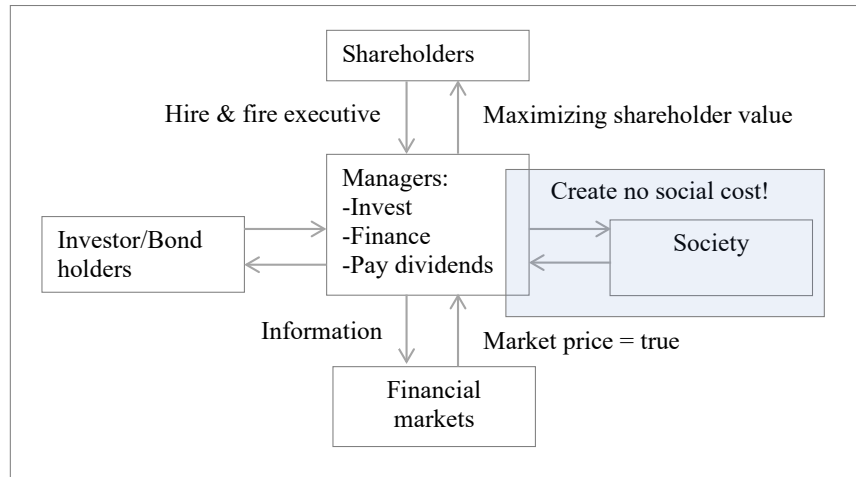


Figure 1. Classical objective model (Damodaran, 1999).

Figure 1 shows no social costs as all costs created by the firm in its pursuit of shareholder value can be traced and charged to the organization. This model is viewed as a Utopian world except the problem in stakeholder management is overcome with all costs created by the firm including side costs of environmental and social costs arise are acknowledged. However, there are cases in the real world where the social costs incurred are large but cannot be traced back to a particular organization to be held accountable; the managers though are aware of the costs but may choose to ignore it for maximizing owner wealth; the social costs will then eventually bear back on the community who will suffer most. Figure 2 tells the real-world account that relevant to our review as follows:

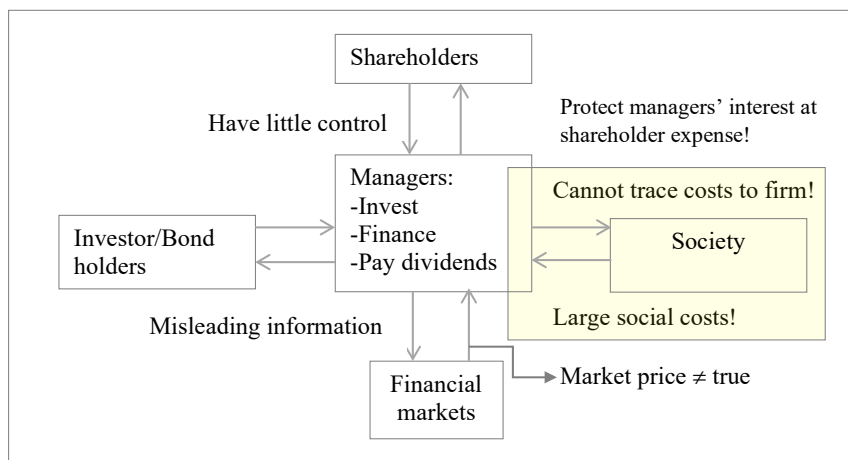


Figure 2. The real-world model (Damodaran, 1999).

What is shown in this real-world model of Figure 2 implies that stakeholder management problems are the toughest challenge for the relationship between stakeholders in relation to the implementation of the concept of sustainable development. Some conflicting environmental interest of a company with community is arguable rooted from the information about the environmental impact of a company's products, processes, and waste maybe disproportionally disseminated between the organization and the community. The resultant could be of distrust and may trigger organizations to act opportunistically and complicate the social problems that arise from the environmental damage; this will worsen the conflict with community and force company to deal

with it in a more costly manner.

Further in this distrust context, economists affirm the bright side that the chief cause of the wealth of nation is not material at all, but knowledge, skill, and know-how. In essence, those acts, and practice of discovery, invention, organization management, and forethought described as human capital, is in human factor and produced by the intangible activities of education and training as well as mentoring. The question with the sustainable development concept is how organizations and humans who run it can become more environmentally literate. Before jumping to the answer, we will first examine several worldviews in the book of Miller and Spoolman (2010) where they discussed two environmental worldviews that are human-centered: 1) planetary management worldview, and 2) stewardship worldview, and one earth-centered worldview called environmental wisdom worldview. The book further argues that any human-centered worldview will eventually fail because it has wrongly assumed humans now have or can gain enough knowledge to become effective managers or stewards on the earth. In fact, this worldview is focusing on short-term economic benefits with less regard for the longer-term damaged environmental, health, and social problems resultant of this worldview. Van Egmond and de Vries (2011) added that many different worldviews which shape the society appear to be part of an overall integral worldview which is defined by its vertical contrast between idealism and materialism and its horizontal contrast between uniformity and diversity. Finally, according to the environmental wisdom worldview, we can learn how to work with the nature; it involves being driven by hope and valuing collaboration and self-discipline, instead of being motivated by fear and manipulated by misinformation and belief system that having more is the key to happiness.

Pointing at the chief cause is in human the importance of worldviews, then learning in organization should rest on right worldviews and values. While formal environmental education is important, it is not enough as humans face a dangerous paradox: when organizations and business have more technology and economic power to degrade and disrupt nature, most leaders in the organization know little or ignore nature and have less direct contact with it. Miller and Spoolman (2010) explained that the problem is not just a lack of environmental literacy, but for many people a lack of contact with nature and little appreciation of how nature works and sustains humans. Relevant with this, Gnanakan (2007) echoed learning through experience, when a learner is integral part of an experience, this will lead to meaningful action and eventually changed values; it not only transforms the individual but goes on to influence those around. In the viewpoint of Giesecke and McNeil (2004), learning is about acting, using the information gathered to form knowledge management systems and then using it to improve the organization. The implication of this is that we cannot infer learning when knowledge is acquired but not applied in daily activities. Following the above explanation on learning, according to Budihardjo (2020), ideally, organizations should adopt a culture of learning and professionalism. This can be reflected in the vision and mission which refers to learning, professionalism, innovation, and sustainability. Further, Pentland (1992) defined organizational learning as the capacity to act competently. Odor (2018) mentioned that organizational learning occurs in a context which includes internal and external environment. The internal is those in control of the organization like structures, people, and processes. The external is outside the control of the organization like economics, politics, competitors, natural environmental, social issues, and community. Some researchers have also measured knowledge by assessing characteristics of its products or services (Raubitschek and Helfat, 2000) or its patent stock

(Gittleman and Alcacer, 2006). Some scholars support transmitting knowledge as one of the learning activities using a cognitive-behavioral approach that must involve both the belief system and the behavior, while the belief system is by education and the behavior is by way of action. Wolterstorff (2014) in his *Educating for Life* conveyed that one of the goals of any education is to educate people who will act responsibly and carry out their duties (Wolterstorff, 2014). Business organizations are no exception, which can also perform business more sustainably and become environmentally literate. Semiz (2021) stressed that education plays a crucial role in shaping individuals' knowledge, skills, and attitudes to be responsible citizens for a sustainable world. Finally on learning in organizations, Senge et al. (2010) in their *Fifth Discipline* mentioned that, ultimately, learning is judged by results. The rationale for any strategy that building a learning organization revolves around the premise that such organizations will produce dramatically improved results, compared to more traditional organizations. Whether the results include profit, time to market, customer loyalty, or other agreed-upon measures of goals. And that important results derived from deeper learning often do not produce tangible evidence for considerable time but require precise patience and quantification. It involves a deep learning cycle in the domain of enduring change with awareness, beliefs, and capabilities, and with organizational architecture within the domain of action with ideas, infrastructure, and theories or methods as depicted in Figure 3.

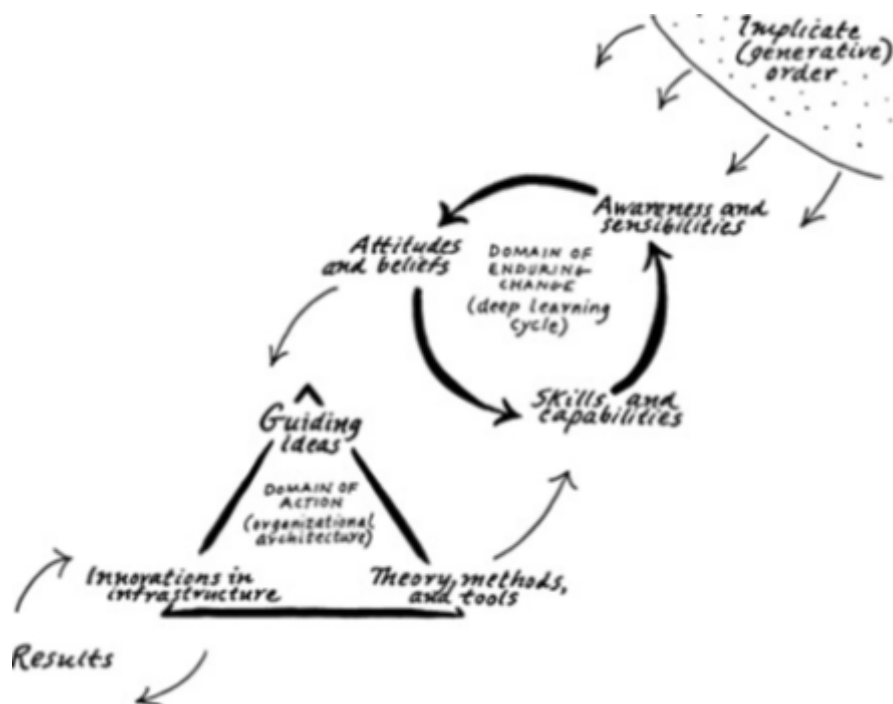


Figure 3. Learning assessed by results framework (Senge et al., 2010).

3. Research methods

This research uses the literature review method by observing and analyzing an already present conceptual framework that depicts how to solve the sustainable development implementation problem. A theory of change is applied in the form of intervention components necessary to activate change for achieving desired result of creating a conceptual framework through synthesis (Garside et al., 2010). The research procedure was carried out according to the guidelines of

research methodology by literature review. The first step is to build a research topic to locate the gaps of the past or existing study on the topic. Winchester and Salji (2016) explained that literature review should be an informative and unbiased synopsis information, consolidating what is already known and providing a balanced view that includes conflicting findings and inconsistencies, as well as establishing a current thinking. In-depth information is required on the research topic to serve the aims for identifying an area of unmet results or findings in answering a research question. Certain assumptions are built based on the frame of reference in sustainability issues, such a paradigm clarifies what domains are to be studied and makes other assumptions not researched constant or unchanging so that they are considered not to affect what will be or is being researched (Ihalauw, 2008). The paradigm about the earth is deteriorating by unsustainable human activities that endangering the society and ecological foundations, with environmental damage is obviously generated by the production and the consumption of goods regardless of the market in which they are sold (Dean, 2009), has provided scientific ideas for this research. A research question that derived from the phenomena of an endless conflict between economic and environmental dichotomy is how a conceptual framework which consists of environmental worldview, organizational learning, and strategic planning components supposed to assist organization in achieving sustainable development. After that, the next step is to develop familiarity with the key words, issues, and controversies in the area, to identify what areas or fields of study are related, and to set the first inclusion or exclusion criteria of how many and which literatures exist to be used on the topic. Cronin et al. (2008) explained that having sufficient literature is important particularly when the review is an academic assignment. This research has carefully considered and identified broad keywords relevant to the research topic and directed its literature search to affect which materials need to be read and analyzed. Comprehensiveness and relevance are what reviewers need to consider, adding to that, the more specific the topic or question being searched, the more focused the result will be. This research uses scientific journals which incorporated theories, concepts, and research results in the topic with some of them are the latest in context. This research also uses data from an interview and analysis of the report of one organization that has successfully implemented environmentally friendly practices. Interviews and reports are added to this research to find the empirical objective for the concepts or theories explained. The data from the interviews and reports underpin the conceptual framework to be offered as research finding solution to the problem of prolonged conflict between elements in sustainable development. Moleong (2016) explained that this qualitative procedure will produce descriptive data with holistic interpretation of the natural background and social fundamentals based on observation and interview, and other data from literature review. The last step is to reach the frame of thought as the objective of a research using literature review as methodology; it is to put the overview of sources explored in the relevancy with the specific field of the research topic. Ramdhani et al. (2014) explained that this step is to analyze each initial classification and grouping of the ideas by breaking it down and identifying the importance of the information, then to integrate them to identify the conclusions that can be drawn from the articles. Linking one concept closely related with another concepts, and strongly intertwined become syntheses with two or more concepts produce one new concept. Ghozali (2016) explained this in a way that researchers don't have to reinvent the wheel or squander effort to rediscover something already known. After going through all the above research methodology steps using literature review, this research presents its conceptual framework explanation with empirical section in its discussion.

4. Results and discussion

4.1. Sustainable development concepts and framework synthesis

4.1.1. Environmental worldview

The concept of environmental worldview contributes to sustainable development as an initial step in which organizations can set or align their direction, start with where they are in the journey and ensure that sustainability is an outcome of its core mission strategy. This commencing pace is called the diagnostic of the current state where it is necessary to identify the organizations' understanding and priorities regarding sustainable development. The desired state for environmental wisdom worldview that encourages earth-sustaining forms of economic growth and discourages earth-degrading forms (Miller and Spoolman, 2010) is the ultimate objective and must become a major belief. The result expected should be an engagement in local or national with pursuing global initiative of emission reduction and getting certification in Climate, Community, and Biodiversity Standards. The role of worldview in this argument is determinant within communities and leaders in organizations which can be captured from their life activities (Sartini and Ahimsa-putra, 2017). This research uses an earth-centered environmental worldview because it is more practical than the human-centered worldview. Environmental wisdom worldview is the earth-centered worldview, believing that human economies and other systems are subsystems of the earth's life-support systems (Miller and Spoolman, 2010). The natural system we are all part of is holistic, interconnected, and interdependent, keeping us and other species alive and supporting our economies. Preventing the depletion and degradation of this natural capital is the key to promote environmental sustainability. Preserving earth's natural capital requires us to mimic nature by applying the three elements of sustainable development. It is our own self-interest not to act in ways that impair the overall system. Leaders must involve in efforts and fund for environmentally and socially friendly practices not because their organization has so much to add as social responsibility, but also because they have a strategic interest in doing so (Bonini et al., 2006).

Figure 4 shows a proposition point of how environmental wisdom worldview first identified relates by filling its gap with major beliefs which then bring to actions as the desired state in the form of engagement.

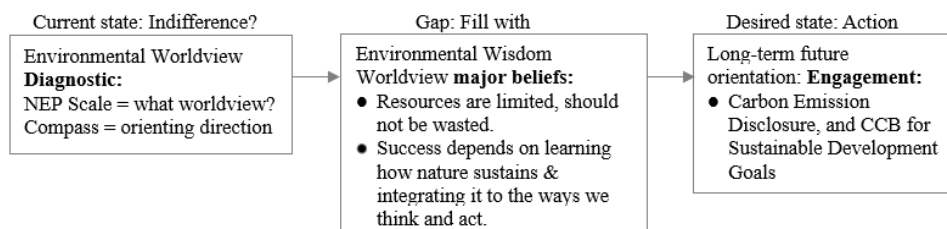


Figure 4. Environmental wisdom worldview for sustainable development.

4.1.2. Organizational learning

The concept of organizational learning is necessitated for every organization for its economic performance and sustainability. Firm survival is a logical consequence of a healthy and well-performing organization. Understanding firm survival nowadays is associated with sustainable

development, while revenue and profit are important financial measurements but do not guarantee the survival of the company if they are not based on organizational health as reflected by the employee engagement, employee and customer satisfaction, concern for climate and environment, and organizational learning (Purusottama et al., 2022). Organizational learning is not only a process within the organization, but also involves external parties. Meanwhile, internal processes are not only through training and education, but also through various experiences at the management level, both success and failure experiences. In case of failure, Spear (2009) explained that it can be seen as a process towards success. The purpose of organizational learning is foremost for future perspective. Referring to that, organizations need to comprehend their future objectives not only in terms of economy, but towards sustainable development goals which include environmental and social objectives. Maltz et al. (2003) incorporate the future perspective in the balance scorecard which we shall use in the framework to emphasize the ability of an organization to exist in the future. According to Garvin et al. (2008), organizational learning exists in three building blocks; it must have a learning condition (environment), learning activities (experiment, education, training, experiential learning), and leadership that drives continuous learning. Leadership plays an important role in sustainable development as it influences followers' behavior and mindset in an organization (Iqbal and Ahmad, 2020). **Figure 5** shows a proposition point of how organizational learning in the quest for sustainability with its building blocks brings higher ability to cope with challenges of results approach to creating values as all stakeholders for sustainable development.

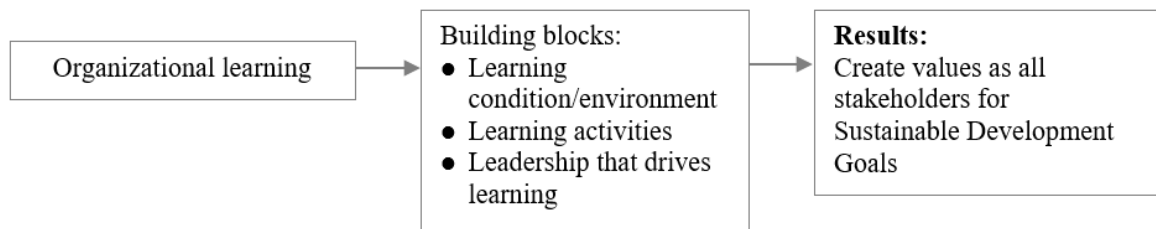


Figure 5. Organizational learning for sustainable development.

4.1.3. Strategic planning

The concept of strategic planning plays an equally important role as worldview and organizational learning for holding together as the glue the many systems and initiatives within an organization. In the case of integrating sustainable development into the strategic planning, sustainability aspects must be considered the analysis of external developments and internal strength and weaknesses (SWOT analysis). The challenge is to incorporate an awareness of environmental and social issues more systematically into organizations' core strategic decision-making processes (Bonini et al., 2006). To structure possibilities for sustainable development strategy, a coherent strategic planning need to be developed which consist of: 1) length of the planning period with long-term future orientation, 2) the ability to scan the horizon for emerging trends and threats, and 3) a strategic intention to integrate their responses towards social and environmental dimension. Further on strategic planning, the ingredients of strategic planning besides considering the five industry forces must also include actions, a translation into concrete actions, including needs for capital spending, staff training and development (Porter, 1987) and at the level of strategic thinking involves a "strategy map" that describing strategies in a comprehensive architecture (Kaplan and Norton, 2001a). Further on, Baumgartner (2013) defines the steps of planning, activities, and

measurement as a learning loop which consists of three phases of sustainability strategy planning: 1) deciding basic strategic orientation based on contextual factors and normative position, which can be passive, reactive, or proactive depending on the relevance of the sustainable development issues for the organization, 2) determining fixed either medium or long-term plan, the desired future contribution of the organization and the effective date to reach these goals, and 3) the strategy is further detailed in concrete measurements with activities and goals are plan to be carry out with the full participation of the stakeholders. **Figure 6** shows a proposition point of how strategic planning links to operative that connected with feedback and learning loop. The strategy type and the goals initiation must support and contribute to the strategic position to increase economic success, then action plans are formulated with resources allocated.

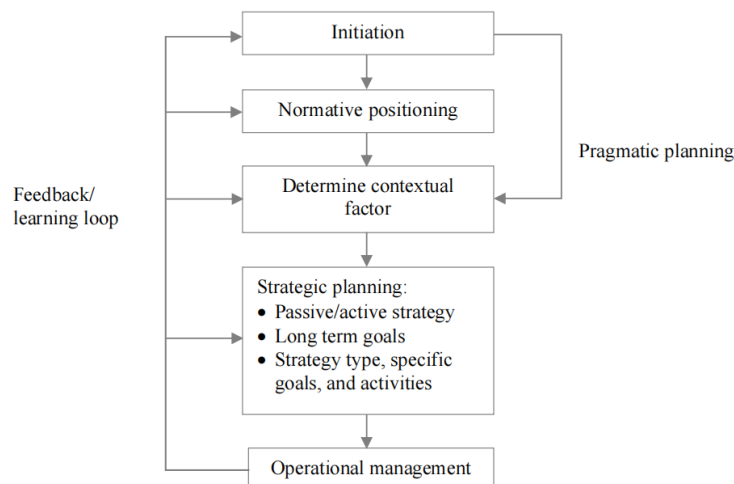


Figure 6. Strategic planning for sustainability strategy (Baumgartner, 2013).

4.1.4 Conceptual framework for sustainable development

Approach that analyzing the similarity concepts and its association in the interrelated and interconnectedness towards the big theme of sustainable development has bring this research to the last step of its studying and searching for a combine conceptual framework with intervention components of worldview, organizational learning, and strategic planning.

The framework in **Figure 7** started with worldview, specifically environmental wisdom worldview as the foundation, together with learning perspective particularly refer to organizational learning. The cruciality of worldview as explained early is undoubtedly defined as the fundamental a must step in building a coherent strategy to achieve sustainable development objectives. This highlights why there are two concepts at the very bottom of the framework (refer to the learning area in the BSC perspective which has a bottom-up process rather than seeing it as a strategy map with a top-down look). Leaders with environmental and social paradigm are foremost to define employees' current state of environmental understanding with the NEP Scale as the diagnostic tool and Sustainability Compass as the orienting tool. The environmental worldview then acquired as core knowledge and major belief must become the predominant curriculum of learning and what embodied in the whole learning building block within organization. Organization learning results are in process improvement, innovation, and product or services enhancement (Gomes and Wojah, 2017). To this relevant, seeing learning results needs patience and quantification because deeper

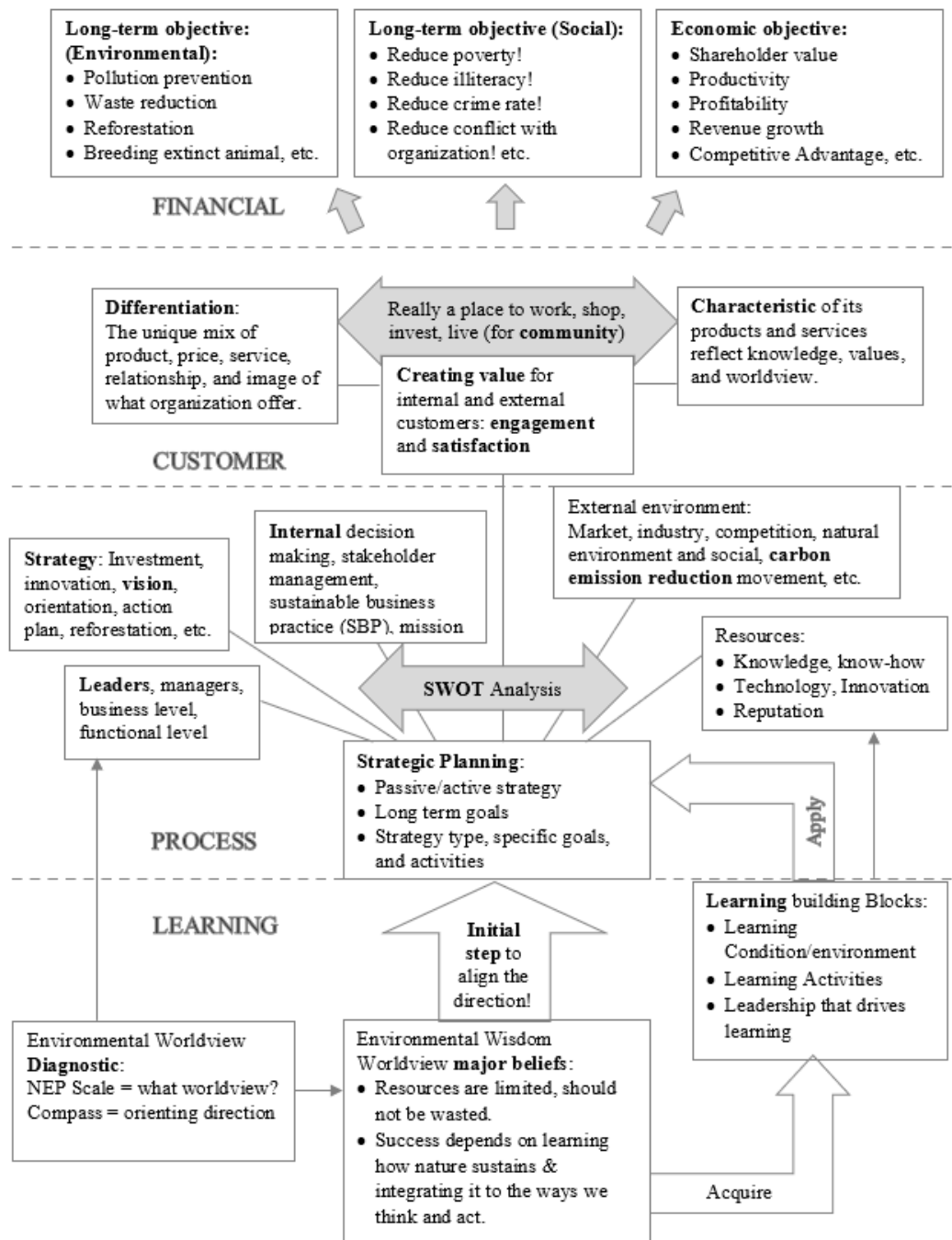


Figure 7. Conceptual framework for sustainable development.

learning often does not produce tangible evidence for considerable time (Senge et al., 2010). After all, we must not focus on short-term economic benefits with little regard for the long-term harmful environmental, health, and social consequences that are the result of different environmental worldview (Miller and Spoolman, 2010). Although put in the bottom of the framework, organizational learning can happen at various levels, and continually as the eternal resources for organization to grow and be healthy as long as the organization going concern. Learning and work are integrated in an ongoing and systematic manner to support continuous individual, group, and organizational improvements (Odor, 2018). Further on this, worldview and organizational

learning are intertwined equally important at this area for what Argyris and Schön (1991) note that organizational learning through individuals acts as agents for them and individuals' learning activities, which in turn is facilitated or inhibited by an ecological system of factors. Morgan (1986) points out that organizations cannot learn by themselves, it is the individuals within them who learn. Later, Garvin et al. (2008) concurred by noting that higher rate of learning is positively associated with competitive advantages. So, a right worldview is extremely important regarding what will influence their action in dealing with environmental and social issues in the organization and potentially will make organizations possess competitive advantages.

Using SWOT analysis to examine how organizations will achieve the intended outcome for sustainable development is complementing to what suggested by Baumgartner (2013) in assessing the contextual factor while looking at the normative position in identifying and determining which of the organizations' internal and external issues relevance or becoming constraints for achieving the sustainable development goals. The knowledge from the right worldview acquired will be applied in constructing the articulation of the organization's environment and strategy. There are no substitutes for this step and for the role of SWOT analysis to look over the industry demand, the existing and potential constraints, and threats, the assessment of resources and drivers that best estimate the precise concern of organization competitive advantage and disadvantage, and finally ratifying the strategy (Porter, 1987). The area of concern at this part is that the analysis is trapped in a way that does not allow organizations to access the risk of such magnitude related with the natural environmental and social issues; organizations' leaders are often tempted to force everything into a simplistic cost-benefit analysis which changes are marginal, and with effects only described in terms of money. What could draw wrong perception for the goal of sustainable development is, people often pointed out "development" is attached to "growth" until the whole concept of sustainable development turns from its authenticity to become just a greenwashed tool for a business-as-usual economy (Staniškis et al., 2022). What is required is not a common future but future in commons, and those policy strategists must begin with the science of sustainability, including climate change and improving natural environment as most important goals.

What will go further at the upper area of the framework is to make sure every effort in the economic system of the organization must be to improve the well-being for all, that is creating value for all stakeholders in an engagement and satisfactory manner within the limits of what nature can sustain, and producing good lives that don't cost the earth (Staniškis et al., 2022). This relevant has been raised by Mahsud et al. (2018) in his explanation of achieving authentic sustainability for all stakeholders; sustainability will only be realized when it is conceptualized, specified, implemented, and practiced in a fair manner to all stakeholders whether at local, regional, or global levels. This is also what Damodaran (1999) stresses in his work in corporate finance as the true value when the managers (leaders) do not attempt to mislead or lie to financial markets about their prospects. Market and community will assess what organizations offer, the characteristic and unique mix of organizations' products and services whereby reflect the intention, knowledge, values, and worldview of environmental and social awareness, as a giving back movement to conserve the nature and empower the community.

At the top of the framework is the desired state of when the three dimensions of sustainable development are achieved together. Is this being utopia, as modelled in Damodaran's (1999) lassical objective function (**Figure 1**) where there are no social costs as all costs created by the

organization in its pursuit of shareholder wealth can be traced and charged to the organization? Or is this practical where doing business as in real world but without unsustainability as in **Figure 2**? What this research thinks are that organizations can depart from this dilemma between conventional economy and sustainable development by the transformation pathway constructed in the framework discussed. Further results from the empirical section will build up the discussion in more objective of how an organization can be more sustainable despite of constraints and through a strategic planning and learning journey towards sustainable development mission.

4.2. Empirical insight from a social foundation established by an energy company committed to sustainable development

This research includes an interview with one social foundation (Yayasan) in which the foundation was established in 1986 and transformed to become an “Agent of Development” Yayasan by a reputable energy company known to be very committed to sustainable development goals. This inclusion of the real-world practice is to utter the comprehension on the ongoing meaningful events in this Yayasan amid its diverse complexity and constraints, by incorporating explanations of its process towards sustainable development using understanding generated from existing theories and the built framework. The insight from empirical evidence will be presented in conceptual-related pointers and by order, referring to the conceptual framework discussed, with new components in the framework as explained below:

<p>Worldview:</p> <ul style="list-style-type: none">• Yayasan vision emphasize on natural environment, sustainability, and governance as well as community empowerment.• The goals and objectives in the social and humanitarian fields delivered in five pillars of its mission.<ol style="list-style-type: none">1) ensure access to environmentally friendly, efficient, and affordable energy,2) involved in climate change for environmental sustainability and a longer life of the earth,3) participate in the development of equitable and quality education,4) social empowerment to realize self-sufficiency and community welfare, and5) attention to issues of gender equality and marginalized communities.• Possess Visionary Leadership factor with right environmental worldview.
<p>Organizational Learning:</p> <ul style="list-style-type: none">• Learning from internal and external.<p>In 2008, a former top management at BP Indonesia, a prominent energy company, and a very strong figure in the field of HSE (Health and Safety Environment) joint, then motivated and led Yayasan towards the global trend of Triple Bottom Line, set target starting in 2010 Yayasan must determine as the baseline year for calculating emissions, it should start reducing, the impact must also be actual by starting to build initiatives and implement towards that timed target.</p><p>In Yayasan, the learning take place in ‘tour of duty’ the leadership team, the key position experience different fields from Strategic HR, M&A (pre-merger to integration process), learning from all streams; finance, operations, marketing, business development, HSE.</p>• Learning from mistakes.<p>The leadership and managerial team are encouraged to be innovative and creative by exploring alternatives without limits, and to take thoughtful and calculated risks where desirable. For the simple reason that all the experiments are not bound to succeed, they do not need to think of them as failures, but to rebuild with new strategy. (Once environmental and social activities were stopped due to fraud problems, planting 100 million trees was not easy to control, the potential for fraud was high).</p>• Learning with long-term perspective.<p>Since 2010 was then set as baseline for every move towards sustainable development, starting from that initial step, calculating carbon emissions in all production activities from upstream to downstream resulting when the G20 meeting in Bali early 2023 where Yayasan has managed to reduce significant emissions and measurable with a complete set of data.</p>

Strategic Planning:

- Long-term goals.
Yayasan create a long-term plan in multiple of 5 years, the latest roadmap is 2022 – 2027 using a Sustainability Compass to chart its impacts for environmental project, building the action plan incorporated the concept of CCB Standards.
- Strategy investment.
Roadmap for greening approx. 3,000 hectares land in Central Java where the community initially planted corn and sugarcane, after harvesting and need land clearing (for replanting) they just burnt it. As the result, there was deforestation, their living was affected, the ecosystem was so damaged, endangered species like peacocks, deer, etc. animal populations were depleted. The Foundation breed deer that were still survive, and the forest was replanted with pure plant seeds.
- Strategy innovation.
When drilling is carried out on new vacant land, innovations must start here. The foundation must manage on a business basis, upstream operations must be reforested (planting the drilling land) because if not and when it is damaged, then it becomes a cost.

Sustainable Development, a “balanced” system:

- Impact to stakeholders (with community and customers).
Act on biodiversity protection by ensuring the environment is not damaged, mapping biodiversity, if there is land that has been damaged, then it is reforested. Those that have not been damaged, then they are better conserved.

By planting trees both terrestrial and mangrove trees, and carrying out community development, community are empowered. Community will participate in protecting the climate action that has been built and run by Yayasan, added by creating new economic sources for the community so that they may benefit from the economic value of the forest, and they may build their own economic center for a more decent life.
- 2021 is a new milestone for the foundation's journey, the Covid-19 pandemic with increasingly stressful social conditions has not dampened efforts to achieve vision and mission that continues to earn achievements: The Best CEO 2021 Employee's and Millennial's Choice, Corporate Branding Award 2021, The Best CEO for CSR 2021, The Best CSR 2021. Its products, services, and business process with the CSR programs really reflects Yayasan values, and worldview, and commitment for Sustainable Development.
- Financial Perspective:
 - The economic value of the carbon that has been reduced absorbed by trees planted is calculated, the forest is certified by its ability to absorb carbon, for all quintals of CO₂ absorbed, there is a value per ton according to the market value.
 - With a clear roadmap incorporate elements of community development, and element of biodiversity protection, then the value in the market can be 20 times as much.
 - Yayasan income and net margin improve from 2020 to 2021 amid they invested in many social and environmental projects with funding value 25.5 billion Rupiah in just 2021.

Stakeholder Theory posits that organizations need to create value for all stakeholders. This discussion and conceptual framework has realistically asserted with the empirical journey and process of one example in real-world, that this is how the purpose of sustainable development goals get affirmation in practice. The relationship between environmental awareness worldview and organizational learning is fundamental; knowledge that went through a “filter” is more likely to influence the formation of attitudes (Kempton et al., 1995). “When someone has a hammer, every problem looks like a nail”, we must make sure that by adopting a conceptual framework to achieve sustainable development goals, we provide theoretical insights not on “a hammer” single-minded, but broader view on how organizations roll out transition towards social and environmentally friendly practices while still perform economically. Moreover, organization sustainability can be a source of competitive advantages; if the chances related to sustainable development can be identified coherently, this practicable framework is for that task.

5. Conclusions

The resulting framework serves as the transforming explanation, that we believe there is a sufficient opportunity for any organizations to embrace the sustainable development mission without leaving their sound financial management obligation to the shareholder or owner of the organization. The idea of presenting a generic framework seems to be straightforward, but as the framework combines different components and broader perspective, it becomes open stating that

future problems cannot be solved within the traditional paradigm of just economic growth. The minimum effort has tried to answer the “how a company can be more sustainable”. Based on the results, this research can provide advice to organizations and society with its practical implications as follow:

- 1) It is a mistake to assume that human motivations are all selfish in caring about the planet and all its inhabitants. We still have a chance to establish a new sustainable development economy that allows unselfishness to control the immediate self-interest that harms others. The time is urgent for organizations to start acting as reinforced by management instruments that can support planning and implementing corporate sustainable activities.
- 2) The framework puts a strong focus on the opportunities in changing the production-consumption system of organization and community that driving the environmental degradation as well as evidence from practices of empirical results collected from interview and reports. The financials performance has also been proven to be achieved from innovations towards mitigating sustainability problems.
- 3) In this framework, the economic sustainability achieved is stocks from the broader concept of sustainable development, thus achieving economic result at the same time and coming from sustaining the natural environment and empowering the community. This concept, although like CSR but is not, is beyond that domain since CSR in its contestability is still viewed as violating obligation to shareholders and dichotomy in economic vs social and profits vs community.
- 4) Worldview namely environmental wisdom worldview, organizational learning, and strategic planning are the essential “ingredients” in this framework for transforming organizations particularly business organizations towards sustainability. The ultimate purpose of business is not and should not be simply for money, but must enable a good life for all stakeholders while safeguarding the natural environment for future generations.
- 5) This framework suggests that creating value for all stakeholders according to Stakeholder Theory will not create tension in the real-world model, thus showing that it is not a utopian but indeed a practical for classical objective model of Damodaran.

This research has quite number of limitations explained in the separate section, in general on the resulting framework; it is still needed further study to be carried out in the future to verify either its associations between existing concepts or variables within the framework, or its structure as a support system for possibility of building a new mini theory. Further study is required to produce expanded objectives with empirical results both in qualitative and in quantitative methods in underpinning those theories being reviewed and discussed in this paper, and for bringing evidence on its variables cause and effect significant, most likely with new components or variables.

6. Theoretical and practical implications

Based on the discussion of the research results above, several theoretical and practical implications of the research can be conveyed as follows.

6.1. Theoretical implications

- 1) By producing a framework consisting of different components in achieving sustainable development, it gives an understanding to the researchers that further efforts are needed to identify other components that really contribute to the success of achieving it and researchers should not be satisfied with paying attention to several components that are discussed dominantly in this research.
- 2) The results of this study strengthen the Theory of Seven Pillars of Science (Gauch Jr., 2006) on the Worldview component that underlies this framework, which is explained in the theory that sciences and humanities can contribute to a meaningful worldview. A framework with an environmental worldview is a powerful condition when its implications are worked out.
- 3) From an Organizational Theory perspective, the results of this study can explain the importance of learning goals (Seijts and Latham, 2005) which focus on motivation before ability. The organizational learning component in this framework emphasizes imparting knowledge and skills or what Seijts and Latham call a “mindset” towards the effectiveness of achieving sustainable development goals in the future.
- 4) The role of strategic planning needs to be further studied for its theoretical reasons, especially regarding the establishment of an organization’s vision and mission based on environmental worldview in its strategic plans, to become tactical plans that are ready to meet a particular threat or opportunity.

6.2. Practical implications

- 1) The role of leadership with the paradigm or “mindset” of its leaders which is embodied first in the vision and mission of the organization can be interpreted more seriously in bringing the organization towards world trends that have used the Triple Bottom Line in measuring success and achieving sustainable development goals.
- 2) In doing business, ethics must be carried out correctly. For an organization to be ethical, the application of this framework can lead the organization to achieve financial performance while continuing to conduct business ethically, namely being able to focus on social with community empowerment and the natural environment conservation at the same time.
- 3) With this research, organizations can prepare a clear roadmap with the Sustainability Compass and can be achieved in stages with real, measurable impacts and start building towards it, with a standard baseline to start like a greening movement, protecting biodiversity, and empowering the economy of the surrounding community.
- 4) The managerial implication of this framework is in its “balanced” view on different and broader perspectives which hold up the generic integration of sustainability aspects into stakeholder values, strategies, and activities.

7. Limitation and future direction

This research has limitations that can be used as a reference for the implementation of subsequent studies as follows:

- 1) This research has not explained the causal relationship between components in the framework that has been built so that it can become a new proposition that is provisional and contextual. The results of this study are only in the form of abstract concepts that are built from observation or empirical reality and understanding of existing theories, so it is not certain that their application can be replicated just like that and still must be tested further through various studies using both quantitative and qualitative methods deeper.
- 2) There are three research scopes related to the topic of sustainable development and the environment (Peters et al., 2019), namely, a) the classical paradigm that focuses on impact environmental damage, pollution air, noise, water contamination, etc.; b) sector-based approaches such as discussing urbanization, transportation, agriculture, energy, industry, and circular economy; and c) a holistic approach that examines planetary perspectives, ecosystem, social sustainability economy, injustice environment, etc. This research has only been engaged in one small part of the sector-based approach, namely looking at organizations engaged in the energy sector, so future research can broaden the scope to obtain more complete results and be able to better explain the components forming the framework or use the other components.

Author contributions

Conceptualization, DOKK and RP; methodology, RP; software, RP; validation, DOKK and RP; formal analysis, DOKK and RP; investigation, DOKK; resources, DOKK and RP; data curation, DOKK and RP; writing—original draft preparation, DOKK; writing—review and editing, DOKK and RP; visualization, DOKK; supervision, DOKK and RP; project administration, RP. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

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