Sustainable Leadership Wisdom Cube: Sustainable Leadership Style Evaluation Application to the Wisdom Cube Scientific Knowledge Space

Evangelos Markopoulos^{1,2}, Lisa Marie Carolin Winter³, Hannu Vanharanta⁴

e.markopoulos@qmul.ac.uk, lisa.winter@uvex.de, hannu@vanharanta.fi

Abstract. The triadic combination of wisdom, strategy, and democracy in a sustainable and social context introduces a new area in management and leadership where thinking replaces believing for the benefit of human beings, society, and the economy. Humanity requires sustainable leaders who advance by education and personal growth for the people and the planet through prosperity, peace, and partnerships. Drawing and processing data, information, and knowledge with established business methods such as the Wisdom Cube and applying sustainable leadership, wisdom is generated and inherited based on its four dimensions. This synthesis demonstrates the Sustainable Leadership Wisdom Cube (SLWC) model developed to benefit anyone who can be provided with the right tools and resources to adapt themselves to suit society. This framework is based on understanding the various wisdom characteristics, focusing on business innovation within the Pink and Green Oceans strategies under sustainable and social management and leadership.

Keywords: Sustainability for leadership · Agenda 2030 · Sustainable Development Goals · Wisdom Cube · Sustainable Leadership · Pink Ocean Strategy

1 Introduction

In the immediate sense of unsustainability, the current data, information, and knowledge are critical for social change through sustainable development [1]. Leaders must guide the world during times of global crisis and prevent new ones. New technological alternatives emerge in the face of this consumer-driven era, which pushes planetary limits. This crisis, which requires a behavior change, involves cultural, social, and individual transitions.

¹ Queen Mary University of London, School of Business and Management, 327 Mile End Road, GB E1 4NS, London, United Kingdom

² Turku University of Applied Sciences. Faculty of Engineering and Business Joukahaisenkatu 3, ICT-City, C-wing, FI-20520 Turku, Finland

³ UVEX Winter Holding GmbH & Co. KG, Wuerzburger Str. 181, 90766 Fuerth, Germany

⁴ University of Vaasa, School of Technology and Innovations, Wolffintie 34, 65200 Vaasa, Finland

The 2030 Agenda of the United Nations identifies 17 Sustainable Development Goals (SDGs), which offer a framework for a holistic interpretation of what sustainability requires. This framework focuses on the premise that sustainability and sustainable growth have a social, economic, and environmental aspect, assuming that social and ecological elements are related/interrelated and that social and economic components depend on environmental frameworks (Figure 1) [2]. We have recognized the need to consider and evaluate sustainability for leadership. This work, therefore, emphasizes current business leaders who are not sustainability experts themselves. The success of a leader lies in the understanding that humans behave complicated. They respond to the traditional concept of the 'carrot and stick' methodology and drive loyalty, love for the good and the beautiful, apathy, self-doubt, and all dimensions and patterns of thinking, acting, and feelings make each one a unique individual [3].

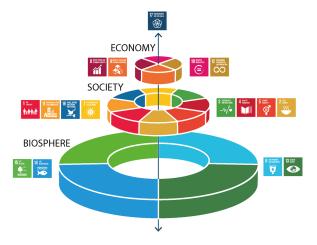


Figure 1. The 17 Sustainable Development Goals [2]

2 Problem Formulation

Inevitably, the intricate environmental impact will directly affect business, the social system, and ecosystem functions; and with far-reaching regulations, governments will seek to mitigate its effects [4]. Thus, the global response is fundamental to long-term sustainable development, seeking booming economic, social, and environmental prosperity. Businesses need to strengthen their potential viability, sustainability, and resilience rather than retreating from core issues. [5].

This paper attempts to answer if leadership can have a sustainable dimension, i.e., how informed, committed, and skilled, sustainable leaders allow companies to generate growth, profit, and maintain environmental, societal, and long-term sustainable development? These attempts lead to three sub-sections: What must be adapted in leadership today to work towards sustainable development in the future? How can leaders motivate and guide others to care for the common goals of a long-term sustainable future? What character traits must a sustainable leader have?

3 Research Methodology

This research paper uses interviews, surveys, case studies, and secondary research to collect and sample qualitative and quantitative data and information. The methodology allows the collection of objective data explicitly focused on Sustainable Leadership (SL). Qualitative information is derived from semi-structured interviews with managers of different sized enterprises. To avoid prejudice, we selected a range of interviewees. Invariably one female and one male manager from start-ups, small-to-medium-sized-enterprises, and large enterprises. For quantitative data collection, a survey contains many individuals to identify sustainable leaders' needs and requirements in society and return business. The method allows an understanding of sustainability awareness in the general community today. We gathered more information about SL with three case studies, i.e., Vandana Shiva, Jacinda Ardern, and Albert Arnold Gore Jr., to help analyze people's character traits and personal attributes within the sustainability leadership style.

4 Leadership Styles

The four main types of Leadership are Entrepreneurial, Aspirational, Experiential, and Revolutionary. Entrepreneurial Leadership focuses on doing more with less than anyone thinks possible [6]. Aspirational Leadership strives for more than pure success in business; it aspires to purpose and prosperity [7]. Experiential Leadership emphasizes concrete results more than innovative impact, as disruptive innovations and business models can reshape markets and industries; however, past performance is a more reliable predictor of potential effects [8]. Revolutionary Leadership underlines tangible progress and practical approaches as the most unlikely places can give the essential contributions [9]. Within these four leadership types lie nine universal leadership styles; Transactional-, Transformational-, Servant-, Democratic-, Autocratic-, Bureaucratic-, Laissez-Faire-, Charismatic- and Situational Leadership. The Situational Leadership style focuses on flexible leaders who adapt to their environments and circumstances [10]. Figure 2 represents the main types and leadership styles.

Science and research have identified the need for leaders who can benefit human, social and economic values. However, for a future-orientated organization to succeed in ever-changing environments, leaders must also adapt their leadership capacity, capabilities, competencies, and skills to grow environmental matters and values for the more significant and common good.

5 The Pink Ocean Strategy

The Pink Ocean Strategy (POS) is an approach that can significantly affect the lives of millions worldwide while maintaining social and sustainable requisite resilience through productivity development and scale-out market operations (Figure 3).

The POS goal is to create the development space that leads and encourages innovations to create a social innovation ecosystem. Companies must move from the blue to the reach pink oceans, as creativity is required for advancement outside rivalry [11].

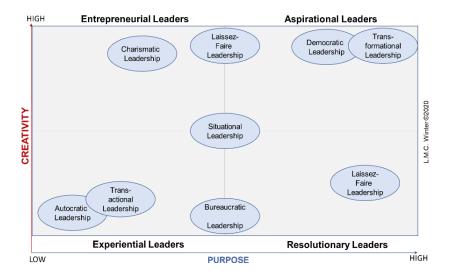


Figure 2. Map of the leadership styles with the different leadership types.

Research and development have created tools and metrics to lead organizations into future-driven business environments. However, human capital remains the key element to successfully guide businesses into new, sustainable, and prosperous waters [12]. Thus, it is clear that only a specific leadership style can guide companies through these ever-changing, blue, pink, and green oceans of social and sustainable opportunities. Specifically, green and pink character traits are required to succeed in such a business transition to succeed socially (pink), environmentally (green), financially (blue).

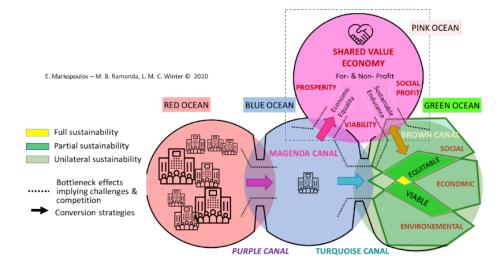


Figure 3. The Red, Blue, Green, and Pink Oceans transitioning [11]

6 The Wisdom Cube Sustainable Leadership Framework

Knowledge on sustainability, the understanding and reasoning of sustainability, the technical implementation of sustainability, and the practical implementation of sustainability form a methodological approach that provides the basis for the identification and demonstration of values, frameworks, and definitions of ontologies applicable to the SDGs for the evaluation of practical leadership competencies and character traits.

The Wisdom Cube Framework (WCF) can create a functional leadership model program for sustainability (Figure 4). In the WCF, the proportions of wisdom can be visualized because each one briefly defines vital characteristics. Through the WCF, one can discover the planes that occupy the content of each dimension. Episteme, Sophia, Techne, and Phronesis are the critical aspects as knowledge was described and expressed by the ancient Hellenic philosophers. [13].

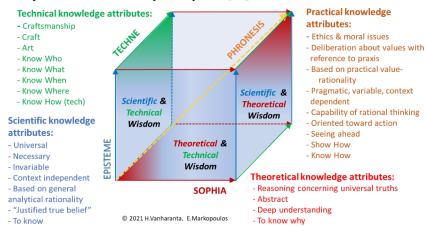


Figure 4. The Wisdom Cube with the four dimensions of wisdom [13].

Episteme is the Scientific Dimension of Wisdom, which means that what is objectively understood can be explained. So intangible things become more of an art than real knowledge. Sophia is the Theoretical Dimension of Wisdom. Sophia's ancient Greek term has been represented in different forms by the terms' smart, wise, intellectual, knowledgeable,' meaning the human being's wisdom. Techne is the Technical Dimension of Wisdom. According to Aristotle, Techne is a 'representative of the imperfection of human emulation of nature.' Phronesis is the Practical Dimension of Wisdom. It is an ancient Greek term meaning a kind of insight or intellect [13]. The WCF allows leaders and managers to assess their current position and degree of successful leadership qualities and think of new potential functions using a well-known definition of creative tension.

5.1 Framework Implementation

The effort to develop a framework for the successful implementation of Sustainable Leadership is based and considered an add-on to the current business practices and not a replacement. Thus, a key factor is the different existing characteristics, and leadership styles managers currently embody. Leaders mustn't implement this framework due to external pressures but because they seek long-term sustainable development. Thus, a successful implementation is based on individual leaders' intentions to a sustainable culture throughout the business, which can be achieved with education and communication. Teaching and learning lead to extraordinary opportunities and cultural legacies, allowing an organization to develop and make sense of the world in ways that others cannot. The long-term success of this framework depends on the relationships and mindset portrayed within the business culture.

5.2 Sustainable Leadership Style Evaluation

The Sustainable Leadership theory comes from the concept of sustainable development in business. Sustainable leaders are dissatisfied with the status-quo and thus accumulate data, information, knowledge, and resources to convert their organization to benefit the planet and the people while also focusing on their businesses' profits and growth.

Sustainable Leadership dimensions allow managers to adapt and develop their current leadership style to relate or be useful in business operations by listening, understanding, and emphasizing. They utilize compassion, trust, and honesty to convey their persuasive, confident, and enthusiastic environmental and social sustainability approach. They are selfless to achieve their apparent goals of long-term, future-oriented growth, driven by sustainability for every decision. In non-sustainable choices, they make their decisions consciously and communicate them directly. Nonetheless, sustainable leaders keep these decisions pending until they access tools and resources to adapt to sustainable decision making. This leadership style leads with purpose and creates meaningful change. However, it isn't easy to adopt it if leaders do not embody the real will, passion, and understanding of its benefits.

Figure 5 indicates the relation to other leadership styles based on the four main types of leadership. However, Sustainable Leadership is fixed at high purpose, moves along the y-axis of creativity based on the leader adopting Sustainable Leadership.

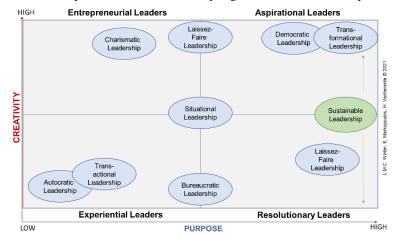


Figure 5. Sustainable Leadership (SL) in correlation to other leadership styles

6 Sustainable Leadership Wisdom Cube

The SLWC (Fig. 6) breaks the Sustainable Leadership theory into various characteristics to understand the essence of wisdom and reveals how important it is to use this information for educational purposes and growth in the light of sustainability.

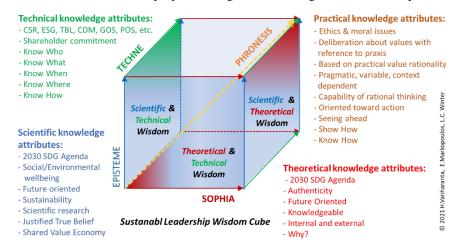


Figure 6. Sustainable Leadership Wisdom Cube (SLWC).

The four original knowledge attributes of the Wisdom Cube Framework can be applied to the context of sustainability. These are required for the successful implementation of sustainable leadership; however, the context must be adapted.

In the light of sustainable leadership, Episteme focuses on the scientific research that has been identified to analyze social and environmental wellbeing. This information is universal and necessary as it impacts the global population. The 2030 Agenda embodies all targets humanity must reach for prosperity and supports knowledge to understand viability and sustainability in all its forms.

Sophia focuses on the human traits of intelligence. Asking 'why' and understanding its importance is essential for authentic, sustainable leadership. The SDGs embody crucial knowledge related to future-oriented business for organizations, society, and humanity. This theoretical wisdom can be portrayed internally and externally to create full sustainability in leadership and business.

Techne focuses on the tools derived by research to become socially and environmentally sustainable without compromising business growth, such as the Triple Bottom Line, Corporate Social Responsibility, Environmental Social Governance, the Company Democracy Model, or the Pink Ocean Strategy. Primary research has identified several systems businesses put in place to measure their sustainability.

Phronesis focuses on the implementation of Sustainable Leadership. This action-oriented approach is universal to implement any concept. Thus, for the Sustainable Leadership Wisdom Cube (SLWC), the original information is accurate. Leaders need to be role models and demonstrate sustainability verbally and physically, thus eliminating hypocrisy and focusing on authenticity through actions.

7 Sustainable Leader Traits

Sustainable Leadership is a new leadership style that emerged due to situational circumstances of climate change. Sustainability requires fulfilling one's own needs without undermining future generations' abilities to fulfill their own needs. Sustainable leaders embody skills to make them successful, sustainable, and future-oriented leaders were focusing on a scientific, theoretical, technical, and practical implementation. Sustainable leaders embody eight abilities (Figure 7). These are persuasion, listening, confidence, compassion, trustworthiness, enthusiasm, honesty, and sustainability.

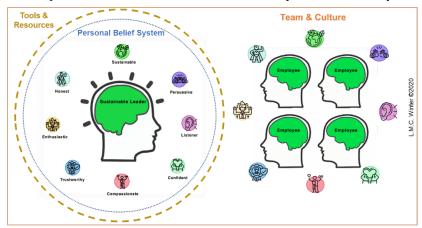


Figure 7. The eight Sustainable Leadership (SL) character traits

When applying these characteristics, three aspects must be considered: (a) Alignment of the team and business culture with Sustainable Leadership, (b) Capable resources and tools available to leaders to lead into sustainable development while also growing it, and (c) Leaders must have personal belief systems aligned with sustainable development. Where some leaders already embody some of these qualities, some do not at all. This leadership model is highly aware that not every person is the same. Therefore, it is necessary to develop a range of supportive frameworks appropriate for any individual to implement Sustainable Leadership traits.

8 Impact

All sustainable leadership character traits align with viability and sustainability and thus link directly to the 2030 Agenda. A sustainable leader fosters the development and implications of SDGs in business, leading to adopting the Social Progress Index (SPI). (Fig. 8). SPI contains three pillars: Basic Human Needs (ex. nutrition and primary medical care), Foundation of Wellbeing (ex. access to basic knowledge), and Opportunity (ex. personal freedom and choice). [14]. Basic Human Needs are achieved if the sustainable leader is a role model, showing compassion to the issue, listening where the problem comes from, being honest about the attainability, enthusiastic about solving a crisis, confident, and persuasive to build and lead teams.

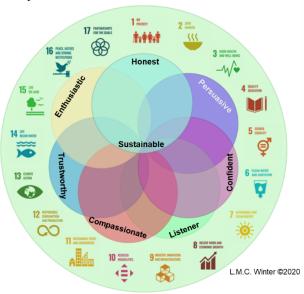


Figure 8. Sustainable Leadership character traits aligned with the 17 SDGs.

9 Limitations and areas of further research

This work has been delivered under the Covid-19 pandemic, where access to study leaders in their workplace was limited. The pandemic also impacted the secondary research as five out of six interviewees were German. Finally, the western way of thinking studies from the interviews cannot be compared with the international literature used to support the SLWC model. Thus, the validity of the data is restricted. The involvement of international participants, especially from developing and underdeveloped countries, could have demonstrated a more relevant and fundamental social perspective.

To develop this research further, in the preliminary study, the SLWC model should be tested on managers globally to identify time implementation methods in general, as well as how different leaders from different regions apply this model. It is essential to highlight that this leadership style should be tested in developed and underdeveloped

areas and adopted accordingly. After the testing phase, further research application of the SLWC model should be undergone.

Since this framework can also be applied to business innovation, it would be tested if innovation within the Pink and Green Oceans could be achieved successfully using the SLWC model. Additionally, the development of an assessment tool for managers in business today would increase the reach of potential SLWC framework adopters. Furthermore, this concept should be adopted by political and social leaders rather than business managers.

10 Conclusion

If the global objectives are met by 2030, matters must be completed differently. Importance to social change must be assigned, and international approaches must be scaled up. These global goals are a monumental moment, as the world's leaders have vowed to deliver them.

The SLWC model was developed with the impression that anyone shall be provided the right tools and resources to adapt themselves to suit society. It gives the awareness of the impact business and people have on the world and an understanding of what one can change to find a sustainable role and place within the community. A single action alone might not change the world. However, working towards sustainable development in communality can create a worldwide positive impact.

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