Leadership for Sustainability in Crisis Time



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Abstract Leadership has been a crucial topic of moving forward in times of COVID-19, and as can be seen in the chapter, it forces having to address different needs, from the death of workers, providing good teams, maintaining commitment, maintaining leadership image, avoiding harmful habits in closing, and mainly, ensuring smooth and effective communication in all teams locally and globally. Many people have passed away, many companies have remained, and that more than ever should drive the focus of academic and research efforts on leadership in times of crisis. About resilience, there is a need to lead processes that have sustainability at their core, specifically with projects that include sustainable indicators and certifications such as footprinting.

 $\textbf{Keywords} \ \, \text{Circular economy} \cdot \text{Leadership} \cdot \text{Leader} \cdot \text{Sustainable development} \\ \text{goals} \cdot \text{SDG}$

1 Introduction

Leadership is an urgent requirement in times of crisis, such as the current COVID-19 pandemic for both face-to-face and remote work [115]. World leaders in each country and global institutions should reflect and ask themselves whether this type of leadership is expected to move a country or the world forward with a pandemic ahead. As of December 31, 2021, 281,808,270 people have been infected worldwide,

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and 5,411,759 have died [203]. When we speak of global leadership in times of crisis, we are talking about the leadership necessary for transnational companies to be able to continue with optimal supply chain management to supply their customers in the world with their products, likewise, leadership is expected from governments to take the most balanced and effective measures to control the pandemic in each country. On the other hand, leadership is expected in the medical environment to feel supported and protect patients. Finally, leadership is expected in education, which by moving to the online format became genuinely global, generating that access to education can be from and to any part of the world. Leadership is required in times of crisis to have a vision of sustainability to achieve sustainable results over time.

We present the leadership actions that have been recognized in the world and reported in the academic literature. We also present a pilot leadership outcome and its effects on job performance, and finally, the pending leadership actions required, emphasizing the communication of information, which is the basis for decision making.

2 Before and Current Situation About COVID-19

The world has changed, and people's habits regarding sustainability have changed forever. The companies and people are working hard to reestablish the world they usually live in. The world has changed and people's habits regarding sustainability have changed, depending on the characteristics of pre-pandemic time. Sustainable education is the cornerstone for leadership that can guide the companies and habitants for efficient use of sources as water and food. In Table 1, it is presented different sectors that have been damaged by COVID-19.

3 The Employee Needs Sustainable Leadership in Times of Crisis

Today's world is characterized by VUCAT (Volatility, Uncertainty, Complexity, Ambiguity, and Technological). These elements cause workers to need leadership that must be addressed continuously [76]. MNEs have to dedicate efforts to ensure that their employees in all their branches can be led in a homogeneous way to have a strengthened global team [66, 205]. Despite the difficulties that workers of all levels have had to adapt to remote work, based on communication technology, an adaptation has been made in general terms, but in many cases, human resources' typical performance has been altered. It must be considered that remote work is a permanent feature for more organizations and companies, which means that institutional leaders at a global and local level design new rules to safeguard the quality of life of workers and at the same time contribute to their higher performance.

Table 1 Impact of COVID-19 in different sectors

Education	Ali [9], Allen et al. [10], Alvarez-Risco, Estrada-Merino, et al. [20], Alvarez-Risco, Del-Aguila-Arcentales, Rosen, et al. [17], Alvarez-Risco, Del-Aguila-Arcentales, Yáñez, et al. [18], T. Chen et al. [57], Lackie et al. [122], Lashley et al. [123], Zollinger and DiCindio [213]
Entrepreneurship	Afshan et al. [4], Alvarez-Risco, Mlodzianowska, Zamora-Ramos, et al. [23], Alvarez-Risco, Mlodzianowska, García-Ibarra, et al. [22], Alvarez-Risco and Del-Aguila-Arcentales [16], Belitski et al. [34], Block et al. [38], Brown et al. [46], Bacq and Lumpkin [29], Chafloque-Cespedes et al. [54], Maritz et al. [135], Liguori and Winkler [129]
Health sector	Abiakam et al. [1], Alan et al. [8], Alsairafi et al. [12], Alvarez-Risco, Dawson, et al. [14], Alvarez-Risco, Del-Aguila-Arcentales and Yáñez [19], Barello et al. [31], Bozdağ and Ergün [43], X. Chen et al. [58], Deressa et al. [79], Koetter et al. [117], Raudenská et al. [159], Rojas Román et al. [164], Yáñez, Afshar Jahanshahi, et al. [207], Zhang et al. [211], Zhang et al. [212]
Hospitality	Duarte Alonso et al. [85], Gursoy and Chi [97], Ho et al. [103], Kaushal and Srivastava [112], Yan et al. [206]
Intellectual property	Altindis [13], Alvarez-Risco and Del-Aguila-Arcentales [15], del Castillo [77], Erfani et al. [89], Jecker and Atuire [110], Krishtel and Malpani [120], Okereke [144], Sekalala et al. [174], Zarocostas [210]
Population	Ahsan [6], Alvarez-Risco, Mejia, et al. [21], Cegarra-Navarro et al. [53], Hanzl [98], Lim and Prakash [130], Quispe-Cañari et al. [153], Sánchez-Clavijo et al. [169], Shaw et al. [176], Wen et al. [202], Wu et al. [204], Yáñez, Alvarez-Risco, et al. [208]
Prices	Apcho-Ccencho et al. [27], Chung et al. [61], Galanakis et al. [92], Hepburn et al. [101], Leiva-Martinez et al. [127], Obergassel et al. [143]
Tourism	Assaf and Scuderi [28], Baum and Hai [32], Brouder [45], Carvache-Franco et al. [50], Fotiadis et al. [91], Carvache-Franco et al. [51], Sigala [178], Carvache-Franco, Carvache-Franco, et al. [52]
Trade	Abudureheman and Nilupaer [2], Acuña-Zegarra et al. [3], Aguirre et al. [5], Alvarez-Risco, Quipuzco-Chicata, et al. [24] Alvarez-Risco, Rosen, et al. [25], Borzée et al. [40], Cruz-Torres et al. [67], Kirk and Rifkin [116], Lopez-Odar et al. [133], Tran [193], Vidya and Prabheesh [197], Yasin Ar [209]
Violence against women	Amarillo [26], Chafloque-Cespedes et al. [55], Dominelli [82], Gulati and Kelly [96], Roesch et al. [163], Sánchez et al. [170], Viero et al. [198]

For this, mainly in multinationals, the CEO and regional and local managers in the areas of Human Resources, Finance, and IT must propose strategies to take care of the companies' human capital in all their premises. Some of the main components that must be secured include:



Fig. 1 Activities, type of communication, and alternatives of software

Ensure that managers can successfully convey work rules, including annual
goals, indicators, activities, and planned schedules. Additionally, it means
communication for formal communication [126]. It is relevant that global leadership provides efficient communication in times of pandemic and that it serves
after the pandemic to be the efficient way to carry it out [80]. Some concrete
examples of standardization of the forms of communication are shown in Fig. 1.

One example of communication leadership must be the following example:

a. Do not repeat the myth

Wrong message

"It is said that when we are with trusted people in the office, we can stop using masks."

Correct message

"You always wear the mask during all the time that I am in contact with people in the office."

- 2. Ensure everyone has the equipment and the correct connectivity to be carried out at the scheduled times. Everyone is expected to have the same minimal technological tools: webcam, headphones, microphone, monitor, printer, and scanner. Leadership must make workers feel part of the same team with the same weapons. This lack of identification has been a problem in the health field where there have been health workers in the first line of care who have not had the necessary protective equipment for many months and, nevertheless, have continued to save the lives of patients with COVID-19 [71, 125], 131].
- 3. Evaluate the most suitable descriptions for remote jobs so that effective recruitment can occur for both part-time and full-time workers. Another leadership element that workers tend to manifest is the control they may feel from the company, represented by their bosses, of meeting specific hours in a

manufacturing model. Do people have to be sitting the same hours they were in the office because they are supposed to be productive? Do you think that they should not make the same effort because people are at home? What is the impact of control devices on the image of a leader built in front of the workers? How can a worker feel like a leader, a person who controls them millimetrically through the use of software?

Some current ways to overcontrol employees and do not allow them to create a leadership image include [36]:

- Taking screenshots of employees' screens, making video recordings
- Invisible installs and stealth monitoring features
- Keyloggers
- Instant Messaging app monitoring
- Remote desktop control
- Spying on employees' mobile devices
- Complete communication logs
- · VOIP calls spying
- Internet monitoring
- Mobile Keylogger
- Geofencing alerts
- GPS tracking
- Remote control of the infected device along with viewing and blocking specific apps
- Access to the calendar, notes, and reminders
- Surroundings audio recording capability
- Taking over the phone's camera, making screenshots.
- Ensure that people keep their work, assisting that they can continue to develop their activities despite all the mental effects of the pandemic and also, motivate them to remain focused on institutional objectives [64, 100]. Leadership in the MNE has been reflected in various strategies and commitments, but it is still pending to know what workers expect from their bosses [107]. The urgent need to generate research that allows us to know the impact of leadership and what workers expect from their local and corporate leaders has been recognized [49]. It can be started by conducting studies that link the three main variables: leadership, work environment, and satisfaction. One of the strategies that have been seen throughout the companies is the empowerment of staff skills through the increase and variety of training [86, 166]. The pandemic has also facilitated the global proliferation of Webinars. At a global level, the leaders of companies have understood in most cases that they must retain their talents and must ensure that they can be optimally developed in times of crisis. This distance training also has the advantage of being carried out in the home's comfort, contributing to the work-family balance to achieve employee engagement [56]. Due to all experienced in the global health environment, the urgent need for leadership can be recognized [99, 181]. One aspect that global leaders must prevent and address

is to know the pattern of distraction that employees have due to lockdown. Thus, technostress presence has been recognized [138, 142, 146, 152]. Technostress generates various forms of burnout, which can also lead to increased alcohol consumption at home [182], with all the implications that this entails and an increase in gambling. The institutional leadership must address all these circumstances, achieving that habits are changed, promoting activities in the company that can distract the busy work schedule [44].

Business leadership has responded to the challenge of the pandemic with responsibility and innovation. These attributes are essential for a social actor to operate in an environment of multiple crises: health, economic, environmental, trust, and social. The world continues to undergo rapid transformations. For years, it has faced sustainability-related problems such as biodiversity loss, water scarcity, air pollution, frequent migration crises, and social inequality. When setting these business goals, we often look at the limitations to be overcome, focusing primarily on the profit approach but ignoring the great urgency of addressing environmental, social, and economic issues.

Offering green products and services carries great responsibility as it is expected that the green component of the offer is such. Scientific literature shows that certain companies and individuals have a green expectation of a product when it is not: greenwashing. These previous studies show results from the last 20 years, such as the factors [78], policies [158], evaluation of greenwashing [84], strategies [173], ethical commitment [148], relation with corporate social responsibility [41, 134], impact [74, 149, 185], taxonomy [177], the role of stakeholders [191], the effect of purchase intention [7], and consumer reaction [156]. More recently, a systematic review presented the most recent evidence [73]. Some certifications can help recognize products that deliver on their environmental promise to guide companies and customers. There have been various efforts to encourage companies to obtain sustainable certifications to be standardized. Thus, there are the following certifications:

ENERGY STAR is the symbol of energy efficiency endorsed by the U.S. government. Thousands of organizations work with the U.S. Environmental Protection Agency (EPA) to deliver energy efficiency solutions that save costs and protect the climate. ENERGY STAR was created in 1992, and over the life of the program, every dollar the EPA has spent on ENERGY STAR has translated into \$350 in energy cost savings. A review of the following articles specific to this certification is recommended [42, 47, 105, 147, 155, 160, 184, 201].



2. **Water Sense** is an EPA-sponsored consortia program that seeks to promote efficient water management and bring water-efficient products and services to the marketplace [59, 94, 95, 186, 196].



3. **Cradle to cradle** is a certification that verifies that a product uses safe and environmentally sound materials and is designed for material reuse, recycling, or composting [30, 37, 65, 68, 72, 75, 118–119, 121, 132, 167, 179–180, 192, 200].



4. **Forest Stewardship Council (FSC)** accredits forest managers, manufacturing companies, and controlled wood products that exhibit responsible consumption of forest products. A review of the following articles specific to this certification is recommended [35, 128, 136, 139, 141, 150, 151, 154, 165, 183, 187, 188.



5. **Leadership in Energy and Environmental Design** is a certification that focuses on green buildings. A review of the following articles specific to this certification is recommended [48, 60, 62, 69, 70, 81, 93, 102, 108, 111, 113, 114, 161, 168, 175].



4 Research in Sustainability and Consumers

The development of research that allows management decisions is an urgent issue, given the need for economic reactivation after the COVID-19 pandemic. The authors describe variables that could be part of future studies, which should be quantitative and correlational in order to predict the influence between variables and to be able to organize more efficient strategies. Thus, several studies could be carried out. The following items can be used in Likert scales.

4.1 Behavior of Circular Economy

In Fig. 2, it is presented the items that can be used to test models to explain the behavior of the circular economy.

4.2 Intention of e-commerce

Website Quality

The online purchasing platforms that I use give me detailed information.

The online purchasing platforms that I use give me complete information.

The online purchasing platforms that I use are interesting.

The online purchasing platforms I use have innovative designs.

Information can be easily found on online platforms.

Customer Satisfaction

I enjoy making purchases online.

Interaction is convenient when I use online shopping platforms.

Purchasing online is a good decision to.

Purchasing online is enjoyable.

I am satisfied with the whole experience of purchasing online.

Customer trust

I believe that the companies where I am purchasing online protect their customers.

I consider that the companies that I purchase from online are honest when doing business.

I feel safe when purchasing online.

I believe that the online shopping platforms I use can do business online.

I am sure that the online shopping platforms that I use are reliable.

Attitudes
Recycling plastic waste is good
Recycling plastic waste is useful
Recycling plastic waste is rewarding
Recycling plastic waste is sensible
Recycling plastic waste would give our organization great satisfaction
It is our organization's responsibility to recycle plastic waste
Subjective Norms
Most people who influence our decisions think that we should recycle plastic waste
Most people inside our organization think that we should participate in recycling plastic waste
Most people outside our organization think that we should participate in recycling plastic waste
Many organizations similar to our organization participate in recycling plastic waste
Our neighboring organizations participate in recycling plastic waste
Perceived Behavioral Control
Our organization knows what items of plastic waste can be recycled
Our organization knows where to take plastic waste for recycling
Our organization knows how to recycle plastic waste
Whether our organization recycles plastic waste is entirely up to us
Whether our organization recycles plastic waste effectively is entirely within our control
Intention of Circular Economy
Our organization intends to recycle plastic waste
Our organization plans to recycle plastic waste
Our organization is willing to put efforts to recycle plastic waste
Our organization is willing to participate or continue plastic recycling
Pressures
International trade regulations
Regional regulations on plastic recycling
Local regulations on plastic recycling
Threat of future environmental regulations
Green strategies of competitors
Environmental awareness of customers
Behavior of Circular Economy
Utilizing eco-friendly packaging
Segregating plastics from other waste
Handing over generated plastic waste to a waste management company
Selling generated plastic waste to other organizations
Reusing generated plastic waste within our organization

Fig. 2 Items to explain Behavior of Circular Economy

Online repurchase intention

When the quarantine ends, I intend to continue purchasing online.

When the quarantine ends, I intend to increase my online purchases.

I intend to buy instead of traditional (physical) purchasing when the quarantine ends.

When the quarantine ends, I intend to use my credit card to make online purchases.

When the quarantine ends, I will recommend my friends/family/acquaintances make online purchases.

When the quarantine ends, if my friends/family/acquaintances ask me for advice, I would recommend purchasing online.

When the quarantine ends, I will not purchase online.

4.3 Intention to Purchase Sustainable Clothing

In Fig. 3, it is presented the items that can be used to test models to explain the intention to purchase sustainable clothing.

Although sustainability professionals have been advocating for years for environmental impact to be integrated into corporate management, with the advent of the pandemic, significant changes have put these issues on the agenda of the CEOs of major companies. Currently, more significant regulatory pressure and activism can be evidenced by an increase in companies' fiduciary responsibility and their leaders.

I know how to behave sustainably I know how I could lower the ecological harm with my behavior I understand how I could reduce the negative environmental consequences of my behavior
I understand how I could reduce the negative environmental consequences of my behavior
I understand how to protect the environment in the long-term
Environmental concern
I am concerned about the environmental development
I am concerned about the long-term consequences of unsustainable behavior
I often think about the potential negative development of the environmental situation
I am concerned that humanity will cause lasting damage to the environment
Attitude
Generally, I have a favorable attitude towards the sustainable version of clothes
I am positive-minded towards buying secondhand clothes
I like the idea of buying sustainable clothes instead of conventional clothes to contribute
to environmental protection
Subjective norms
My friends expect me to buy sustainable clothes
My family expect me to buy sustainable clothes
People who are important to me expect me to buy sustainable clothes
Purchase intention
I consider purchasing sustainable clothes
I intend to buy sustainable clothes instead of conventional clothes in the future
I might buy sustainable clothes in the future
I would consider buying sustainable clothes if I happen to see them in an online store
Purchase behavior
I choose to buy exclusively sustainable clothes
I buy sustainable clothes instead of conventional clothes if the quality is comparable
I purchase sustainable clothes even if they are more expensive than conventional clothes
When buying clothes, I pay attention that they are sustainable

Fig. 3 Items to explain Intention to purchase sustainable clothing

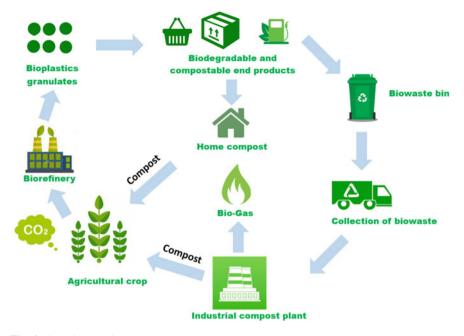


Fig. 4 Organic recycling process

Globally, leadership is a basis for successful planning. In this period of global resilience, thinking sustainability is the key to making efficient use of the resources available to countries. Various legislative initiatives are being promoted and implemented. Figure 4 shows the organic recycling cycle that must be planned, executed, and monitored. These practices are part of the most recent regulations increasingly demanded by the population.

The regulatory pressure undoubtedly leads to the transformation of sectors and business models that have to comply with their legal obligations and anticipate change to survive in the new paradigm. If sustainability is not made transversal to the business, not only will it be possible for the company to incur non-compliance with the law, but it lose business opportunities, investment, innovation, and competitiveness for the future.

There are several global initiatives to achieve eco-efficient plastic management: the Global Commitment Report [87], the Plastics Pact Network [88], Alliance To End Plastic Waste [11], Commonwealth Clean Ocean Alliance [63], and the UK Plastics Pact [145].

Specifically, the Paris Agreement has been under investigation since 2016, when it was signed [39, 83, 90, 104, 106, 109, 124, 137, 157, 162, 171, 195]. However, recent information shows that the goals set by the Paris Agreement are not being achieved [33, 140, 189, 190, 194, 199] (Fig. 5).

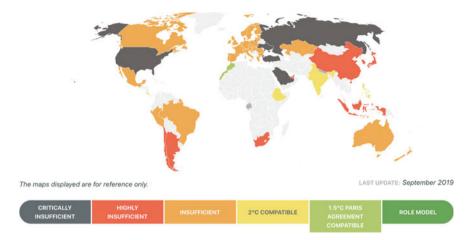


Fig. 5 Compliance with the Paris Agreement

5 Closing Remarks

The current pandemic that is plaguing the world will remain in the memory of each person and company. Each activity developed in this pandemic time is vital because it is the image that remains in the memory of all the people in an organization and is a predictor of the engagement that workers have concerning their leaders. Companies need to work on leadership at all levels so that all the directory measures are reflected in the most peripheral workers since they are direct with direct customers and finished products. Let us look at the future we want to create from global leadership. All the latter shows that leadership is required to achieve the goals set globally.

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