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# THE HOLISTIC PRINCIPLES OF SCENARIO PLANNING TO REFRAME ORGANIZATIONAL ETHICAL CULTURE – A MULTICASE STUDY APPROACH


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*“Ecrire, ce n’est pas seulement être sur sa table et se livrer à soi-même, c’est aussi écouter ce bruit du monde”*

- *Jean-Marie Gustave Le Clézio*

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As I write these acknowledgments, I could stop to reflect on the stages of my thesis and recall the journey I had taken. It started at the end of 2016, when I first arrived in Bilbao, a city I had heard about through references of the Guggenheim Museum, the traditional football club Athletic, the Basque language, and the long struggle in the Basque Country involving ETA. Aside from these important references, I knew very little about the city's and region's underlying structures and assumptions, history, and unique cultural traits. I immediately learned about the kindness of locals and the informality of social interactions, as well as the strong culture of collaboration and coopetition among citizens, government, universities and especially Basque business enterprises. Upon my arrival, my first contact at the University of Deusto was with my supervisor Professor Pedro Manuel Sasia Santos. His immediate kindness and openness to my proposals and thoughts endured throughout my PhD. His support, mentorship and guidance were unique and helped me develop not only academic proficiency but also practical and professional capacity that would eventually prepare me for paths beyond the PhD. For this and more, I am truly thankful to him.

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## ABSTRACT

The need for organizations to build, consolidate and promote an ethical culture has gained momentum over the years as continuing corporate scandals have resulted in societal distrust and consequently the loss of reputation and social legitimacy for businesses. Corporations have attempted to institute structures to contain malpractice and unethical behavior, and implement integrated strategies to improve reputation. Many of these structures are compliance-oriented and determined by corporate and governmental policies and regulations. However, overly compliance-dependent strategies can lead companies and organizations to exploit loopholes to be able to claim that their corporate practices are within regulatory parameters. This can indicate unresponsiveness to social justice, fairness, and human rights. Thus, this thesis stands on the belief that the ethical culture of a company should recognize that organizational ethics is a practice that goes beyond mere compliance.

Furthermore, an uncertain and turbulent contextual environment influences the structure of a firms' ethical culture, as disruptions that exceed corporate governance and control are catalysts that can facilitate reactions to an organization's ethical rationality, and thereby its dynamics and strategic positioning. Scenario planning has been recurrently applied and deemed useful to address external uncertainties and to envision the impact of change as a socio-ecological phenomenon rather than one restricted only to isolated parts of a system. Organizations that are attentive to uncertain driving forces and weak signals of disruptive change can create and enable mechanisms of ethical awareness to anticipate and adapt to the current needs, rights and demands of their stakeholders and society, beyond compliance.

In this regard, this thesis proposes to explore how scenario planning can guide organizations to reframe ethical culture by envisioning alternative possible and plausible future scenarios, and by mapping relationships and interdependencies that constitute an ethical system.

In order to address this research question, three phases of research were conducted and presented in published articles. Study 1, *Scenario planning to assess ethical culture*, introduces a practice-oriented research outline for practitioners and academics where scenario planning is an assessment tool for an organization's ethical system. In this study, four industrial cases serve as practical examples of the scenario planning process to provide lessons for companies and practitioners to visualize scenario planning as a valuable

complementary tool for ethical culture assessment. The prescriptive matter of this study also offers examples to negotiate organizational barriers that the scenarios methodology may face and to identify internal agency for leadership buy-in.

Study 2, *Toward a diagnostic tool for organizational ethical culture with futures thinking and scenario planning*, uses two case studies to explore the usefulness of scenario planning for corporate ethical deliberation and as a tool to diagnose external disruptions that could affect the ethical culture of organizations. Futures-thinking dialogue interviews with executives analyzed the status-quo of an electric utility's ethical culture, the evolution of the sector, and identified six themes as possible disruptions to their organizational dynamics. Subsequently, three scenario planning workshops were conducted in an ethics forum where managers interacted and co-created two scenarios. The study leads to managerial implications of scenario planning as a social and ethical process and introduces a diagnostic template that illustrates the openness and/or reluctance to incorporate scenario planning to reflect upon organizational ethics.

Study 3, *From profit to purpose: How electric utility multinationals visualize systemic change and adaptation of organizational ethical culture through scenarios for 2040*, encourages executives from two electric utility multinationals to view their corporate ethical cultures as complex systems. With awareness of their moral agency, executives reflected beyond their immediate organizational landscape in order to plan for the contextual uncertainties that could disrupt their ethical systems. The findings suggest that future business models will be dependent upon the capacity of electric utilities to assume accountability for corporate purpose over the maximization of profit, and to transversally integrate environmental and sustainability strategies across their corporate structures.

Study 1 and Study 2 provide conceptual, methodological and preliminary empirical findings of the thesis as it introduces the relevant theoretical underpinnings of scenario planning for organizational ethical culture with systems thinking and pragmatism. First, this is demonstrated by the importance of viewing the socio-ecological nature of ethical culture as a complex adaptive system and identifying six key themes that can disrupt ethical culture. Second, through participatory scenario planning workshops where managers were encouraged and challenged to introduce ethical reflection through every step and phase of

the methodology. Third, to identify barriers that might be encountered when attempting to integrate future scenarios intended to specifically deliberate about organizational ethics. Fourth, complete empirical findings are presented in Study 3, in which an adapted framework and the six key themes, previously validated in Study 1 and Study 2, lead to a systemic conception of four scenarios on the future of organizational dynamics and ethical culture.

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# SECTION I – GENERAL INTRODUCTION

## 1.1 Introduction

### *1.1.1 The din of the world*

Le Clézio's short quote that appears in the very first pages of this thesis does not necessarily reference ethical culture and organizational ethics *per se*. Still, it does give the context in which this thesis was structured for action research and investigation. This quote is not from Le Clézio's Nobel prize-winning writings but from a press conference he gave in 2008. Here, translated, it says: "To write is not only to be self-absorbed at your desk, but it is also to listen to the din of the world." This is certainly present in his novel *Ritournelle de la Faim* where he depicts from his own childhood experiences the travails of young *Ethel* navigating an uncertain world on the brink of World War II and searching for immediate actions for survival while already envisioning a post-war world. The quote has been an inspiration to me since my studies as an M.A. student in Paris, France, where I completed my studies in international relations and diplomacy. It was during this time that I was introduced to scenario planning. To learn about future scenarios and the processes by which scenarios are co-created, iteratively reviewed, and applied for present actions and decision-making, immediately reminded me of my work as a journalist. With journalism, I understood that no-one's story is the definitive story. It is imperative to reach out to others who each experienced a unique reality, a particular situation from which to draw an unbiased picture of that specific moment where something occurred. The same happens with scenario building. Our future does not have only one side of the story and our worldview should not be restricted to limited perspectives. We should reflect on the future collectively and blend distinct vantage points and backgrounds. All three studies attempt to integrate this holistic approach. Holistic here reminds us of systems theory and thinking [1]; [2]; [3], and the scientific concept of 'wholeness' and 'founded on the possibility of amplifying perspectives' [4]. For this thesis, what determines the existence of ethical culture is exemplified in the second study by the Indian fable of the four blind men which is also an analogy to the 'partial truths' of the executives and the concept of wholeness. The dialogue-interviews and the participatory workshops revealed particular correct fragments or partial truths of a larger complex system vis-à-vis organizational ethical culture and its evolution. The Mont Fleur scenarios famously used scenario planning to include a diverse range of participants from all levels of society in order to listen to the din of the world and envision together possible and plausible futures for

South Africa during a time when the country was entering negotiations to end Apartheid [5]. This thesis does not advance to this extent due to limited resources and organizational barriers; however, it draws from examples such as the Mont Fleur scenarios to portray a holistic understanding of ethical culture as a complex system of relational property and evolution.

### *1.1.2 Study Rationale*

Similar to what is implicit in societies worldwide and their particular cultures, organizations have tried to define their own internal cultures. An organization's culture expresses "how things should be done here" to employees. It conflates inner subjective values with the objectivity to which inner virtues aspire, to "how our business should act" as part of a particular social context. Nevertheless, what seems to be the right way to do business is not always consistent with social needs and may be influenced by interconnected contextual forces outside the control of businesses. Ethical cultures in organizations are not closed static systems. They are open systems that change and adapt. For an ethical culture to change and adapt to an evolving societal *ethos*, organizations are expected to reinforce self-scrutiny and deliver themselves up to internal and external assessment. Beyond the inevitably ingrained assumptions of executives, this is an attempt to evaluate if corporate actions and decision-making processes are internally as responsible and responsive as the executives perceive them to be.

Many multinationals continue to 'talk the talk' rather than 'walk the talk' e.g., 'greenwashing' and "fempower-washing" [6]. Corporate purpose is marketed as the definitive guide for an ethical framework that would answer stakeholder needs and rights and upscale collective value beyond a myopic and short-term drive for profit maximization. However, citizens continue to be skeptical when the topic reverts to business ethics. "Is that even possible?", "Businesses are ethical?" "Business ethics is a great example of an oxymoron," you might hear. The progress that has been made has committed companies to institutionalize ethics in light of regulations, international accords, strategies, and international standardizations to tackle corruption, competition, and tax evasion (Sarbanes-Oxley Act of 2002, Dodd-Frank Wall Street Reform and Consumer Protection Act, OECD Base Erosion and Profit Shifting, EU antitrust policy, Foreign Corrupt Practices Act, ISO

9001, ISO 14001 etc.). Furthermore, although the study of ethical organizational culture is a limited field, research has attempted to investigate the best tools to measure, evaluate, assess and promote ethical culture in organizations [7]; [8]; [9]; [10]; [11]; [12]; [13]. Yet, there is still daily evidence of disregard for minimal ethical standards and extensive malpractice by organizations. To name a few that are known from our recent past: Enron accounting and corporate fraud; UBS tax evasion; Odebrecht corruption and bribery scandal; Wells Fargo account fraud; Volkswagen emissions scandal; Facebook-Cambridge Analytica data scandal; Amazon workers abuse and violations; Apple batterygate and conflict minerals. This list can go on. The market power [14] that some of these organizations have acquired can make society overlook corporate scandals, while they employ tactics such as rebranding, unethical lobbying and vested interests, and abuse of their control over media. The dependency on the products these multinationals supply is yet another factor, which again makes the public repeatedly discount their unethical business behavior.

With less media and brand visibility, the same is true in the electric utility sector where there is an ever-greater dependency of society on electricity, and where in some regions these utilities are monopolistic. This is to note that two crucial case studies of this thesis are with electric utility multinationals including the participation of their executives and decision-makers. For this thesis, the reflective analysis ecosystem was composed of executives who participated in dialogue interviews or participatory workshops. As executives with moral agency, they reflected on the future of their ethical cultures and explored the usefulness of scenario planning to diagnose disruptions, support ethical culture assessment, and visualize systemic change. Within these lines of research, this thesis aims to explore the holistic and interdisciplinary principles of scenario planning to reframe organizational ethical culture and conceptualize the capacity of ethical culture to adapt in the present by working with the future. Ultimately, the desired outcome with future scenarios here is to provide senior executives an enhanced understanding of possible disruptions to ethical culture influenced by contextual factors. The capacity of their companies to adapt will be determined by reinforcing organizational ethics i.e., building and implementing legitimate structures, strategies and policies, which should then support a cultural system of norms, values, virtues and customs.

The architecture of this thesis, as a compendium of three published articles, was designed to commit to investigative consistency in each research phase and was inherently sequential from an analytical point of view. Study 1 and Study 2 proposed and established a conceptual and theoretical framework for the use of scenario planning to investigate ethical culture. They also provided research validation, either through the publication of preliminary results (Study 2) or through lessons learned in case studies (Study 1). For example, Study 2 leads to conclusions vis-à-vis the usefulness and suitability of scenario planning to address ethics in organizations and for the analysis of ethical culture. These first two studies proceeded to tailor scenario planning and fine-tune it according to literature from ethical culture and futures studies, and the findings arising from the case studies. This was the necessary groundwork before going into the final study (Study 3) in which scenario planning becomes the core methodology of analysis with a framework iteratively corroborated in studies 1 and 2. Thus, in Study 3 ethical culture becomes the subject of analysis.

The framework for all three studies applies and discusses Allaire and Firsirotu's [15] conceptual framework for organizational culture, which was adapted to the building blocks and scenario planning principles. The complete outline and application of the framework, in which data from two electric utility multinationals was used for the analysis, is presented in Study 3. This sequential design takes into account the fact that scenario planning had never been specifically applied for ethical culture in organizations. Figure 1 illustrates the starting point of the research with the Main Objective (MO), divided into three General Objectives (GO), which are investigated in each study. The validation of the framework occurs in Study 1 and Study 2, and the application of the framework in Study 3, which addresses the main objective of the research.

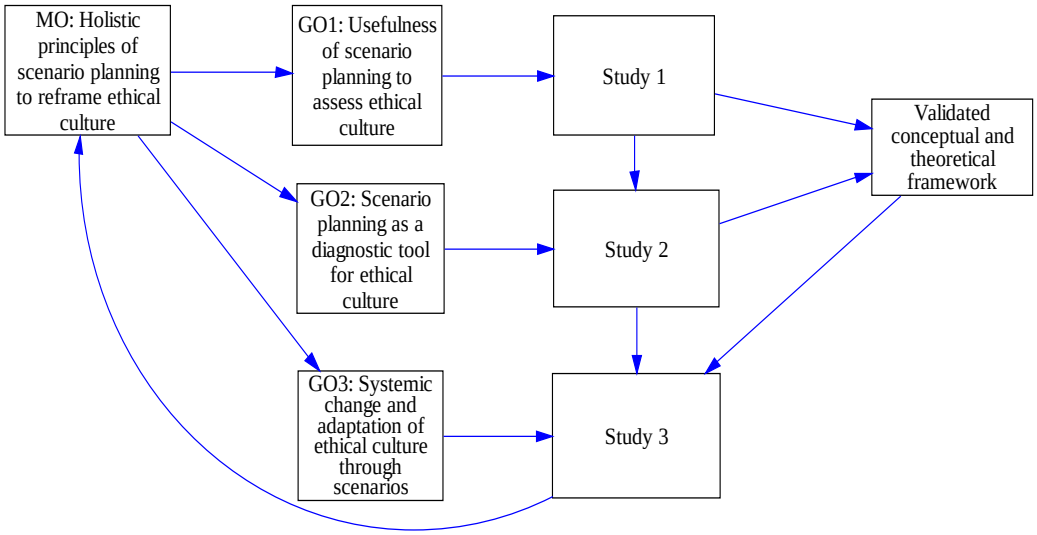


*Figure 1. Process diagram describing the causal mechanisms between objectives and studies.*

Through three published studies, this thesis relies on a systemic and futures thinking analysis for organizational ethical culture, which is viewed as a complex adaptive system. The influence of external driving forces in organizational dynamics is crucial to understand the adaptability of ethical culture, which should act upon evolving societal needs. For this, scenario planning is applied due to its usefulness to diagnose external disruptions, map individual and collective past, present, and future events, and to the value it gives to understanding the interrelationships and interdependencies that emanate from within an existing ethical system towards an emerging ethical system.

This thesis aims to contribute to the practice of scenario planning and theory of organizational and futures studies, as it proposes scenario planning as a complementary tool for ethical assessment and a diagnostic tool for ethical culture. It also seeks to encourage companies and practitioners to associate scenario planning with ethical culture evaluation, as it applies a qualitative multilevel analysis i.e., a systemic view of interconnections among individual, group, organizational and industry dynamics. Furthermore, the thesis aims to contribute to research and practice by understanding why some corporations would be open while others would be reluctant to apply scenario planning for ethical deliberation. It also aims to contribute to the studies of organizational ethical culture with systems thinking, as ethical culture is a composite of interdependent and relational properties, which should encourage

executives to recognize the importance of the effect of their moral agency. Finally, it wishes that the findings contribute to both electric utility multinationals that participated in the studies, for their internal organizational use and iterative review. The extensive analysis of the data can provide insights for these multinationals to reinterpret company corporate policies and initiatives for ethical culture and strategies for sustainability.

The findings were primarily drawn from the input by executives of two electric utility multinationals, one of which co-financed the project through the European Commission Marie Curie COFUND fellowship. This multinational referred to as EUMa in Study 1 and Study 3, and EMNC in Study 2, was the main source for research, fieldwork, and two corporate residencies during the Ph.D. program. The original project title was *Promotion of Ethical Culture in Transnational Companies*. For the following sections of the *Thesis Synthesis*, except in sections in which the studies are introduced, this multinational will be referred to as European electric utility multinational (EUM).

### 1.2 Project Context

The Ph.D. project had a collaboration agreement with the ethics ombudsperson office at EUM headquarters in Europe. I was also co-supervised by their Ethics Ombudsperson, who hosted me during the residencies, advised and validated the research, and who also liaised with key stakeholders for fieldwork to be undertaken on two different continents. Aside from the interviews, ethnographic research was conducted during the residencies as I experienced the daily work life of the ethics ombudsperson's office and team, and from project engagement with senior executives and board members.

EUM has subsidiaries around Europe, South America, and North America. Over their history, the multinational developed an ethical organizational culture, which is not only based on formal or explicit mechanisms, such as the Code of Ethics. EUM also sought to prioritize informal and implicit methodologies to promote ethical behavior. In addition, implicit methods are far more valued by EUM as an essential component of risk management [16]; [17]. Foreseeing events can help avoid bad decisions, which includes risk management, one of the ethical concerns of EUM.

Organizational culture is a complex combination of formal and informal systems, where informal systems appear to be more prevalent than formal ones [16]. At EUM, an example

of an informal methodology is that ethical practices are not discussed explicitly but rather the social conditions in which the ethical practices could be produced.

According to an international ethics assessment consultancy company, EUM has been ranked amongst the most ethical companies in the world. This assessment analyzes corporate ethics, reputation, leadership, governability, corporate citizenship, corporate social responsibility, and sustainability strategies. In addition to these external and internal assessments, during the PhD residencies EUM conveyed their engagement and concern with societal challenges and demands, not least with industrial transformation, specifically the fourth industrial revolution and its ethical dimensions.

I became acutely aware of specific challenges faced by management of multinationals, as they experience and foresee uncertain contextual disruptions that will inflict changes on their culture and ethical positioning. As a result of the fourth industrial revolution new ethical dilemmas arise not only for EUM and other multinationals, but also for society as a whole. This is further complicated when there is the desire to extend the corporate culture of the parent company cross-culturally to subsidiaries in very different societies. Schein [18] has already raised this concern with mergers and acquisitions (M&As) in which he considers that "the most obvious forces toward culture change is the bringing together of two or more cultures" (p. 117). Cultural consistency is one of the key themes and findings introduced in the three studies as the multinationals were frequently engaged in the acquisition of new companies and in entrepreneurial activity with *start-ups*. Interviews were conducted at EUM's headquarters in Europe and at its South American subsidiary in order to include cross-cultural differences when building future scenarios and to encourage a holistic ethical culture reframing.

As explained in Study 1, throughout the first residency at EUM, scenario planning was first reviewed for its value 'in learning from leadership about the organization's capacity for cultural adaptation' and ethical culture resiliency. The numerous stages required for implementation and the organizational barriers encountered are detailed in this study and it is a first step to further understand the context and evolution of the project.

### 1.3 Structure of the Thesis

This thesis is a compendium of published studies. As a preliminary contextualization of the theoretical and conceptual framework of the thesis, Section II provides definitions of organizational culture and organizational ethical culture and presents research, which has utilized frameworks and tools to analyze and measure ethical culture. Additionally, it questions the attributions of an overly measured field. Section II then provides brief historical context for scenario planning and definitions. It also introduces literature that has bridged futures studies and ethics and proposes scenario planning as a complementary qualitative methodology for organizational ethical culture. Section III presents the main objective of the thesis which is also guided by three general objectives. The general discussion of the thesis is presented in Section IV in order to revisit the main objective and general objectives and to discuss how these progressed to general conclusions. It also provides a summary of results from each of the three studies, as well as, limitations and recommendations for further research. Finally, Section V introduces the published studies as three separate papers [19]; [20]; [21].

# SECTION II – THEORETICAL AND CONCEPTUAL BACKGROUND

## 2.1 Organizational (Ethical) Culture: A measured field

> "Man is an animal suspended in webs of significance he himself has spun, I take culture to those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning" [22, p. 5.]

Authors such as Schein [23] and Lozano [24] agree on the fact that scholars and enterprises have confusingly defined organizational culture, and even beyond the different definitions are the methods used to interpret and measure corporate cultures. However, can culture be measured? Are quantitative parameters and analyses the best way to identify the influences that culture has on the company? According to Schein [25], observing reality has significant importance to understanding concepts such as organizational culture. "We have gone too quickly to formal elegant abstractions that seemingly could be operationally defined and measured, i.e., centralization-decentralization, differentiation-integration, power, etc., and failed to link these to observed reality". He goes on to detail that his experience in research was overly dependent on "abstractions, i.e. questionnaire responses" and that treating these abstractions as the reality only "create fuzzy theory and research that is useless to the practitioner" [25]. On the other hand, Lozano [24] questions if organizational culture "is or is not a variable and, in consequence, if it can or cannot be accepted in the practical sense of managing values". Resulting from this understanding, quantitative tools to measure ethics and culture can be useful for internal control, evaluation, and possibly to sustain corporate reputation. Within the interaction that this thesis proposes, it is crucial to observe and work within culture rather than excessively measure it. The empirical construction can finally be made to respond to social needs. Authors such as Lozano [24] and Drake and Drake [26] use Schein's [23] dynamic definition for corporate culture:

> "basic assumptions – invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration – that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems. This accumulated learning is a pattern or system of beliefs, values, and behavioral norms that come to be taken for granted as basic assumptions and eventually drop out of awareness" (p. 21).

Added to this definition, this thesis prioritizes and applies Allaire and Firsorotu's [15] conceptualization of organizational culture. The authors present three main dimensions—

society, history, and contingency—that uncouple a cultural system from a socio-structural system. The cultural system represents myths, values, and ideologies, while the socio-structural encompasses structures, strategies, policies, and processes. The framework establishes a connection between these two systems so that they legitimize and support each other. Furthermore, this conceptualization considers the influence of the external environment on organizational culture. It encourages organizational learning processes to reassess the rationality that inspires an organization and determine its ethical positioning [27]. Lozano [24] and Cunha, Rego & Clegg [28] additionally discuss the fact that leadership has important influence on culture and also "that the world needs more ethical leaders skilled in virtue" [28].

Culture is shared belief, shared values, and shared vision [2]; [9]; [26];. Senge [2] says that in a shared vision, you should ask the question: "What do we want to create?" A shared vision also has a relation with long-term views. To create a meaningful and robust corporation it is necessary to have a forward-thinking perspective in order to build a foundation.

Out of the broader spectrum of organizational culture, we find organizational ethical culture, which is a subset of organizational culture. This thesis uses Treviño, Butterfield and McCabe's [8] definition for ethical culture.

> "[…] a subset of organizational culture, representing a multidimensional interplay among various formal and informal systems of behavioral control that are capable of promoting either ethical or unethical behavior. Formal cultural systems include such factors as policies (e.g., codes of ethics), leadership, authority structures, reward systems, and training programs. Informal systems include such factors as peer behavior and ethical norms" (p. 451-452).

This definition reminds us of Allaire and Firsirotu's conceptualization of organizational culture. Here, particular dimensions of ethical culture should also legitimize and support each other, such as the formal role of leadership and its influence on an employee's ethical behavior. Additionally, the interdependency of formal and informal systems, and the interconnectivity of elements, structures and policies constitute an ethical culture's survival, development and capacity to adapt. As explained in Study 3, when interconnections and relationships of an ethical system are surfaced, an organization will be better positioned to

anticipate if its emerging ethical system is either reinforcing towards an ethical or unethical culture, or balanced in terms of stability or resistant to change.

The construct of organizational ethical culture is underdeveloped [10] and the methods and frameworks used for its analysis have not been as widely used and established in comparison to the construct of organizational ethical climate, which was conceptualized separately with distinct literature and assumptions [8]; [29]. Furthermore, the majority of studies for ethical culture have used a quantitative approach at an individual level of analysis [29]. The authors in Table 1 have provided this field with the main conceptualizations and operationalizations of ethical culture.

Table 1. Conceptualization and Operationalization of Ethical Culture

| **Authors** | **Methodology** | **Description** |
|---|---|---|
| Hunt, Wood and Chonko [7] 1989 | Corporate Ethics Values (CEV) | Bases on three broad based perceptions of an organization's interest and capacity to act to address ethical issues:<br>1. perception that managers *act* ethically<br>2. perception that managers are *concerned* about ethics<br>3. perception that (un)ethical is *rewarded* or *punished* |
| Treviño, Butterfield and McCabe [8] (1998) | Ethical Culture Index (ECI) | This measurement associates two constructs for measurement (ethical climate and ethical culture)<br>It includes 10 factors and a 44-item measurement: *Ethical Environment Employee-Focused Climate; Community-Focused Climate; Obedience to Authority; Code Implementation; Self-Interest Climate; Efficiency Climate; Rules and Procedures Climate; Personal Ethics Climate; and Law and Professional Codes Climate* |
| Kaptein [10] (2008) | Corporate Ethics Virtues Model (CEV Model) | Kaptein defined seven virtues for organizational ethical culture: *Clarity; Congruency; Feasibility; Supportability; Transparency; Discussability; and Sanctionability*<br><br>To validate and refine the CEV Model, Kaptein generated a questionnaire with 96 items revised by academics in business ethics, organizational behavior, practitioners, and management consultants. |
| Ardichvili, Mitchell and Jondle [11] | Center for Ethical Business Cultures Model (CEBC Model) | Ardichvili, Mitchell and Jondle [11] identified five clusters of characteristics attributed to organizational ethical culture: *Missions and Values-Driven; Stakeholder Balance; Leadership Effectiveness; Process Integrity; and Long-term Perspective.* Jondle, Ardichvili and Mitchell [12] developed a survey instrument to provide organizations "specific directions to take in building and sustaining their organizational culture based on ethical principles and metrics to measure progress" (p. 37) e.g., to identify necessary ethical training programs and interventions. |

These operationalizations of ethical culture were reproduced in recent studies [13]; [30]; [31], and also with combined approaches such as the Corporate Ethics Values with the Ethical Culture Index [32]. The majority of the tools either evaluated or measured ethical culture with quantitative approaches and at an individual or single level of analysis. In order to address this gap in practice and literature, the following subsection introduces scenario planning and proposes it as a complementary tool and qualitative multilevel analysis for ethical culture.

Until the conclusion of this thesis, no practical example was found in literature where scenario planning was applied specifically for organizational ethics. The following section provides the reader an overview of how and where ethics has been discussed in the field of futures studies, and which principles of futures studies are deemed appropriate and applicable for a process to reframe ethical culture in organizations e.g., systems thinking, futures-orientation, contextual disruptions, participatory and social processes, and iterations.

### 2.2 Scenario planning: a qualitative multilevel analysis alternative for ethical culture

> "By allowing us to imagine different ways of acting responsibly in creating futures, these ideas may provide us with some new conceptual coordinates for thinking about the ethical underpinnings for our relationship with the future and for reshaping the legal and thereby the political expressions of our responsibilities to it. They might help restore a sense that the future matters." [33, p. 141]

Scenario planning as a method is based on the work of Herman Kahn (1922-1983). He was a game theorist, a futurist, a military strategist and a systems theorist of the Cold War. His focus was on survival strategies for nuclear catastrophe. The core principle of his strategies, as seen in scenario planning today, is to imagine and create possible stories of the future through which to mitigate possible bad outcomes. There are two further key events in the history of scenario planning that are important to consider. In the 1970s scenario planning was adapted and further co-developed by Pierre Wack at Royal Dutch Shell. Then in 1991, the Shell scenarios methodology was famously applied in South Africa during a turbulent time of negotiations to end Apartheid. Groups of citizens from distinct backgrounds and all sectors of society were brought together to envision the numerous possibilities and plans for the future of their society [5].

As a process and method of “inherent human capacity” and integration, scenarios elicit plausible and possible future assumptions that are well known for their usefulness to inform, enhance and reframe strategies and policies in turbulent, uncertain, novel and ambiguous environments (TUNA) [34].

> “As an approach to engage constructively with unpredictable uncertainty, scenarios expose future assumptions that would otherwise remain implicit and clarify present situations to service different purpose-learning, informing decisions, making sense, aligning values or guiding action” [35 p. 225].

This methodology has influenced businesses, organizations and societies to support decision-making processes, reframe strategies, and align and improve collaboration among stakeholders. From an ethical perspective, in order to arrive at these prospective outcomes an ideal scenario building process emphasizes the gathering of people from various backgrounds for a democratic and open discussion in order to promote a culture of strategic conversations [36] and accept a diversity of views [5]; [35]. This not only encourages a common learning culture but also has the power to engage decision makers to rethink their worldviews, pay attention to new, uncomfortable, and unlikely signals of change, and prepare for a complex, uncertain and turbulent environment. As we have seen, ethical culture is a subsystem of organizational culture. Therefore, it embraces internal shared values and shared vision, which should be aligned with the external pluralistic perspectives of diverse social spheres e.g., businesses/competitors, government, civil society and academia. This can provide the organization with a worldview that will help to make it actively aware of its shifting ethical responsibility within a TUNA environment. During her conference at the University of Deusto, the philosopher Adela Cortina talked about these same concerns: “Vivemos en un mundo muy cambiante” and "sociedades plurales" [37], which translates to: “We live in an ever-changing world” and “with pluralistic societies”. She refers to the complex, uncertain and turbulent environment that society faces as a whole and that within this context everyone wants to feel that she or he is a full citizen or a valued member of a company or organization.

For building scenarios, there are diverse schools of thought e.g., intuitive logics and the French *la prospective,* and approaches e.g., deductive and inductive [38]. With an emphasis on causal relationships of events and stakeholders, the application of scenario planning for

this thesis is guided by the Oxford Scenario Planning Approach [34] and the intuitive logics school [39] through the process of co-creating plausible scenarios deductively and inductively. Moreover, they value the qualitative aspect of scenario building as opposed to quantitative approaches such as *la prospective* and the probabilistic modified trends methodology [38].

Korte [40] explains that scenario planning is of most benefit to organizations when strategic learning undertakes a multilevel analysis i.e., it transversally integrates knowledge and learning across individual, group, organizational and industry levels.

> "Planners must analyze the processes linking various elements at different levels and understand that these links between elements across levels of analysis contribute to the driving factors and uncertainties comprising scenarios and strategies. Understanding these elements and links is essential for organizations to develop and implement the necessary capabilities to survive into the future" [40, p. 192].

Scenario planning is a tool that enhances the capacity for organizational learning [40]. Furthermore, it is perceived to shift ingrained assumptions and strengthen or create a culture. The greatest value of scenarios is that it creates a culture where you could ask anyone a question, and the answer would need to be contextual [41]. Regarding ethical decision making in organizations uncertainty is a fact of complex, dynamic organizational life. Ethical issues are ever present in uncertain conditions where multiple stakeholders, interests and values are in conflict and laws are unclear. Managers, therefore, engage in discretionary decision-making behavior affecting the lives and well-being of others [42]; [43].

Decision-making can have a major impact on ethical dilemmas that affect diverse stakeholders [44]; [45]; [46]. Scenario planning is a hands-on and practical tool which values interaction among stakeholders to develop a coherent way of thinking. It seeks to build trust and underpin fairness among the participants in order to arrive at a common ground [47]. Distrust and reputation were concerns expressed not only in the meetings during two residencies at EUM headquarters, but also in interviews and workshops of the other two case studies.

### *2.2.1 Bridging futures studies and ethics across different levels*

Bowman et al., [48] use a case study approach with two scenario planning interventions to discuss what elements and what methods can lead to success or failure during the process. Drawn from storytelling theory, the example of an inductive intervention considers that participants are inclined to be more engaged, communicative and more open to discuss particular implications of scenarios, such as the impact that a specific scenario may have on an individual or community. The inductive method seems to create a more unrestricted discussion and arguably puts you into someone else's shoes. This is accomplished through either the different stages of scenario development or when the scenarios start to include a story line and narratives with characters and depictions of plausible future events**.** Schwartz [49] suggests: "stories are about meaning; they help explain why things could happen in a certain way. They give order and meaning to events". Stories or narratives, furthermore, have the potential of being memorable. They elicit tacit knowledge and help people respect different perspectives and imagine new possibilities. Finally, to think about the stories in scenarios we should imagine that implicit and explicit knowledge is being shared among stakeholders, either in strategic conversations or in interaction within the different levels of organizational structure. The joint participation in the creation of stories favors the creation of a sense of identity and belonging, in such a way that co-creation will be a fundamental asset needed to achieve shared objectives and to promote cohesion.

Melé [50] explains that "the human being is *relational*, with the capacity to establish relationships with others and enrich their character and personhood through such relations" (p.79). These can be characterized by feelings of *empathy*, *sympathy* and *affection*, which through a scenario building process may be amplified as stakeholders are encouraged to invest in their "constituent principle" of *rationality* and capacity to dialogue with others [50]. Within pragmatism, the principle of rationality or the quality of being a reflective practitioner questions how a certain issue may affect the relationships that are being built or damaged, as well as the influence and impact it may have on diverse communities and individuals. Additionally this creates awareness of our biases and reveals our ingrained assumptions and biases.

To address biases when eliciting future scenarios, Inayatullah [51] introduced Causal Layered Analysis, a futures research method that guides stakeholders through four levels of research: litany, social causes, discourse/world view and myth/metaphor. The first level, *litany,* looks into the exaggerated trends which have political overtones and creates a certain fear factor through sensationalist news broadcasting e.g., immigration. The second level, *social causes,* surfaces political, cultural and historical factors that can be interpreted quantitatively from scientific research and "excels at technical explanations" e.g., technological advances. The third level, *discourse/worldview,* begins to assume a more ethical reasoning and "discerning deeper assumptions" e.g., ethical dilemmas that may arise from technological advances and gender perspectives within different cultural typologies. The final and fourth level is *metaphor/myth* and this is where narratives and stories are given greater importance in futures studies. The narratives reassess an "emotional level experience to the worldview under inquiry" (p. 820), which takes us back to Aristotle's rhetoric on *pathos*. Inayatullah discusses that no one level should be given emphasis, but that the research should go up and down the levels i.e., iteratively, in order to understand different worldviews and the arising narratives, and to value moral pluralism with integrated discourses. These then are fundamental tenets of pragmatism and systems thinking.

Rowland & Spaniol [52] discuss models of scenario methods and iterative processes. One of seven techniques described for achieving closure in iterations is "isolating an alternative-narrative as either less plausible or unethical". In relation to this, one of the authors states that "scenario narratives in and of themselves, are not typically subjected to ethical judgment, given that they are hypothetical; however, plans formed in conjunction with the narrative are" (p. 3). Yet, it appears unlikely that that the plans created, based on narratives, would take ethics into account, if the narratives did not explicitly take ethical judgment into account. Creating a vision is an activity organizations will undertake to begin influencing corporate culture and in many cases is exemplified as a preferred or ideal story of the future. A vision that is inconsistent with ethical values may also affect action plans, strategies and employee behavior.

For this aspect of inherent ethical value throughout the scenario planning process, Masini & Vasquez [53] look into the use of futures studies from a "human and social perspective" and,

similar to Ramírez and Wilkinson [34], the authors stress that in futures studies ethics is essential in order to avoid manipulation. Ramírez and Wilkinson [34] call this “dominant powers or vested interests” in social processes. This means that unilateral interests within the organization may impose the direction and focus of the scenarios according to their own priorities and agendas. The social processes in scenarios could be considered one of the most important aspects to be addressed in an ethically oriented intervention, whether in governmental organizations or private companies. Lang & Ramírez [54] explain that the variety of perspectives and enabling interaction with scenario planning has been shown to help form new social capital and also, that the cognitive dimension of social capital helps participants achieve a common ground. The means by which practitioners engage and map the stakeholders to participate in scenario building is one of the processes which attends to ethical criteria. Freeman [44] famously theorized the relationship between organizations and stakeholders while giving this relationship an ethical premise in order to achieve a more socially responsible corporate environment. Mitchell et al., [45] added to the theory and stakeholder framework using three attributes for organizations to better map, select and engage with stakeholders: power, legitimacy and urgency. This mapping is an alternative way by which to attend to the ‘stakeholder balance’ characteristic within ethical culture, in order to avoid the colonization of corporate futures by vested interests with respect to e.g., vision-building, strategy development, and also the scenario planning process itself.

With further reflections on the engagement of diverse stakeholders, Bojer [55] stresses the importance of “convening and container building” in the scenario planning process and how the mapping of participants is also a question of legitimizing the scenarios and stories. With this in mind, the author gives the example of the Mont Fleur Scenarios in South Africa where scenario building incorporated a diverse group of stakeholders from all segments of South African society. The author includes the stakeholder component which she views through an ethical lens when she talks about representation and that the participants should reflect “the whole system” e.g., business and societal representatives, politicians (from different ideological backgrounds), minorities and marginalized populations. Within this conception of wholeness in scenario building, Schultz [56] provides in her article a brief history of futures. A practice and academic field in which scenario planning is a branch among a variety of methodological tools and schools of thought. She divides the development of futures

studies into five waves: *the oral tradition, the early written age, enlightenment and extraction, systems cybernetics*, and *complexity and emergence*. The last two waves introduce a justification for the holistic principles of scenario planning with the seminal progress of systems theory, complexity science and futures studies. Schultz [56] explains, for example, that "systems sciences and systems thinking evolved side by side with futures studies" as did the science of ecology (p. 326).

Here it is important to mention the *Futures* special issue of 2005 [57]. On examining future-orientation as an ethical standard in corporations, Fuller & Tilley [58] use the Business in the Community (BITC) corporate responsibility index ratings of five corporations, to analyze the relationship between the ethical orientation and the future orientation scores in their reports on corporate social responsibility (CSR). Using a conceptual matrix, they showed that the companies which identified to be future orientated in their CSR reports also had higher ethical orientation scores and ranked in the top two quintiles of the BITC corporate responsibility index. Other authors in the special issue emphasize the importance of systems thinking and causality to define the "conditions of responsibility" in business [59] and that when reporting responsible corporate behavior the "various interlinked systems provide a firm basis for the responsibility policies" [60, p. 139].

In order to reflect further on the relevance of scenarios for organizational ethical culture, specifically in a TUNA environment. Examples can be drawn from the aforementioned ethical culture models e.g., CEV and CEBC. Within the CEV model, Kaptein [10] discusses the organizational virtue of *clarity* which is the "normative expectations regarding conduct of employees" in that these "should be concrete, comprehensive, and understandable" (p. 924). In other words, ambiguity should be avoided as it is a "source of unethical conduct". Although the author approaches the seven organizational virtues of the model from the perspective of normative expectations, the virtues shed light on the principles of scenario planning where they aggregate value to other organizational virtues such as *discussability* and *transparency*. The processes of inquiry and participation of scenario building for ethical culture encourage the organization to provide employees the opportunity to "raise and discuss ethical issues" and to make the consequences of employees' actions visible and transparent.

These, for example, are initial discussions included in Study 2 of this thesis with the diagnostic template.

Ardichvili, Mitchell and Jondle [11] in the CEBC model present general characteristics of ethical organizational cultures: mission and values driven, stakeholder balance, leadership effectiveness, process integrity, and long-term perspective. In the writings of authors on futures studies it becomes evident that scenario planning includes these same characteristics which appear to be highly necessary for a successful intervention. Furthermore, the *holistic* virtue/principle elicited by scenario planning would be a valuable contribution to Kaptein's CEV model, and also the *systemic perspective* characteristic would contribute to the CEBC model.

Future scenarios are to be considered hypothetical evidence of a prospective analysis, which would be achievable when first, the past and the present are taken into account and made explicit. Rafael Ramírez, Professor of Practice and Director of the Oxford Scenarios Programme at Saïd Business School, University of Oxford, explains during his lecture at the Oxford Scenarios Programme that "the future is not something you go into, it's something that comes at you". He continues: "the future is something in the present that we expect to come at us". Thus, by imagining possible futures the purpose is changes that could possibly occur and attempt to visualize through different lenses the causal relationships and interconnections that are found among factors in the complex system that is organizational ethical culture. Systems thinking, a branch and important component within the scenarios methodology, could inform us about early signs in the present that are the sketches of what may be coming at us from the future.

### 2.3 Pragmatism: purposeful systems, pluralism and inquiry

The bridge between futures studies and ethics is explained in more detail in Study 2, and the overarching philosophical approach presented in Study 2 combines elements discussed by the authors in the previous section, such as systems thinking and pragmatism. As one of the fathers of pragmatism, Charles Sanders Pierce viewed purpose as a fundamental driver that guides the usefulness of specific concepts and approaches, in such a way that one will be able to holistically fulfill purpose through a tailored process [61]. It is in this sense that scenario

planning should also be tailored according to the purpose of the intervention itself e.g., topic, type of organization, sector, context, stakeholders, culture, values etc.

On pragmatism Wicks and Freeman further explain that:

> "(…) the pragmatic criterion of value is not a pseudonym for utilitarianism. Rather, it contains a broad injunction that is adaptable to a wide range of value-systems that may differ substantially from utilitarianism. Instead of offering specific and detailed content to the term, the pragmatic value of usefulness simply requires those engaged in research or decision-making to scrutinize the practical relevance of a set of ideas as defined by their purposes and those shared by their community (e.g., within a country, a corporation, a research stream). There are a number of challenging problems that emerge from this approach, particularly sorting out which values or purposes can be morally defended and (especially in a pluralistic society) which values can be used to guide the interactions of people in organizations. The pragmatist criterion […] shifts attention onto the ethical dimensions and practical relevance of organization studies. A pragmatist approach fosters an environment in which people see the relevance and importance of values to the study of organizations and the need to engage in discussion about which purposes are advanced and why."
>
> Wicks and Freeman [62, p. 129]

Wicks and Freeman [62] continue, that meaningful connections can be better established with a pragmatic approach, which tries to understand how the organization strives to be, namely its values, goals and ends. In this sense, pragmatism looks for ways and future alternative pathways, that lead to a better understanding of how to benefit individuals and society, and also how to fulfill the demands of society for a better and more just life, "as a form of critical intelligence concerned with navigating the uncertainties of life well, rather than establishing fundamental principles that legislate the shape and meaning of justice" [63, p.103]. Hoover [63], who defines human rights in terms of situationist ethics in reference to John Dewey's work, discusses that the idea of deep pluralism provides an orientation that does not seek absolute or certain ethical principles, but rather accepts the plurality of our values as a condition to be embraced.

Inspired by the work of Pierce, William James was the philosopher that coined the term pragmatism [61]. He explains that pragmatism has an "empiricist attitude" that it "turns away

from abstractions", "fixed principles" and "closed systems" while it should turn towards concreteness, facts, action [64 p. 39], and organic open systems. With an empiricist attitude, the philosophical approach of pragmatism for scenarios values processes of inquiry that are found to ensure the plausibility of scenarios and the relational aspect of hypothetical futures with factual events and elements from the past and the present. On Dewey's pragmatist philosophy of ethics "one finds a plurality of changing, individualized goods rather than a single, unchanging good for all men" [65 p. 11]. Growth is an important ethical principle for Dewey, and that from an empirical standpoint "one must begin by noting each individual's abilities, training and background and then look for the direction in which he [she] is moving from a particular situation" [65 p.13].

Pragmatism emphasizes organic relationships and interconnectedness to evaluate social practices i.e., policies and the construct of industry should take into account the well-being and growth of all that belong to society. This is an idealistic incorporation of holism and pluralism, which attempts to embed the partial truths of individuals at varied stages of a given democratic process, in either political structures or organizational dynamics. On pluralism in system dynamics, Forrester [66] recalls the Indian fable of the four blind men who encounter an elephant. The blind men approach and touch an elephant from different angles and later describe to each other the knowledge they acquired from this experience. The ensuing argument among the men is based on the fact that each one thought that the others were lying about what they had experienced. The idea is that none of them were lying. They each just had a different understanding and perspective. Finally, particular descriptions actually contained a part of the truth of a whole. Strategic conversations take place and different ingrained assumptions can evolve into shared mental models by achieving a common ground through an interactive and iterative process. The foregoing process is an important understanding that scenarios methodology incorporates [34]; [47].

This fable was used as a starting point in the scenarios workshops conducted with the members of the ethics forum in order to draw upon the knowledge of the managers from the diverse companies in the Basque Country. We focused on forging a common ground, based on a learning process shared by the diversity of professionals that make up the forum. It was considered that each one of them had a partial truth and that, in the totality of their discourses,

we would be able to find a shared interpretation about the possible scenarios which the participants were creating. We understood that this shared interpretation could be reached by using a philosophical approach to systems thinking in the construction of scenarios, since it allows us to look widely, visualize connections that can trigger unexpected behaviors and connect our distinct perspectives for a shared vision [1]; [3]; [66]; [67]; [68].

# SECTION III – OBJECTIVES AND METHODOLOGY

### 3.1 Objectives

This thesis is guided by one main objective and three general objectives for each study, followed by particular objectives. The main objective of this thesis is **to explore the holistic and interdisciplinary principles of scenario planning to reframe organizational ethical culture and conceptualize the capacity of ethical culture to adapt in the present by working with the future.** This was largely accomplished with two electric utility multinationals. Reframe in scenario planning is usually used for strategy and policies [34]. Nevertheless, for this thesis, it is intended to suggest that corporations may face alternative ethical cultures considering the high level of contextual uncertainty and due to the fact that ethical culture is referred to as a complex adaptive system (see Study 3 and the four future scenarios). Hence, when we identify alternative ethical cultures, influenced or impacted by disruptive forces (e.g., the six key themes) organizations should be equipped and prepared to adapt ethically.

Aslett, Acken and Yerramilli [69] remind us of Peter Drucker's quote in which he states that "culture eats strategy for breakfast". The authors, however, extrapolate Drucker's quote and affirm: "culture eats everything for breakfast". They elucidate that culture is at the center of an organizational system and has a holistic influence on employees' behavior, corporate action, and strategic guidelines. With such an interpretation, the proposal of reframing organizational ethical culture should be seen to be relevant.

The general objectives and particular objectives of each study are:

In study one:

1. To examine the usefulness of scenario planning to assess an organization's ethical culture
    a. Explore and present four corporate case studies in which scenario planning was applied for organizational ethics.
    b. Provide lessons for companies and practitioners to visualize scenario planning as a complementary tool for ethical culture assessment.
    c. Develop a didactic guide for practitioners and companies, and describe best practices in order to implement scenario planning to evaluate organizational ethics.

In study two:

2. To investigate how scenario planning can be used as a complementary diagnostic tool for organizational ethical culture at an electric utility multinational and in an ethics forum
    a. Analyze and cluster diverse macro (contextual) and micro (transactional) points of view from executives at an electric utility multinational and in an ethics forum in order to identify key themes that could disrupt ethical culture.
    b. Analyze the potential use of scenarios to support corporations to engage in ethical deliberation and thereby reinterpret corporate policies, strategies and initiatives.
    c. Describe the processes by which executives from the electric utility multinational and an ethics forum would utilize scenario planning methods to address business ethics in organizational dynamics.
    d. Reveal executives' fundamental biases towards the acceptance of scenario planning for business ethics.
    e. Explore why businesses could be open or reluctant to engage with scenario planning for organizational ethics.

In study three:

3. To explore how electric utility multinationals visualize systemic change and adaptation of organizational ethical culture through scenarios for 2040
    a. Incorporate and adapt a framework for organizational culture with the scenario planning methodology.
    b. Evaluate six key themes that executives from EUMa and EUMb perceived to affect their ethical cultures.
    c. Introduce a systemic reflection found among the six key themes to identify degrees of interconnectivity and relevance for EUMa's and EUMb's ethical culture.
    d. Conceive four scenarios on the future of organizational dynamics and ethical culture.

e. Illustrate the implications of the scenarios for EUMa and EUMb according to their strategies for sustainability i.e., Sustainable Development Goals.

## 3.2 Methodology

> "In appearance, this locus is a simple one; a matter of pure reciprocity: we are looking at a picture in which the painter is in turn looking at us. A mere confrontation, eyes catching one another's glance, direct looks superimposing themselves upon one another as they cross. And yet this slender line of reciprocal visibility embraces a whole complex network of uncertainties, exchanges, and feints."
>
> Michel Foucault describing the painting 'Las Meninas' by Diego Velázquez in his book The Order of Things [70, p. 5].

### *3.2.1 Multicase study approach and action research*

This thesis provides a futures-oriented and holistic analysis of ethical culture in organizations in order to explore the relational property that constitutes ethical culture and the processes through which ethical culture has the capacity to change and adapt in the future. This is achieved through action-research and a multicase study approach through which comparisons and stereotypes are avoided. For this thesis, a multicase study approach was not designed for comparing cases [71]. Stake [71] explains that the "ideal for most naturalistic, holistic, ethnographic, and phenomenological case studies is to provide description: subjective, potentially disciplined interpretation; a respect and curiosity for culturally different perceptions of phenomena; and empathic representation of local settings" (p. 84).

Although made explicit in all three studies, this is particularly true in Study 2 and Study 3 in which the case studies feed into each other rather than provide comparisons. In all the case studies scenario planning methods were applied i.e., two electric utility multinationals (EUMa and EUMb) and in an ethics forum. A fourth case introduced in Study 1, a mutual insurance company (Mutualia), is an organization which participated in the scenario planning intervention with the ethics forum. The CEO of Mutualia acquired sufficient scenario planning literacy from the ethics forum and took it upon himself to champion and apply it in his organization. The results were subsequently shared and published as an industrial case in Study 1 for this thesis.

The ethics forum and the knowledge transfer to other companies such as Mutualia is an example of a successful action research component of the thesis. Within the realm of futures studies, scenario planning is "accurately described as an action science" [72]. In the ethics forum as we focused "on the creation of areas for collaborative learning", with scenario planning, combined action and reflection were proposed as an "ongoing cycle of co-generative knowledge" [73]. To this extent the ethics forum and Mutualia extend themselves to a paradigm of action research described as 'Participatory Action Research' (PAR) "which emphasizes collaborative participation of trained researchers as well as local communities in producing knowledge directly relevant to the stakeholder community" [73, p. 583]. The ethics forum is composed of managers from the Basque business community, as well as trained researchers from the Centre for Applied Ethics at the University of Deusto, which is in line with the authors' definition of PAR. One example, was to promote a practical and transferable form of knowledge-in-action for commitment to social change. This was accomplished with Mutualia with scenarios literacy at the ethics forum and subsequent independent application of scenario planning in its own setting.

### *3.2.2 Scenario Planning Methodology*

Although research conducted with EUMa and with EUMb were not participatory, they still encompass elements of the construct of action-research as they looked into the determinants of change and adaptation of ethical culture, through the lens of future scenarios in dialogue interviews and with the "notion of a field of relations" and of "dynamic patterns of inclusion and exclusion, dominance and submission and insistence and resistance" [73, p. 748]. Changes and capacity of adaption are primarily dependent upon contextual uncertainties and driving forces, e.g., changes in regulations, economic crises and social unrest, over which companies have no control. Moreover, this thesis considers the transactional environment i.e., their immediate actors, as determinants of change and adaptation, since it is in this environment where power relations, leverage points, and strategic reframing are accomplished and identified in order to influence the system towards balance or instability.

All case studies incorporated the scenario planning methodology to develop futures-thinking interviews, participatory workshops, and systems thinking analyses. The primary source of investigation was conducted in a European electric utility multinational which co-financed

the PhD project together with the European Commission. As part of the collaboration agreement between the University of Deusto and the multinational, a 12-month residency was undertaken during the fellowship at its headquarters in Europe and its subsidiary in South America. This multinational in the published studies is either referenced as EUMa (Study 1 and Study 3) or EMNC in Study 2. Hence, the primary focus is on the investigation of ethical culture in multinationals and specifically those belonging to the electric sector. The scope of the project with this multinational guided the design of the general and particular objectives of each study. Nevertheless, as the project progressed another multinational of the electric sector was introduced (EUMb) during the fieldwork in South America. Finally, businesses from an ethics forum, which are not from the electric sector, and neither are they all engineering companies, were included. As the reader will see in the first two studies, the organizations in the ethics forum serve to complement, validate and test the research as a prototype intervention to incorporate an ethical perspective into the conceptual framework. This was conducted without deviating from the primary focus of electric utility multinationals and organizational ethical culture. The third study demonstrates this prioritization in which it draws attention to electric utilities and arrives at the final goal of the thesis which exemplifies the whole process of building scenarios with a holistic framework in the fields of engineering, electric utilities and multinationals. See Table 2.

Table 2. Case studies and description of methods

| **Studies** | **Objectives** | **Methods** | **Data Recording and Analysis** | **Form of Findings** |
|---|---|---|---|---|
| *Two multinational electric Utility companies (EUMa and EUMb)* | Test/apply the theoretical and conceptual framework, identify preliminary findings e,g, determinants of change of ethical culture, validate findings e.g., create a notion of interconnections and relations, and, finally create future scenarios. | Two phases of futures thinking open-ended dialogue interviews with 29 senior executives. Interviews encouraged executives to reflect on What if…? scenarios and think in terms of systems and interconnections | Recorded interviews, detailed transcriptions, and deductive coding with NVivo. | Based on six key themes, four scenarios were developed on the future of organizational dynamics and ethical culture |
| | Workshops promoted a practical and transferable form of knowledge-in-action e.g., reuse of the scenario planning | Participatory scenario planning workshops. Guided by the Oxford Scenario Planning Approach scenarios | Participants registered their thoughts on white boards and post-its. From observations of facilitators, notes and | Two co-created scenarios and validation of the scenarios workshops through interviews |

| | | | |
|---|---|---|---|
| *Ethics Forum in the Basque Country* | methodology by the company Mutualia. | were built with a 2 x 2 approach.<br><br>Follow-up interviews were conducted to assess the relevance of the intervention for organizational ethical culture. | summaries were prepared. Interviews were recorded and transcribed. |

The research encountered organizational barriers which are recurrent in organizational dynamics and transitions. During a residency at the European headquarters of EUMa, a proposal had been sent, revised and agreed upon with the ethics office prior to the second residency. The proposal for this research phase was sent to the ethics ombudsperson office and then approved by a member of the board of directors. However, the ethics ombudsperson office, at this point, was going through a leadership changeover and a rerouting would have to be settled with the new head of the office. Nevertheless, following a couple of meetings with the new head, it became evident that an entente for a path forward was not achievable, and the next steps for this phase had to be adapted and relocated. The option at hand was to transition the final phase to the South American subsidiary where an executive was open to support and champion the continuation of the project. EUMb was then included in the project in that it permitted a validation of results. These barriers were actually an asset to the addition of EUMb in the research.

As EUMb is also a private European electric utility multinational with similar operationalizations in the sector, it supported the research and its inclusion was appropriate to the research question, which addresses the reframing of ethical culture. EUMb also helped to validate and corroborate preliminary findings acquired with EUMa, published in Study 1 and Study 2.

## Study One

With a qualitative multicase study approach, the study used four industrial cases to examine the usefulness of scenario planning to assess organizational ethical culture. There were three phases of analysis leading to the results of the study: 1) orientation and exploration; 2) scenario building; and 3) validation and implementation. Each phase is exemplified by four industrial cases— two electric utility multinationals (EUMa and EUMb), an ethics forum

composed of managers from different industries, and a mutual insurance company from the Basque Country (Mutualia).

Each case is presented within a specific analysis phase of the scenario planning methodology. The cases describe the steps taken to develop each scenario phase, the organizational dynamics confronted during the development of the phases, and the lessons learned. This study was published in a journal of practice from which practitioners and companies can adapt these cases and the lessons learned for their own settings and can visualize scenario planning as a useful complementary tool to assess ethical culture. This study in itself is the methodological and didactic demonstration of how scenario planning was used in each industrial case to assess ethical culture and within a specific phase of the scenario building process. It also provides an overview of the methodological steps the research of this thesis took for its investigation.

**Study Two**

The second study was initiated during a first residency at an electric utility multinational where eight interviews were conducted with executives. Eight more interviews were then conducted with the same multinational in South America (more details in Table 6 of Study 2). The questionnaire was based on the seven-question approach and De Bono's 'Six Thinking Hats' [36]; [74]; [75]. This empirical qualitative study was the first phase of fieldwork where 16 executives reflected on the future development of their company and industry and the impact that these developments would trigger on their organizational ethical culture. From these interviews, and with Allaire and Firsirotu's [15] framework as an analytical framework for the deductive analysis, six key themes were identified as possible disruptors of ethical culture. Six key themes: *From profit to purpose, Cultural Consistency, The role of leadership, Regulation and relationship with public institutions, Digital and technological advances, and Environment and Sustainability*.

This deductive process analyzed the transcripts of interviews and assigned extracts to relevant elements and sub-elements of the adapted version of Allaire and Firsirotu's framework e.g., Historical elements, PESTLE factors, Business Idea components, Cultural System elements and Socio-strucutral system elements. A further in depth analysis of the coded extracts clustered the identified factors of change as six key themes. The length and

depth of the interviews and the involvement of the interviewees were carefully regulated and coded with NVivo, a qualitative analysis software (see Table 5 in Study 2). The interviews were also supported by corporate and external reports, corporate and external surveys, corporate PowerPoint presentations, and news articles.

The interviews were complemented with three scenario planning workshops in an ethics forum, in Bilbao, Spain (Table 7 in Study 2). The ethics forum is composed of managers from diverse industries and from these workshops two scenarios on the future of ethical culture in a digitalized Basque Country were co-created (see Table 3 in Study 1). The scenarios were built with a deductive intuitive logics approach in which two driving forces are used in a 2 x 2 scenario matrix.

**Study Three**

Inspired by an inductive method of intuitive logics and with an adaptive scenario-based planning approach, by which our reality should see ethical culture as a complex adaptive system, the scenarios for Study 3 are informed by causality and interconnections through Allaire and Firsirotu's [15] conceptual framework for organizational culture. Here is where systems thinking has played an important role in making sense of the complexity of ethical culture and building future possibilities. The art and science of scenario planning is realized by its usefulness in making sense of a system as a whole, as opposed to separate isolated parts thereof. The importance here is to perceive those parts as interconnected and interdependent in order to visualize possible future scenarios and to ensure that they are plausible. Therefore, this study embraces the contributions that complexity science has for futures studies and the importance of socio-ecology to scenario building [76].

The results and discussion section of Study 3 are depictions of each of the components encountered in the conceptual framework (for the framework see Figure 2 in Study 1 and Figure 6 in Study 3) which are first retrieved from the interviews conducted at EUMa and EUMb, second, by ethnographic research conducted at EUMa during two residencies, and third, with the support of literature and reports, either corporate reports or from international organizations. There were two phases of the research which included a total of 29 interviews with top executives from two private electric utilities. The first phase interviewed 16 executives of EUMa in the European headquarters and in a South American subsidiary by

which six key themes were identified by the executives to potentially disrupt and influence ethical culture. A subsequent phase of the research was conducted in South American subsidiaries of two European multinationals (EUMa and EUMb). In three South American cities, 13 more interviews were conducted with executives (see Tables 11 and 12 in Study 3). This phase aimed to validate the relevance of the previously identified six key themes for ethical culture, their interdependencies and their interrelationships. For this final phase, each executive was interviewed with reference to a specific theme related to their expertise and knowledge with the theme e.g., the theme Environment and Sustainability was conducted with the heads of sustainability in the organizations or with executives who had dedicated work to this field. All interviews were carefully regulated, transcribed and coded using a qualitative analysis software. The two guiding themes of the scenarios were From Profit to Purpose and Environment and Sustainability. This was achieved by identifying the number of relationships with NVivo that each theme was assigned by interviewees as being highly interdependent and interconnected with other themes. See Figure 9, in Study 3. This study covers with detail each component of the framework, which leads us to the organizational output with the six key themes, two systems maps and four future scenarios.

### *3.2.3 Conceptual Framework*

Allaire & Firsirotu's [15] conceptual framework for organizational culture was the basis for analysis in all three studies. The authors provide a typology of schools of thought in cultural anthropology, which are then connected to schools of thought of organizational culture and management. The authors create a conceptual and holistic framework of organizational culture to study adaptation and change in complex organizations. This specific framework was chosen for the analysis over others such as Schein's [23] three levels of organizational culture, because of its emphasis on the influence that culture receives from the contextual environment and its holistic approach to the definition of culture and to aspects of complex relationships. The framework is presented and discussed in all three studies and explains its analytical importance and relationship to scenario building within those contexts of investigation. Components of the framework were adapted to the scenario planning methodology. For example, the component Society was adapted to PESTLE analysis (political, economic, social, technological, legal, and environmental). Contingency was adapted to the Business Idea from van der Heijden [36] as it provided an understanding of

survival and development. Finally, the Output component of the framework referenced the products that were conceived from the analysis, such as future scenarios, systems maps, and clusters of driving forces i.e., the six key themes (*From profit to purpose, Cultural Consistency, The role of leadership, Regulation and relationship with public institutions, Digital and technological advances, and Environment and Sustainability).*

# SECTION IV – GENERAL DISCUSSION

## GENERAL DISCUSSION

This thesis is composed of three empirical studies which examine the usefulness of scenario planning to assess an organization's ethical culture with four industrial cases; investigate how scenario planning can be used as a complementary diagnostic tool for organizational ethical culture at an electric utility multinational and in an ethics forum; and explore how two electric utility multinationals visualize systemic change and adaptation of their organizational ethical cultures through the process of futures thinking and scenario building for the year 2040. These studies were guided by a main objective to explore the holistic and interdisciplinary principles of scenario planning to reframe organizational ethical culture and conceptualize the capacity of ethical culture to adapt in the present by working with the future.

First, this was accomplished by investigating four industrial cases in which scenario planning was applied for organizational ethics i.e., two electric utility multinationals, an ethics forum, and a mutual insurance company. Through the case studies, the research provides lessons for companies and practitioners to visualize scenario planning as a complementary tool for ethical culture assessment and develops a didactic guide for practitioners and companies to describe best practices and implement scenario planning to evaluate ethical culture. Second, an analysis of diverse macro (contextual) and micro (transactional) points of view from executives at an electric utility multinational and in an ethics forum were clustered into six key themes and proposed as potential disruptors of ethical culture. The processes through which futures thinking and scenario planning were used as a diagnostic tool for organizational ethical culture described how executives would utilize scenario planning methods to address business ethics in organizational dynamics and revealed executives' fundamental biases with respect to the acceptance of scenario planning for business ethics. Finally, by incorporating and adapting scenario planning to a framework for organizational culture the six key themes were further evaluated and validated by executives at two electric utility multinationals in South America (EUMa and EUMb). This introduced a systemic reflection by the executives among the six key themes to identify degrees of interconnectivity, interdependence and relevance for both multinationals. Finally, four scenarios were built on the future of organizational dynamics and ethical culture. These scenarios provided an illustration of implications for EUMa's and EUMb's ethical cultures

through their sustainability strategies and review of a unified ‘business idea’ in terms of survival and development for the future.

### 4.1 Lessons from Scenario Planning on its Applicability to Assess Ethical Culture

The first study provided important lessons that can be taken into consideration by companies when applying a foresight methodology. In this case, these can be lessons for when a company is purposefully applying the methodology to assess ethical culture or also to tackle other corporate concerns e.g., strategic planning. Nonetheless, when transitioning through the different maturity levels and phases of the scenario planning and foresight processes culture and ethical culture are consistently the subject of reflection and deliberation [77]; [78]; [79]. As it was explained in Study 1, each case study was analyzed in a specific phase of scenario planning e.g., orientation and exploration phase, scenario building phase and validation and implementation phase. The orientation and exploration phase does not differ from other approaches, such as horizon scanning, megatrend analysis, technological surveillance, and competitive intelligence, which seek to scan the organizational terrain (external and internal). However, the ethical perspective in this section attends to the similarities and differences between the organization’s culture and purpose vis-à-vis society’s prevailing culture and needs. Furthermore, the evolution of the organization from its foundation to its present day gives us an overview of past and present ethical conduct e.g., a state-owned enterprise transitioning to the private sector. With the EUMa industrial case this first phase provided lessons of which a scenario practitioner should be aware in terms of culture and ethical rationality of the company e.g., the maturity of organizational learning internally. As it was explained in Study 1, EUMa has experience in engaging with executives through participatory business case projects for their ethics training programs, which fundamentally builds a culture of ethical deliberation, communicative action and inquiry, and formulation of future “hypotheses specifying form of conduct” [80]; [81]. Examining John Dewey’s philosophy of pragmatism, Gouinlock explains that ethical or moral deliberation “is precisely the process of attempting to formulate such hypotheses” and that in “these experimental formulations we identify the scientific character of moral deliberation” [80 p. 222]. A culture of ethical deliberation at the same time facilitates the integration of knowledge that ethics should not be separated from any step of corporate analysis, such as the PESTLE (political, economic, social, technological, legal and environmental) analysis.

The separation of business from ethics should be rejected [82], regardless of the analytical tool, which for this case was exemplified with PESTLE and its six categories. Ethical reasoning in organizations would need to appear throughout all of the categories and, therefore, each category carries an ethical weight.

The orientation and exploration phase requires a first step to identify key stakeholders and experts who will provide feedback from surveys and open-ended interviews. Mitchell et al. [45] stakeholder typology and identification is a recommended tool to classify stakeholders according to power, legitimacy, and urgency. This stakeholder identification and relationship mapping builds on Freeman's [44] research and embraces one of the most imperative organizational responsibilities as a corporate citizen and social justice seeker. As an example, it was applied by the mutual insurance company Mutualia prior to their scenario-building. Mutualia's specific industrial case, was not precisely targeted for ethical culture, nevertheless, with the company's continuous strategic efforts to consolidate and build their ethical culture, this was first implicitly and subsequently explicitly accomplished. The company has been going through a cultural transformation, providing recurrent ethical training to employees at all levels, and attempting to find ways to best attend the needs and rights of their stakeholders. Mutualia's example illustrates the prerequisite of identifying an 'idea champion' [83] for the implementation of scenario planning and the willingness of the champion to use it as an assessment tool. Additionally, scenario building supported the building blocks of their ethical culture and confirmed that scenario planning is in itself a relevant methodology for the fields of organizational ethics and ethical culture.

Two particular lessons stood out from the case of Mutualia:

1. Reinforce their strategic guidelines for corporate citizenship, humanistic health care, commitment to staff and innovation.
2. Through preferred futures, the company was motivated by the challenge to be the benchmark for ethical management in the Basque Country with the conceptualization of corporate citizenship.

From the industrial case of the ethics forum there were also theoretical lessons learned. The managers that participate in this forum and learning community are from diverse companies and industries and are a representation of a managerial ecosystem in the Basque Country. For

the scenario building phase, it was proposed that each company possesses a partial truth in respect to how digitalization will influence the corporate ethical environment. Finally, ethical content and unexpected behaviors appear with the articulation of each discourse that evolves from the interactions and from the relationships and interdependencies of these discourses. This is detailed, as well, in Study 2. Additionally, the introduction to the tenets of American pragmatism provided the reflection of "reasonable pluralism" which reinforces the implications of moral judgment and decision-making from the managers who are reflective practitioners [84]. With the topic of digitalization in the Basque Country in the scenario building workshops, this approach helps the managers to pose questions surrounding the technology that will be developed and used, produced and distributed in a digitalized corporate environment e.g., How will technology affect relationship with others, with the community, with property and with yourself [85]? Where do our existing ideas and values work and where do they breakdown? The incentive to the organization is not to define things, but to define processes i.e., "instead of analyzing a particular artifact irrespective of its use and users, we need to ask questions throughout the design, the development, production, distribution, and maintenance process" (p. 361).

Additionally, it was suggested that the managers contemplate Martin and Freeman's [85] reflection on the recurrent linear view with which literature has approached technology and ethics in business ethics i.e., social determinism versus technological determinism. The authors argue that a linear and "traditional approach simplifies technology by diminishing the role of ethics in the analysis of technology" (p. 356). The pragmatic approach proposed by Martin and Freeman, and aligned with systems thinking, elicits these multiple interpretations and interactions, which permits managers and decision makers to capture the ample and complex interconnectivity of technology with society.

As Study 1 illustrates, in the validation and implementation phase there were three additional crucial lessons from the application of scenario planning to assess ethical culture. First, is the benefit of systems thinking, which stimulated reflections on the relational property of ethical culture. Second, the identification of weak signals, which were perceived as background noise and that executives recognized the importance of connecting external and internal pieces of information to identify disruptions e.g., the six key themes. Finally, the

conceptualization of ethical culture resiliency in terms of adaptation, to navigate towards ethical futures.

### 4.2 Diagnosis of Six Key Themes as Possible Disruptors of Ethical Culture

Study 2 does not explore a specific crisis or industry, but diverse and unrelated organizations in diverse environments. It seeks the common threads that are the partial truths individually perceived and expressed by the participants. The unifying factor is ethics and is addressed by the ostensible engagement of individuals with ethical standards and ethical behavior within their organizations, while concomitantly they attempt to identify the impacts of turbulent, uncertain, novel and ambiguous conditions, whether generated internally or externally. Futures thinking and scenario planning to diagnose disruptions that shape ethical culture is thus proposed as a tool for managers who wish to visualize the possible changes their organizations will undergo and need to assess their capacity to adapt to those changes ethically. The managers in this study expressed their acute awareness of the immediacy of ethical challenges that need to be addressed, although they are confronted with the inadequacy of internal structures and the lack of will within corporations and governments. It is evident that there is a continued need to fine-tune forward-thinking methodologies, primarily scenario planning, to support corporations to enable an ethical reinterpretation in the development of company policies, strategies and initiatives. It is valuable to draw attention to the fact that each of the three studies in this thesis focused on a particular study group (managers and executives) and was designed as an iterative process for enrichment of findings and validation. Independently of the diversity of sectors that the managers represented and the individual contextual concerns (themes and driving forces) that were in the forefront of each manager's mind, the research found that these same concerns were shared by all participants. In this regard, Ramírez et al., [86] point out the ability of scenario planning to produce interesting research and these authors are referenced specifically for the purposes of a defining proposition in the three studies, that each participant sees only a partial truth relative to the whole understanding of culture and the ethical reasoning which is integrated in that culture.

Initially, for Study 2, I came to the conclusion that the use of the term diagnosis in the field of organizational culture was not entirely accurate [87]. In this thesis, the process of diagnosis

does not intend to say that ethical culture is diagnosed. It does, however, contextualize the process of diagnosis for ethical culture. Hence, scenario planning is a complementary tool to diagnose disruptions, secondary effects and unexpected behaviors. This was the case with the identification of the six key themes through Allaire and Firsirotu's conceptual framework for organizational culture (*From profit to purpose, Cultural Consistency, The role of leadership, Regulation and relationship with public institutions, Digital and technological advances, and Environment and Sustainability).* These key themes are discussed in all three studies.

The interviews with the executives were deductively analyzed with NVivo, a computer-assisted qualitative data analysis. The interviews were, then, coded into each component of the framework and subcomponents e.g., History, PESTLE analysis, Business Idea, Cultural System and Socio-structural system. From this process, the themes were inductively conceived as an output through clusters. In Study 1 and in Study 3, this is shown in a table of the top terms used for the clusters. Iterations provide validation of results and the degree of plausibility of the future hypothetical scenarios. In Study 2, the six key themes reinforced the findings in the scenario building workshops under the chosen topic of digitalization in organizations and its influence on ethical culture. During the workshops, two contextual uncertainties (*the level of state intervention* and the *changing nature of labor demand)* were used in a 2 x 2 matrix to build the scenarios. See Appendix F for the narratives of the scenarios. The experience with the workshops recall lessons learned in the applicability of scenario planning to assess ethical (subsection 4.1) where participants were encouraged to reflect upon the proposition that ethics is inherent in the scenario building process and to reject the separation of business from ethics. Additionally, an interviewee had suggested the inclusion of an ethics expert or figure with a *de facto* ethical framework of moral pluralism as a supporting facilitator to guide the deliberations during the workshops. This would appear to be valuable indeed when evaluating participants' knowledge of their internal normative ethical standards as well as the willingness of the organization to continuously build internal capacity for corporate ethical knowledge, and also when incorporating universal principles of human rights to the scenario building process.

An observation from a reviewer for Study 2 provided an interesting reflection on discrepancies between a TUNA (turbulent, uncertain, novel, ambiguous) environment and ethics which was interpreted by the reviewer to be stable. With an exceedingly compliance centered organization this can be perceived to be true. There may be an impression of ethical stability to the organization expecting to decide and act based on compliance criteria when confronted with a dilemma or problem. However, ethics in Study 2 and in this thesis is viewed beyond compliance. The state of the world is TUNA and ethics has to operate in a TUNA environment. Furthermore, beyond compliance and under pragmatism, the philosophy of ethics is not understood as stable, true or transcendent. On the contrary, it embraces uncertainty, processes of inquiry and collective reflection. Gouinlock [80] explains: "Dewey is best known as an advocate of democracy, or – as he called it – social intelligence. […] he stands for the method of solving social problems by democratic means. […] social problems are moral problems, for they involve the conflict of values. […] That is, democracy is the participation of every mature human being in the formation of moral value" (p. 225). The author adds "that a human being is not an isolated atom but lives, moves, and has his being as an organic part of more inclusive processes" (p. 225). Hence, defining ethics as stable implies organizational isolation from a social ecology.

In the studies there was no intention to digress into systems thinking and pragmatism, but rather to make the point that systems thinking and pragmatism are intrinsic to scenario planning, as part of the methodology and as a philosophical approach, as was found in the research. In order to clarify these arguments, this was demonstrated by practical examples with systems diagrams in studies 2 and 3, which support the empirical findings and lead to four future scenarios in Study 3. More details on the theoretical background of the thesis can be found in Study 3.

### 4.3 Systemic Change and Adaptation of Organizational Ethical Culture

The results presented in all three studies and especially in Study 3 proceed from a thorough analysis of the matter of more than 4 years of research. This was accomplished with the participation of executives and experts in various fields such as innovation, management, engineering (energy generation, distribution and commercialization), ethics/compliance, regulation, stakeholder management, sustainability etc. (see Study 2 and 3 for details).

The research question in Study 3, "how top executives from EUMa and EUMb visualize systemic change and adaptation of their ethical culture through scenarios for 2040", has guided the empirical research throughout the study by validating the six key themes with executives of EUMa and EUMb, and ultimately leading us towards the four scenarios and their implications as conclusive observations. The research question contextualizes the research (top executives from electric utility multinationals), provides the theoretical background for the research (systems theory), the focus (ethical culture), and the research methodology (scenario planning). By way of a thorough analysis of interviews with a qualitative analysis software and systems thinking tools (clusters, causal loop diagrams and feedback loops), the aim was to arrive at possible and plausible future scenarios of ethical culture for both multinationals. Thus, the research also arrived at a better understanding of power relations and agency, e.g., Chief Ethics Officer (CEthO) balanced against the Chief Executive Officer (CEO) in Scenario 1, and leverage points, e.g., Sustainable Development Goals (SDGs) and their implications in the articulated Business Idea. The findings and the process through which the investigation arrived at the scenarios can transcend to other multinationals of the electric sector, and also to multinationals of other industries.

The logic underlying the significance of purpose over profit is discussed throughout Study 3 in which it argues the importance of companies embracing ethics beyond compliance. Furthermore, the excessive market power of some organizations is in many cases in detriment to social responsibility. The study incorporates a forward-looking and systemic analysis for organizations to acknowledge stakeholders that are part of their ecosystem and shift away from a Friedman profit maximization model, which disregards impacts, needs and rights of diverse segments of society. The perspective of purpose and profit of the study was also in line with the Special Issue to which it was submitted: *Putting Purpose First: Encouraging Ethical Behavior through Drivers for Sustainability.*

The transition to new business models and their effect on the ethical culture of the electric utilities drew attention to topics and definitions of *market-orientation* and *engineering-orientation* at EUMa and EUMb. An evaluation of their influence and level of importance were presented as crucial to the understanding of cultural shifts and ethical positioning of multinationals in the electric sector. It is important to note that the definitions for *market-*

*orientation* and *engineering-orientation* were conceived and validated for the studies through empirical research at both private electric utility multinationals in three countries. These were perceptions and concerns of executives in EUMa and EUMb. With this research and followed by the analysis of the data, market-orientation was defined as "corporate short-termism and myopic culture with an overriding financial perspective". In Study 2 and 3, market-orientation at the electric utilities is found to connote 'financial and results driven'. This is a clear reference to the market power [14] of organizations, ever increasing productivity goals and the risks of disregard for critical internal fairness and external social welfare. The definitions given in the glossary of Study 3 help the reader understand the causal loop diagram and the reason for the relationships and the polarities among terms, such as market-orientation, engineering-orientation, client autonomy/prosumers, business models surrounding energy storage, better prices for consumers and the focus on guaranteeing energy over production. For example, better prices for consumers recurrently appeared in the research for a fair business model transition at EUMa and EUMb. However, it is possible to draw recent examples from the pandemic, while productivity increased in many multinationals, the reality resulted in stagnation and wage inequality for workers, and higher prices for consumers.

Many of the concerns expressed by the executives during the time of the interviews at EUMa and EUMb, which were conducted before the pandemic, are largely the same as the concerns and disruptions which we are experiencing in the present e.g., water crises (droughts), climate change, high energy prices for consumers, CO2 pricing, transition to tech business models, focus on renewable energy, upskilling workers etc. This was addressed in the conclusion section of Study 3, and it is evident that the pandemic exposed these concerns to media attention and thus the attention of a wider audience. Additionally, in other sections of Study 3, certain impacts of the pandemic such as lower electricity demand during imposed lockdowns and unemployment are commented in the results and discussion section. It was preferred not to make this a central issue, for example in the introduction or conclusion, since the executives during our research did not contemplate the possibility of a pandemic.

### *4.3.1 Revising the conceptual framework*

The terminology in Allaire and Firsirotu's [15] conceptual framework was adapted to fit the construct of scenario planning. The framework was reworked and improved through the suggestions of reviewers. One example is the change of terminology in the framework such as the component Society as stated in Study 1. In Study 3 this was changed to PESTLE Analysis. The term 'Society' was kept in Study 1 because this is the exact terminology used by Allaire and Firsirotu in their framework for organizational culture. Nevertheless, since the proposal was to adapt the framework to the scenario planning methodology, it was best to rename it PESTLE in order to avoid confusion for the readers.

### *4.3.2 Unified Business Idea for EUMa and EUMb*

A unified articulated business idea is proposed for both electric utilities since they have various common grounds when it comes to van der Heijden's [36] definition regarding "the organization's mental model of the forces behind its current and future success" (p. 63). These private utilities are similar companies operating in similar value chains, with similar backgrounds and similar future ambitions for their businesses i.e., consumers, renewable energy, society, organizational structure, new markets/players etc.

## 4.4 Organizational Reflection and Reframing of Ethical Culture in EUMa and in EUMb

> "The underlying cultures may be different as well as some participants more open to sharing information and collaborating and others not. As a result, differences between the development models and cultures may cause unnecessary delays before any work is started. Tuning each entity's development processes or culture to gain better alignment can benefit each member of the system." [69, p. 44]

As the thesis primarily focuses on ethical cultures of electric utility multinationals, it is inevitable to view this from the perspective of engineering management. More so, to acknowledge that these multinationals have subcultures and particularities, for which the quote above makes these differences explicit in terms of unique processes. On the practical matter of the three studies and distinguishing the empirical aspects form the implied aspects it was addressed that every business decision, every engineering decision, every aspect has an ethical component. This ethical component does not exist in isolation; it is not an abstract and appears by putting knowledge into action. This explicitly refers to a pragmatist

philosophical approach to organic relationships and the rejection of the atomistic perspective. The scenarios methodology which connects organizational ethical culture and business practices, as they are reflected both in the interviews at EUMa and EUMb and in the workshops with the ethics forum, is where every practical business issue, theme or discussion leads to ethical components and reflection. We cannot divorce the methodology from the practical issue. The links with the scenarios methodology and where it is applied are in the empirical findings and case studies. With holistic and interdisciplinary management with scenario planning for emerging ethical systems, the challenges and opportunities, interactions, lines of communication, leverage points and perceived agency can be iterated internally at the electric utilities in order to foment reflection on their ethical rationality and for them to visualize alternatives in order to reframe their ethical cultures. Hence, the whole process that led to the plausible scenarios in Study 3 is based, in large part, on the thoughtful and meaningful input of top executives at EUMa and EUMb. The findings, therefore, should be taken into careful consideration and could be beneficially shared within all levels of the organizations as they reflect the moral agency of leadership. More so, in the case of EUMa which was the starting point of this project and host to research interventions.

### 4.5 Limitations and Future Research

Scenario planning is an iterative process. Scenarios should always be shared with different audiences in order to update them and make them more plausible. The results, especially in Study 3, as they are extracted from the participation of the executives there should always be room for an open debate to review the plausibility of the future of the organizational dynamics and ethical culture in multinationals of the electric sector.

The lack of a participatory scenario planning intervention with one of the electric utilities and a diverse group of internal and external stakeholders was a limitation of the project. This was due to organizational barriers, lack of sufficient funding and lack of leverage to promote the workshops or the opportunity to have the executives for at least one focus group. Proposals were written for workshops in Europe and in South America, however, this seemed difficult to achieve. Future research should attempt to incorporate a larger-scale participatory scenario planning project to tackle the disruptions of ethical culture. For this, further research should review how Habermas' Theory of Communicative Action can help scenario planning

perceive the whole social system and improve appreciation of various partial truths from stakeholders to promote deliberation about organizational ethics. Future research can replicate the process through which this thesis arrived at scenarios with the adapted conceptual framework for organizational culture. The scenarios in Study 3, and findings, can be reevaluated for their relevancy to reframe ethical cultures in electric utility multinationals and multinationals from other industries. Future research can also examine processes to institutionalize scenario planning and explore if its recurrent application benefits the development of an ethical culture. Practice and research have presented few cases of how scenario planning can be used by organizations to align their strategic objectives with consolidating and building their ethical cultures. Further research and refinement of this methodology is required.

As stated in Study 3, “it is imperative to challenge current assumptions and reframe strategies that although they may exhibit purposeful ambitions for the energy transition, they may still overlook ethical responsibilities when guided primarily by profit. This gives further room for researchers to use scenarios on the future of the electric utility sector and, with this, to review and address the challenges to tackling intergenerational fairness and justice” [21 p. 26]

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# PART 2: COMPENDIUM OF PUBLISHED STUDIES

# SECTION V – STUDIES

## STUDY ONE: Scenario Planning to Assess Ethical Culture

Rodrigo W. Dal Borgo[1]


### ABSTRACT

*Scenario planning has presented itself as a useful tool for organizations to cope with high levels of contextual uncertainty, either to support decision-making, reframe strategy, or to improve stakeholder relationships. Limited attention has been given to how scenario planning may be used in practice to assess an organization's ethical system. Four industrial cases serve as practical examples of the scenario planning development across three different phases—orientation and exploration; building; and validation and implementation. This article provides lessons derived from the industrial cases for companies and practitioners to visualize scenario planning as a useful complementary tool for ethical culture assessment. We rely on complexity science and systems thinking for scenario planning to support the analysis of an organization's ethical system.*


***Keywords:*** *Assessment, business ethics, ethical culture, ethical system, industrial case studies, organizational culture, scenario planning, social legitimacy, systems thinking*

### 5.1 INTRODUCTION

Scenario planning is used by organizations to consider multiple possible and plausible futures. Organizations review alternative future scenarios to be better equipped strategically to address an uncertain contextual environment. Scenario planning methods differ [1] and depend on organizational culture and objectives for applying the methodology. It permits companies to reinterpret policies, strategies, and initiatives from an ethical perspective [2]. Other fundamental contributions have been to build strategic advantage, decision-making processes, innovation capabilities, and technology roadmapping [3].

Moreover, it can be important for managing organizational ethics, although ethics beyond compliance is not always perceived as a key strategic concern. Companies now realize that making ethics pervasive within the organization [4] can improve reputation and social legitimacy, and in turn contribute to company growth and profit [5]. We argue that scenarios as a multilevel qualitative analysis can benefit ethical culture evaluation. There is also a need

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to view the interdependencies of elements within an ethical system[2] and its socio-ecological nature.

Practitioners have described scenario planning as an art form due to its potential to help companies and managers reperceive their worldviews. In considering the art of scenario planning, note that it has received considerable influence from complexity science [6]. From the perspective of a socio-ecological system, there is an understanding that an organization's system is capable of adaptation and transformation, rather than merely resistance to shocks. Therefore, adaptation and transformation may be key for an organization's system, and in this case for an ethical system to become more resilient.

There were three phases of analysis leading to the results of our study: 1) orientation and exploration; 2) scenario building; and 3) validation and implementation. Each phase is exemplified by four industrial cases— two electric utility multinationals (EUMa and EUMb), an ethics forum composed of managers from different industries, and a mutual insurance company.

Each case is presented within a specific analysis phase of the scenario planning methodology. The cases describe the steps taken to develop each scenario phase, the organizational dynamics confronted during the development of the phases, and the lessons learned. Practitioners and companies can use and adapt these cases for their own settings and can visualize scenario planning as a useful complementary tool to assess ethical culture.

## 5.2 MAKING SENSE OF AN ORGANIZATIONAL ETHICAL SYSTEM

The scenario process for business ethics and culture in corporations is a challenging exercise. Therefore, it is necessary to tailor scenario planning for company purposes and its unique corporate culture. This reveals the complex functioning of a company's ethical system. Making sense of the ethical system highlights cultural characteristics, values, goals, and ethical concerns that need to be aligned with company ethics and social norms [2].

[2] Levin [7] explains that "ecosystems, and indeed the global biosphere, are prototypical examples of complex adaptive systems, in which macroscopic system proprieties such as trophic structure, diversity-productivity relation- ships and patterns of nutrient flux emerge from interactions among components, and may feedback to influence the subsequent development of those interactions." Therefore, the eco- logical nature of an organizational ethical system focuses on the interconnections and interdependencies between the organization and the many components that influence its functioning, be they either external (environ- ment, technology, political...) or internal (employees, clients, competitors.. .).

Ethical culture is defined as a subsystem of organizational culture encompassing: formal systems, e.g., policies, codes, and hierarchical structure; and informal systems, e.g., myths, stories, values, and language [8]. We view ethical culture as a complex system and adopt Allaire and Firsirotu's [9] framework as a reference. This holistic framework is adapted to scenarios methodology in order to integrate an organization's history, its mapping of the external environment, and its preparation for future survival and development.

Figure 2 illustrates a conceptual framework for an organizational culture that embraces the scenarios methodology [9]. Each element or node stems from components of scenario planning. The top three nodes are society, history, and the business idea [10]. These top three nodes, the cultural system, and the socio-structural system are in a complex relationship. The organizational outputs of this process are key themes resulting in scenarios or narratives of future possibilities. The output, however, is not the end point, but a starting point for organizations to rethink and reinterpret the company's ethical actions, policies, and initiatives. Managing legitimacy[3] [11] is a fundamental ethical concept to be discussed throughout the analysis. Resilience and capacity to adapt will also be included in the discussion.

Some example questions to be considered are whether the current business idea is socially legitimate in future scenarios of organizational outputs; whether the cultural and the socio-structural systems are resilient in terms of capacity to adapt and to cope with future changes; what support should the cultural system provide to the socio-structural system? Is the socio-structural system legitimating the cultural system? This framework considers social legitimacy as a leverage point to encourage a shift in organizational behavior. It guides the analysis and organizes the data within those nodes for a systemic overview of ethical culture and the driving forces that may cause disruptions.

### 5.3 INDUSTRIAL CASES AND LESSONS LEARNED

This section introduces three phases of scenario planning for an ethical organizational culture. In each phase, cases are presented and provide lessons from real-world application.

[3] Legitimacy "is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" [11, p. 574].

The phases are: Orientation and Exploration, Scenario Building, and Validation and Implementation.

### *5.3.1 Phase 1: Orientation and Exploration*

To guarantee scenario planning usefulness for organizational culture and ethics it will be first, to identify a specific department or a senior executive who has knowledge and experience with business ethics within the organization and thus, can champion the project [12]. It is important to identify the intended users of the scenarios—examples include the chief executive officer (CEO), compliance office, ethics office, or human resources. The champion should have enough influence to promote the initiative. In the EUMa case, an ethics officer and an executive board member led the effort. The orientation and exploration phase seeks to scan the internal and external organizational terrain. An ethical perspective is to consider society's prevailing culture and needs. Organizational history should provide an overview of past and present ethical conduct—such as the process of a state-owned enterprise transitioning to the private sector. Identifying key stakeholders and experts who will provide feedback from surveys and open-ended interviews is required in this stage. Stakeholder mapping is a recommended tool to classify stakeholders according to power, legitimacy, and urgency [13].

This phase requires research in literature and reports, and data gathering from relevant sources. Initial dialogue interviews with senior executives and key stakeholders are also needed. Through the interviews and research, it is possible to start mapping the organization's cultural system and socio-structural system. The business idea and its systemic overview may be mapped with the interviews or, preferably, through one or two workshops in order to draw a consistent cocreated positive feedback loop.

#### 1) Industrial Case: Electric Utility Multinational (EUMa)

For this case, interviews were conducted with top managers from various departments at EUMa. EUMa considers itself to have a forward- thinking culture. Their annual corporate reports express this notion of futures literacy and concern, specifically in sections that discuss global energy trends, strategic priorities, and risk management. The organization's ethics office realized that there was value in learning from leadership about the organization's capacity for cultural adaptation and a resilient ethical culture. External disruptions, such as

climate change with the need to reduce carbon emissions, an energy transition focused on renewable resources, and digital transformation, are understood by the organization to be rooted in a constant need to review their culture and ethical reasoning. Top managers were concerned about a top-down effect on ethical behavior, in view of the influence that leadership has in the process of building and consolidating an ethical culture.

The EUMa corporate training university plays a strategic role in managing the company's ethical culture. The corporate university's executive initially felt that the scenarios methodology was not relevant to the company's ethical culture. This issue was addressed through the support of the ethics office. The same senior executive who had initially rejected the relevance of the methodology, subsequently participated in one of the interviews and provided in-depth reflections. These reflections coherently addressed how the company culture and ethical conduct had been in the past; how the changes in the energy sector and in society shaped its present; and identified contextual disruptions, which will affect the future.

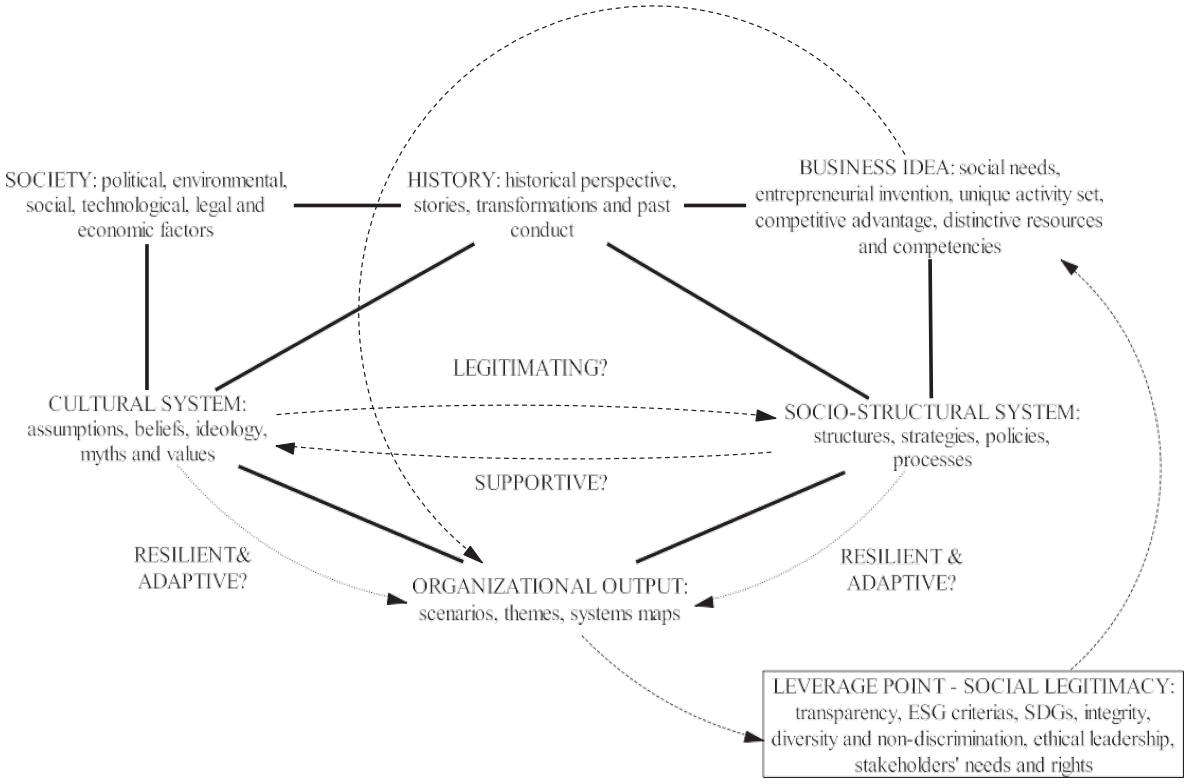


*Figure 2. Adapted from Allaire and Firsirotu's conceptual framework for organizational culture.*

Other global executives were also interviewed across two continents. Two interviewing techniques were used. The first is van der Heijden's [10] questionnaire aligned with

Chermack's [14, p. 112] proposition of using seven questions that "surface the strategic agenda of decision makers." These questions were adapted to the specific topic on the impact that certain drivers will have on the organization's ethical culture. Six other questions were added to the questionnaire inspired by De Bono's Thinking Hats [15], which helped visualize the company's culture and ethics through different critical views, e.g., emotional, optimistic, and creative. When identifying the main drivers of change that would impact ethical culture there was a need to map both the contextual and transactional environments of the company. The drivers were separated into categories by using a PESTLE— political, environmental, social, technological, legal, and economic— analysis.

Qualitative analysis software assisted in identifying: 1. aspects of historical importance within the organization, 2. the managerial perception of survival and development consistent with societal needs, and 3. the company's cultural system and elements of its socio-structural system. Most specifically the socio-structural system incorporated the strategies and processes promoted by the ethics office throughout the company.

**Observations and Lessons From This Case:**

- *Organizational learning culture:* The ethics office, which creates initiatives to consolidate an ethical culture in the organization, had already applied participatory and business case projects with top managers. Consequently, the majority of executives had experience in incorporating ethical deliberation within their responsibilities as leaders and decision-makers.

- *Identifying idea champions:* There should be an agent or department with enough leverage who will promote and perceive the value to the company of applying foresight methodologies for business ethics. In our case, the ethics office and its head mobilized, liaised and supported contact with the participants.

- *Perceive the whole system to avoid biases:* Self-serving biases will appear, especially when managers engage in a self- reflection about the ethics of their organization. To help avoid these types of biases requires interviews with employees at multiple corporate levels. Their perceptions of organizational ethical culture may differ with more critical responses likely to emerge.

- *Define ethical culture:* Ethical culture should be well defined. An organization's self-identified ethical culture does not inherently guarantee that it is ethical.

- *Reject separation of business from ethics:* Other practitioners using PESTLE analyses have treated "ethical factors" as a separate category. However, ethics and ethical reasoning in organizations should appear in each PESTLE category giving each category ethical weight.

- *Question of social legitimacy:* The business idea is stress tested in the organizational output—scenarios and themes— and plays a central role in questioning social legitimacy through business opportunities and strategic priorities. Addressing ethical issues need not be mandated by law for the company to act upon them. Social norms and ethics need to be considered to provide full social legitimacy.

#### *5.3.2 Phase II: Scenario Building*

The scenario building phase in this case consisted of three stakeholder workshops. A team of facilitators who will coordinate and interact with the participants needs to be formed. Facilitators are assigned roles such as the lead facilitator who will present previous findings, emphasize purpose, and propose intended scenario users. Other facilitators will support coordination of the interactions and provide insights to stimulate discussions among participants. The workshops are the most interactive and participatory phase of the scenario building process. Throughout this phase, knowledge transfer and organizational learning while building social capital [16] can be outcomes of this scenario planning phase. These results evolve from stakeholder interaction and from the ability of participants and stakeholders to form a common ground.

Achieving a common ground is likely the most challenging outcome— especially if participants have very different backgrounds. The workshops should accomplish: 1. map the organization's strategic environment, 2. identify relationships and interdependencies between uncertain factors and trends, 3. cocreate narratives for each scenario, and then 4. use those scenarios for organizational actions, such as to reinterpret or reframe the organization's strategy. Table 3 provides details of three workshops that were conducted in an ethics forum dedicated to the deliberation of business ethics. The participants were managers not from a single organization, but multiple organizations. This situation represents the first industrial case of this phase. The second industrial case of this phase is one insurance company.

| Table 3. Workshop Dynamics for Ethics Forum | | | | |
|---|---|---|---|---|
| *Workshops* | *Presentation and Discussion* | *Group Formation* | *Collective Reflection* | *Iterative Process* |
| Workshop 1: Brainstorming drivers of change | A facilitator will present the approach and methodology that will be used in the next three sessions. The facilitator will also introduce the key themes/drivers of change that were identified in prior research and interviews that could shape the future of the company's ethical culture. | Participants will identify the actors from the transactional environment to which the organization should pay special attention within the context of its organizational culture. Next, they will identify the factors of the Contextual Environment that can drive change in the company's ethical culture and that can influence the actors from the transactional environment. | Participants will discuss the findings as a whole group and start elaborating which are the most critical and uncertain factors. The discussion can also be a good opportunity to look forward to ethical dilemmas and risks and their implications, and make possible preliminary projections on cultural changes and shifts, to be treated more extensively in subsequent workshop sessions. | Post workshop, preliminary results may be sent to selected external experts and stakeholders. They would be asked to identify what may be missing and add important actors and factors that may have been overlooked. Results of this iteration should be presented to the participants in the next workshop. |
| Workshop 2: Transforming tacit knowledge into explicit knowledge | A facilitator will reassess with the participants the previous session and present perspectives from external experts and stakeholders that gave feedback from the first iterative process. | Participants will then be divided into groups to create distinct scenarios in a 2 x 2 matrix using two critical uncertainties. Each group will develop four scenarios giving high and low values to each critical uncertainty. | As a whole group, compare the scenarios and achieve a common ground on the four most plausible scenarios. Were the ethical implications and risks considered in each scenario? Finally, create plots for the scenarios, i.e., create a story line and give each scenario a metaphorical name. | What will external experts and stakeholders add to the scenarios created by the participants? What implications of the ethical risks did the participants not think about? Are the scenarios plausible enough? |
| Workshop 3: Implications and actions | The final scenarios will be presented to the group, as will the results from the iterative process 2. | Participants will brainstorm on actions to mitigate possible bad outcomes and on what it would take for the organization to maintain an ethical culture in each scenario. | What are the implications of the scenarios for the organization?<br>- SWOT analysis<br>- Wind-tunnel<br>- Test the Business Idea | The final scenarios should be presented to other audiences and receive feedback on plausibility and relevancy. Further strategic conversations should be held in order to understand cultural consistency, similarities, and differences. |

### 2) Industrial Case 1: Ethics Forum:

Managers from diverse industries participate in a monthly ethics forum to share cases, review managerial tools and engage in proposed thematic sessions to consider the issues of social justice, social legitimacy, responsibility, fairness, and corporate citizenship within their organizations. In order to create three thematic sessions on the evolving digitalization of companies, scenario planning was proposed as a strategic foresight tool to assess ethical culture. The majority of the managers were not familiar with scenario planning and in order to ease them into the subject, an introductory presentation was made by the lead facilitator about the methodology and workshop processes.

The participants approved the proposal for the following three sessions. The scenarios contemplated a 20-year time horizon. Two questions were presented to the managers: What

it would mean to be an organization with a solid ethical culture within the context of digitalization? What ethical implications could the digital evolution have in companies? All three workshops required interaction among the managers. The interactions were facilitated by a coordinating team. Each member of the coordinating team helped generate discussion and took notes for a summarized document of results of the workshops. Aside from the two main questions posed to the managers for the sessions, the coordinating team and researchers also sought to examine scenario planning as a potential tool to support organizations in building and consolidating their ethical cultures. Meetings prior to the workshops with the coordinating team were held to evaluate this potential and to identify the ethical perspective of the methodology, that is, the value that can be assigned to scenarios for transferring philosophy to real-world actions and to orient corporate decision-makers toward social needs. Two approaches were emphasized in order to incorporate an ethical perspective during the process.

1. *Systems Thinking:* These managers from diverse companies and industries represent a managerial ecosystem of their region. Each company possesses particular insights into how digitalization influences the corporate ethical environment. Ethical content and unexpected behaviors appear with discourse on the interactions and from the relationships and interdependencies of this discourse.

2. *Pragmatic Ethics:* Pragmatism provides the "reasonable pluralism" from the reflective practitioner—the managers in this case [17]. This approach helps answer questions surrounding the technology such as—How does technology affect relationships with others, the community, property, and the individual [18]?

Furthermore, with respect to the topic of technology and digitalization addressed during the sessions, we suggested that the managers reflect on the recurrent linear view of technology and ethics, which diminishes the role of ethics. The pragmatic approach introduces multiple interpretations and interactions, which permits us to capture the ample and complex interconnectivity of technology with society.

**Lessons Learned in the Ethics Forum:**

- *Ethical discourse:* How open is your company culture to discuss ethics? The process of building scenarios includes participatory dynamics and interaction among diverse

stakeholders with workshop-based methods. Discussions about ethics may encounter barriers within the organization. A recommended first step is to conduct a preliminary diagnosis of openness and reluctance and analysis of the prevalence of ethical discourse. Openness and reluctance to engage in this process depend on company culture.

- *Business ethics experts:* The scenario building process will also be guided by internal corporate norms and compliance. Business ethics experts who can provide insight and possess business ethics reasoning can refocus discussions to ethics when digressions occur. Especially, when workshop participants' reflections do not encompass ethics beyond compliance.

- *Avoid skepticism surrounding the methodology:* Those coordinating and facilitating the scenario building process—and workshops—should fully support the project to avoid internal skepticism. If skepticism of the usefulness of the methodology is encountered it can easily transfer to the managers and stakeholders participating.

- *Knowledge transfer and success stories:* Companies that identified value in this phase reapplied their own scenario building process in their organizations. They revisited and set their own objectives to consolidate their ethical culture. The next industrial case details one such example of learning from this workshop that was implemented in an organization.

### 3) Industrial Case 2: Mutualia Insurance Company:

Mutualia is a regional nonprofit mutual insurance company. The CEO of the company participated in the ethics forum. The CEO applied tools and information from the forum in his own company. The CEO—after participating in the scenario planning sessions at the ethics forum—followed up with a presentation to the board of directors about the scenario planning methodology. The CEO found possible usefulness in the methodology for their future planning and forward-thinking capabilities. The scenario building process at Mutualia gave support to the framing and reframing of their strategic plan, reviewed their purpose, mission and vision, and emphasized the organization's ethical positioning by targeting objectives to strengthen their ethical culture.

Initially, the CEO shared the methodology and purposes for its application in the company with other senior and top executives. Internal corporate sessions were completed in 2020.

Due to the COVID-19 pandemic, the sessions were held with some of the managers working remotely, whereas others participated in person. The sessions at Mutualia included the stakeholder typology, mapping of the contextual and transactional environments, intuitive logics, and using narratives to describe scenarios—all of which appeared within the forum.

The ethics forum coordinating team did not participate in this corporate scenario building process. However, the knowledge acquired from his forum participation was sufficient for the CEO to promote and champion the initiative at Mutualia. The CEO provided the author of this article with results and lessons learned from their experience.

**Lessons Learned—Mutualia:**

- *Stakeholder management:* Companies may apply unique approaches to stakeholder identification and mapping. To undertake an ethical approach organizations should consider frameworks that incorporate a classification process and relationship attribution. Mutualia applied the Mitchell et al. [13] stakeholder typology and mapped the stakeholders according to three attributes (power, legitimacy, and urgency) and seven subcategories (definitive, dominant, dependent, discretionary, demanding, dangerous, and dormant). In terms of social legitimacy, this approach to stakeholder management was seen as relevant to identify the rights and needs of stakeholders under the company's mission and vision statement.

- *Strategic reframing:* Building scenarios should be viewed as a useful tool in the effort to reframe the company's strategic plan. Managers in Mutualia who did not have a clear understanding of the company's strategic plan were able to thoroughly revisit and imprint the plan in their minds.

- *Ethical culture:* Companies should align their ethical positioning with the scenario building process in order to trace objectives and goals that will strengthen their ethical culture in each of the scenarios.

- *Narratives and strategies:* Following the narratives of each future scenario, managers should pinpoint strategies and describe options to tackle a future state in case it emerges.

- *Strategic guidelines:* In this industrial case, the strategic planning development was supported by the scenario building process to reinforce strategic guidelines within a four-year time horizon (2021–2025). The ethical tone was emphasized in all four strategic

guidelines: corporate citizenship, humanistic health care, reinforcing commitment to staff, and innovation.

- *Preferred future scenarios:* Strategic guidelines should outline company challenges in the preferred future scenarios. Projects and actions were outlined to reach a preferred scenario. Indicators were set to help monitor development. For example, with respect to corporate citizenship, the company challenges itself to be the benchmark for ethical management. Strengthening corporate culture is fundamental for the development of action plans for social legitimacy. Actions should consider reviewing and revising codes of ethics and company purpose to integrate the rights and needs of employees and stakeholders.

#### *5.3.3 Phase III: Validation and Implementation*

There are two approaches for the validation and implementation phase. The first is to consider proposed process successes and failures. The second is to further validate and add to the findings identified as a mechanism for monitoring and stress testing the organization's strategy and business idea. Propose subsequent action plans. Follow-up interviews, with those who participated in the scenario building, can highlight the methodology's utility as a complementary tool to consolidate ethical culture in the organization and provide insight on where improvement is needed. In latter iterations, new interviewees should be identified for interviews. This next round of interviews should revisit the previous findings in order to fill in gaps in the data, check plausibility, review scenarios and themes, and further reflect on weak signals.

### 4) Industrial Case: Two Electric Utility Multinationals (EUMa and EUMb):

As described in phase 1, this three-phased methodology was initiated with interviews conducted at EUMa in Europe and at its South American subsidiary. We focused on the possible future cultural changes and on how the company may need to adapt to ethical challenges encountered from society and within the organization. This futures thinking exercise with executives served to identify partial truths and—by clustering factors and terms—elicited six key themes that may shape the organization's future ethical culture. Table 4 summarizes the six key themes and the top terms used for clustering. All terms were retrieved from interviews.

Guided by the scenario planning methodology and based on these key themes—the purpose for this third phase was threefold. First, identify weak signals for each theme through interviews; second, review and monitor the uncertainties and weak signals that were identified within the themes; and third, consider how the weak signals could disrupt and amplify over time. This phase was carried out in South America with two European electric utility multinationals (EUMa and EUMb). EUMb was included in the project because it allowed for validation and comparison of results. Each theme from Table 4 had its own set of questions. With the same three introductory questions posed to all interviewees. These questions asked managers to identify signs of health and illness in their organization's culture, followed by questions about the future of work and finally an exercise in which managers were asked to illustrate causal relationships between the key themes, and illustrate which themes were most strongly interconnected.

Table 4. Top Terms for Each Cluster

| *Six key themes - Clusters* | *Top terms from interviews* |
|---|---|
| From profit to purpose | Client autonomy, Better prices for consumers, Climate action, Data privacy and protection, Consumers want greener products, The focus on guaranteeing energy over production, Transitioning to an ecosystem of smaller companies, Market orientation versus engineering orientation, ...10% of world population without access to electricity, Society rejecting the logic of subsidizing renewables, A business model focused on quality services rather than solely on return on assets, Future business models surrounding energy storage, Distributed generation |
| Cultural consistency | From *job for life* to entrepreneurship, New generations inspired by tech culture, Mergers and acquisitions, The importance of subcultures, Culture building rather than imposing, Transitioning to an ecosystem of smaller companies, Importance of core values |
| The role of leadership | Tone from the top, Retirement of senior executives and the need for generational renewal, Less hierarchy, New generations inspired by tech culture, Creating new leadership positions due to novelties of the sector, The necessary competencies for future leaders, Ethical leadership and influence on subordinates |
| Regulation and relationship with public institutions | $CO_2$ market and pricing, Coherent political framework, Coherent legal framework, Judicial (in)security, Modernizing legislation for the electric sector, Regulating distributed generation, High "judicialization" of the electric sector, (Un)stable regulatory environment, Favorable regulatory guidelines for decentralization, Outdated regulations as opposed to technological evolution, Lobbying, Lack of political and regulator motivation for change |
| Digital and technological advances | Distributed generation, From consumers to prosumers, Capacity of energy storage, Use of electric cars, Digital revolution affecting businesses in the electric sector, Robotization, The effect of big data analytics and cryptocurrencies on businesses, Consolidation of renewable energy, Arrive at a business model similar to what tech companies have today, Use of technology to further understand the client's needs, Tech companies as new players, Data privacy and protection, Improving customer relationship and loyalty through digitalization, Influence of blockchain in the electric sector, Impact of AI in the workforce |
| Environment and sustainability | Water crises, $CO_2$ market and pricing, Climate change, Renewable energy, Necessary adaptive measures to climate change, Environmental impact, Decarbonization, Low carbon economy, Electric sector inertia to change, High dependence on fossil fuels, Sustainable development goals, Limit global temperature increase below $2^{o}$ C, Stranded assets, Colossal investments for the energy transition |

**Lessons Learned:**

- *Systems thinking:* Inviting executives to participate in a system thinking exercise is challenging. However, the approach does stimulate deep reflection on connections, dependencies, and consequences. Some executives will have more difficulty than others,

especially when we are trying to associate patterns in the electric sector evolution with their own ethical system. For this exercise, we consider the executives as reflective practitioners and moral agents for complex decision-making processes, who encounter daily challenges to think systemically before making a final decision.

- *Weak signals:* In order to visualize the capacity of transformation and adaptation (resilience) of an ethical system it is necessary to identify signals that can significantly influence the system behavior. This identification will lead managers or executives to recognize leverage points in an exercise that requires connecting pieces of information that are presented to them—such as the six key themes and their relationships.

- *Engineering ethics:* Even if there is an aim to transcend results and findings of this phase to nonengineering businesses, specific cases should be situated with examples within their own industrial expertise. Engineering ethics is a field of study in applied ethics and was linked to the questioning of health and illness of organizational cultures. Toxic cultures in engineering companies can be related to the occurrence of accidents, disasters, and malpractice, for example, the Northeast (USA) blackout in 2003, the NASA Columbia space shuttle explosion in 2003, and the Volkswagen "diesel dupe" in 2015.

- *Adaptive measures and ethical future (Resilience):* Managers should be encouraged to visualize resilience as a concept to enable them to navigate toward ethical futures in order to identify the necessary leverage points that can help change behavior.

- *Cultural differences and exercising values:* Companies with many business units and with cultural particularities in each unit should adopt a holistic framework regarding the core values that inspire the organization as a whole. This is to maintain an ethical culture and its virtues throughout the business units. A company espouses values, which are subjective. Virtues are objective and will support exercising values. An option may be to focus a scenario planning project on one business unit going through rapid transformation with the entry of new players, clients, and business opportunities. Articulating a business idea for that unit can also help question its survival and development in alignment with the organization's core ethical values.

## 5.4 CONCLUSION

This article provided a three-phase scenario planning process that practitioners and companies can use to assess their ethical cultures. The phases included industrial cases to help understand practical issues when applying the methodology for organizational ethics and corporate culture. The lessons learned offer practitioners additional insights into appropriate application for each phase for planning and achieving an ethical culture assessment. Within each phase, it was demonstrated that companies can reflect on current actions in accordance with social legitimacy and confront a future that may be unfolding. This is also a reference to the adapted framework for organizational culture, which emphasized the need to review and reinterpret the business idea and an organization's existing strategy.

The value of scenario planning for organizational ethics becomes evident by visualizing ethical culture as a complex system. Systemic mapping allows practitioners to be more aware of leverage points, such as social legitimacy, and of weak signals that may cause disruption to a company's ethical system. Ethical culture resilience is not only the capacity to resist shocks but also what is needed to achieve an organizational capacity for adaptation and transformation. Practice and research have presented few cases of how scenario planning can be used by organizations to align their strategic objectives with consolidating and building their ethical cultures. Further research and refinement of this methodology is required to consider other contingencies.

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## STUDY TWO: Toward a Diagnostic Tool for Organizational Ethical Culture With Futures Thinking and Scenario Planning

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### ABSTRACT

*The literature on futures studies scarcely mentions the use of scenario planning in organizational ethics. By gathering and analyzing diverse macro (contextual) and micro (transactional) points of view, here called "partial truths," this article investigates how scenario planning could be used as a complementary tool to diagnose disruptions that may impact an organization's ethical culture. We conducted futures thinking interviews with 16 managers in a multinational European energy company and its South American subsidiary, and followed up the research with a scenario planning intervention with managers participating in an ethics forum in the Basque Country. Through case studies, the research qualitatively describes the processes by which top management would utilize scenario planning methods to address business ethics in organizational dynamics. The combined study led to a framework of pragmatic ethics and systems thinking that broadens our understanding of the main themes that lead to disruptions that managers believed would impact ethical culture. This analysis gives further insight into the potential use of scenarios to support corporations to engage in ethical deliberation and thereby enable ethical reinterpretation of company policies, strategies, and initiatives. We revealed fundamental biases toward the acceptance of scenario planning methods for business ethics in companies, dependent upon corporate values and goals, ethical concerns, cultural characteristics, and financial and time constraints. The reflections extracted from interviews and ethnographic research resulted in a template showing why some businesses would be open to scenario planning for corporate ethical culture, while others would be reluctant to engage in the activity.*


***Index Terms****—Business ethics, diagnostic tool, futures thinking, organizational ethical culture, pragmatic ethics, scenario planning, systems thinking, top management.*

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## 5.5 INTRODUCTION

It is a given that corporations today deal with a turbulent, uncertain, novel, and ambiguous (TUNA) environment [1] that affects their organizational culture and moral behavior [2]. The culture within a corporation directly influences its managers' actions [3] both inside and outside the company, which in turn affects society's perception of its legitimacy and reputation. In considering corporate ethical culture at all levels, one of the main challenges is for leadership to recognize the underlying forces [4], both past and present, that have shaped current ethical policies, in order to adapt to future societal needs and demands [5], [6]. Scenario planning has emerged as a compelling diagnostic tool to establish new goals for resilience and adaptability for organizations. Implemented by corporations, scenario planning allows managers to create multiple possible future scenarios and debate plans to deal with them, which in turn enables their ability to interact purposefully with their stakeholders for planning transformations [7], to identify the need for organizational changes [8], to reframe mental models [1], and to adopt viable procedures to minimize risk [9], [10]. Korte and Chermack [8] emphasize the importance of mental models in scenario planning as a means to challenge the perceptions of organizational life and culture (also see Glick et al. [11]). The authors state that ingrained assumptions in organizations of how the world should be viewed need to be reevaluated to "examine beliefs and values that support and contest different futures" [8, p. 650]. Scenario planning is normally carried out through participatory dynamics in which the drivers of change are identified, so as to envision not one, but various futures.

There is no question that ethics is an important element in futures studies [1], [12]–[18], (see also Futures special issue [19]). Yet research does not make explicit the relevance scenarios have for diagnosing disruptions which may impact a corporate ethical system, nor were there clear practical examples found on the use of scenarios to reflect upon organizational culture and business ethics. In order to address this gap in the literature and in practice, our aim is to explore the use of scenario planning methods in two case studies focused on the promotion of an ethical business culture. Thus, we demonstrate how scenario planning could be used by companies to diagnose disruptions and address top management concerns with future changes in their organizational and ethical culture by gathering, identifying, and analyzing diverse macro (contextual) and micro (transactional) points of view, which we call "partial

truths." Futures thinking dialogue-interviews [20] were conducted in a European multinational energy company (EMNC) and scenario planning workshops [1] in an ethics forum[5]. The two case studies focused on current ethical cultures and the future changes that they may have to undergo due to impacts from the external environment over which the companies have no control.

In this article, we do not propose scenario planning to diagnose ethical issues per se, but that forces from the external environment will drive new ethical challenges and cast top managers in the position of moral agents, "responsible for the situations in which they enter" [21, p. 349]. They will need to anticipate these challenges in order to strengthen or maintain their organization's ethical culture. Top managers were encouraged to engage in a prospective analysis of their industry and business community from an ethical perspective and with reflection beyond compliance. This included adapting organizational culture to disruptions, such as new technologies, uncertain regulatory frameworks, climate change, and the changing roles of leadership. This article makes the following three contributions. First, it gives insights, through the case studies, into the potential use of scenarios to support corporations to engage in ethical deliberation and thereby enable an ethical reinterpretation of the development of company policies, strategies, and initiatives. In other words, the application of futures thinking and scenario planning to diagnose disruptions that impact ethical culture is proposed as a tool for managers who wish to visualize the possible changes their organizations will undergo and their capacity to adapt to those changes ethically in order to pursue social legitimacy. Second, it provides a framework based on pragmatic ethics and systems thinking that broadens our understanding of the main disruptions, here stated as six key themes, that managers felt would impact ethical culture. Third, reflections from interviews and ethnographic research resulted in a template which shows why some businesses would be open to scenario planning for corporate ethical culture while others would be reluctant to engage in the activity. The template reveals fundamental biases toward acceptance of the scenario planning methods for business ethics in companies, dependent

[5] DIRECTICA is an ethics forum organized by researchers from the Centre for Applied Ethics at the University of Deusto in which top managers, from different business sectors of the Basque Country in Spain, meet for monthly seminars to debate, share experiences and co-create tools to confront key issues that are relevant to business ethics.

upon corporate values and goals, ethical concerns, cultural characteristics, and financial and time constraints.

The rest of this article is organized as follows. Section 5.6 surveys the literature supporting the concept of ethical culture as an integral part of a complex system. In Section 5.7, we present the research design and methodology which combines both case studies for our analysis. Section 5.8 introduces case studies demonstrating the application of futures thinking and scenario planning for ethical culture. Section 5.9 emphasizes the importance of pragmatic ethics together with scenario planning in applying a framework that contains four analytical dimensions derived from theory and practice. Section 5.10 discusses the managerial implications. Finally, in Section 5.11 we offer our conclusions suggesting directions for future research.

## 5.6 THEORETICAL BACKGROUND

For the purposes of this article, Allaire and Firsirotu's [22] conceptual framework is a fundamental illustration of the complex system that is organizational culture. The authors present three main dimensions—society, history, and contingency—that uncouple a cultural system from a socio-structural system. The cultural represents myths, values, and ideologies, while the socio-structural encompasses structures, strategies, policies, and processes. The framework establishes a connection between these two systems so that they legitimize and support each other. Organizational culture, therefore, is a complex system with different levels [23], dimensions, types [24], [25], related elements [26], and concepts [22] that may be affected by both individual [27] and collective [28] influences. Ethical culture adds to this combined definition of organizational culture as a subcategory with informal (implicit) and formal (explicit) systems which can determine if an organization will act ethically or unethically, i.e., an organization's ethical culture does not necessarily determine that it promotes ethical behavior[6] [29]. Treviño and Nelson [4] demonstrate through a multisystem

[6] In order to understand if organizations may act ethically or unethically, some studies such as the one conducted by Ardichvili et al. (2009) identified five clusters of characteristics in ethical culture (mission and values-driven, stakeholder balance, leadership effectiveness, process integrity, and long-term perspective) which has become a model for some organizations "to influence operational practices in creating and sustaining an organizational culture that encourages ethical conduct" (p. 449). However, the study is more oriented toward compliance and differs from what we seek to accomplish with our research, which is to give relevance to a reflection beyond compliance. A. Ardichvili, J. A. Mitchell, and D. Jondle "Characteristics of Ethical Business Cultures," Journal of Business Ethics vol. 85, pp. 445–451, 2009.

framework of formal and informal systems that a complex interplay between these systems attempts to find alignments in order to create and maintain an ethical culture. Allaire and Firsirotu [22] propose, nevertheless, specifically on the aspects of organizational systems that they interdependently legitimize and support each other and are impacted by the external environment which may induce an organization to adapt.

Sasia [2] maintains that discussion of the evolving organizational culture needs to take into account not only the employees of organizations, but also interactions with the external environment, in order to build an ethically oriented culture and, as Senge [30] states, as a means of becoming a learning organization. Vera and Crossan [31], building on the research of Cook and Brown [32], propose that the possession of explicit and implicit knowledge is not enough to understand "the nature of knowledge" in organizations, but that full knowledge means interacting with "the social and physical world" to "put knowledge into action." Putting knowledge into action is a component of pragmatic ethics that encourages managers to reflect first, on how their actions might lead to a particular scenario and second, on how to identify interconnections among facts and review evidences which indicate the implications of possible hypotheses [33]. An understanding of and reflective thinking about the needs of society and the values that the scenario brings forth are invaluable to incorporating pragmatic ethics into the decision-making process.

Melé [34] defines the concept of action by quoting Aristotle that "actions create the moral learning that shapes character." The dynamics of scenario planning incorporates the engagement of diverse external and internal stakeholders, considers the influence of external factors, and includes the values of pragmatic philosophy and interdependent systems. According to Floyd [14], "the incorporation of systems thinking and practice into the futures field can be seen as a response in its own right to the need for deeper approaches to deal with complex, human-related problems" [14, p. 139].

Managers can use these concepts to map connections, compare different perspectives through strategic conversations, enable iterations, and organize reality through narratives. Here, it is important to integrate ethics into this strategy in order to define the ethical dimension of organizational culture and identify any questionable moral behavior. When putting together these partial truths, what we want to avoid is to build a "Frankensteinian" culture by

assembling diverse parts to create a cultural schema that is later rejected by its creators. Negligence can have drastic consequences when people overlook important ethical considerations that could lead to undesirable scenarios. Some participants of the scenario planning workshops in the ethics forum stated, for example, that the scenarios were overly pessimistic and that conclusions appeared to be similar in both scenarios. This perception, however, should not be an excuse to disregard the scenarios. The appearance of similar conclusions indicates that certain issues exist in the scenarios to which the organizations should be attentive in order to maintain or build an ethical culture. In both case studies, we attempted to provoke discussion among the managers of unlikely scenarios to make them think about the unthinkable [35]. In this, we were only partially successful, probably because of the belief that the unthinkable will not happen. Yet, reflecting upon the terrorist attacks of September 11th and the most recent COVID-19 pandemic[7] should compel us to see the necessity of planning for all scenarios [1], [36].

## 5.7 RESEARCH DESIGN

Scenario planning has guided the research design in our case studies and, as pointed out by Ramírez et al. [37], scenarios have the ability to produce "interesting research" with processes of inquiry and "by accommodating and comparing different perspectives"[ 37, p. 72]. This references our proposition that each participant sees only a partial truth relative to the whole understanding of culture and the ethical reasoning which is integrated in that culture. Although, our two case studies are supported by the rationale of scenario planning, we endeavored to structure them so as to avoid simplistic comparisons and to emphasize ethics through concepts and methods, such as systems thinking, pragmatism, iterations, and narratives, that recurrently appear in the scenario planning methodology. Therefore, the framework introduced in Section 5.9, to our understanding, best captures an ethical perspective.

[7] Here added due to the ethical dilemmas arising as a result of the pandemic primarily both in the health and economic sectors.

### *5.7.1 Data Collection and Analysis*

To this end, the length and depth of the interviews and the involvement of the interviewees were carefully regulated (see Table 5). The interviews were also supported by corporate and external reports, corporate and external surveys, corporate PowerPoint presentations, and news articles. Stake [38, p. 83] explains that by only giving emphasis to "one or few variables" the comparison of cases can be flawed by not considering "multiple perceptions." The multiple perceptions are at the core of both cases in this article as a means to cross fertilize ideas and to transfer information from the EMNC to the ethics forum. In our research design, we aimed to value the full-bodied description of pluralities and ultimately, not to compare but to both describe and interpret the discussions in both examples, while "avoiding stereotypes" [38].

*Table 5. Description of European Organization and Interviews*

| **European Multinational Energy Company** | |
|---|---|
| Sector | Electric Power |
| Market | European/Global |
| Number of Interviews | 16 |
| Average Interview Length | 67 min |
| Average Transcript Length | 5382 words |
| Supporting data sources and articles | 36 sources |

For this article, we have applied the adaptive scenario-based planning approach [20] to identify themes and consider possible organizational changes and the capacity of companies to adapt and maintain or strengthen their ethical cultures. The study was initiated with futures thinking dialogue-interviews [20], [39] conducted at the EMNC. By utilizing a research design based around interviews of corporate managers recurrently involved in decision-making processes, we sought to focus attention on the possible scenarios for cultural change and on ways that the company could adapt to meet future ethical challenges within the organization and vis-à-vis society. This exercise in futures thinking helped identify the partial truths supporting logical clusters and to elicit six key themes that may disrupt corporate culture in the future. This article presents a sample of the content of the interviews and introduces each theme with supporting ethnographic research. These themes are subsequently confirmed by the scenario planning intervention in the Basque Country. The

EMNC participation in the ethics forum further contributed to the research by attributing the levels of impact and uncertainty to the driving forces that were identified[8]. The time horizon for the scenarios was initially set for 2025, but as the research with the top managers at the EMNC progressed, we began to see that 2025 was a short-term to midterm period and was corrected during subsequent interviews to the year 2030, then 2040, and at times 2050. Finally, as the workshop discussions began in the ethics forum, the consensus was to look 20 years ahead. Therefore, as the workshops started in 2018, the narratives would address the situation in 2038.

The first organization considered is a European multinational energy company (EMNC) present in 19 countries. Our research was limited to the headquarters in Europe and a subsidiary in South America, with eight dialogue-interviews with top managers in each location (see Table 6)[9] conducted in parallel with ethnographic research by the first author, within a broader scope of research for a Ph.D. thesis. In the ethics forum, we conducted three experimental scenario planning workshops and followed up with dialogue-interviews with three managers from different companies who participated in all three workshops. Facilitators took notes during the workshops which were then presented as a summary of each session with additional conclusions. See Table 7, for further details on the research methods for both studies.

*Table 6. Interviewees at EMNC*

| European Headquarters | Position | South American Subsidiary | Position |
|---|---|---|---|
| Manager A | Head of Energy Planning | Manager A | Head of Tax & Accounting |
| Manager B | Head of Sustainability and Risk Management | Manager B | General Counsel |
| Manager C | Head of Innovation | Manager C | Head of Regulation & Energy Planning |
| Manager D | Head of Organizational Development | Manager D | Head of Planning & Control |
| Manager E | Head of Human Resources | Manager E | Head of Internal Audit & Compliance |
| Manager F | Head of Stakeholder Management | Manager F | Director/President of Partner Company |
| Manager G | Executive Board | Manager G | Head of Construction & Operation |
| Manager H | General Director | Manager H | Head of Distribution |

[8]As part of the iterative process for our research, the driving forces that were identified at the ethics forum were sent to managers at the EMNC and also external experts in the form of an online questionnaire in which participants voluntarily reviewed and attributed the levels of impact and uncertainty.

[9]Due to a confidentiality agreement between the researchers and the participating companies and due to the sensitivity of the subject we did not designate responses of the managers to the labels that appear in Table 6. Therefore, we used generic labels for all managers, e.g., European Manager, South American Manager, and Basque Manager.

*Table 7. Description of Methods*

| Studies | Objectives | Methods | Data Recording | Process and Analysis | Form of Findings |
|---|---|---|---|---|---|
| *Multinational energy company* | Future shifts in corporate culture and the need to consider new ethical concerns that may arise in the future. | Futures thinking & open-ended dialogue interviews with 16 top managers. | Interviews were recorded, transcribed and coded with NVivo. | Interviews were analyzed and coded arriving at descriptions and interpretive results aligned with ethnographic research | Six themes and interpretive results based on the processes of futures thinking. |
| *Ethics Forum in the Basque Country* | Forge a common ground among diverse managers of the Basque Country in order to visualize solid ethical cultures in a digital future. | Scenario planning workshops with managers from eight companies and follow-up interviews with three managers. | Participants used white boards, cue cards and post-it notes to register their thoughts. The three interviews were recorded and transcribed. | Notes, summaries and recordings were analyzed along with observational data from facilitators. | A series of results based on the processes of co-creating scenarios and narratives. |

## 5.8 EMPIRICAL FINDINGS

The six key themes that were identified across the corporations were similar: *From profit to purpose, cultural consistency, the role of leadership, regulation and relationships with public institutions, digital and technological advances, and environment and sustainability*. The findings broaden our understanding of subjects such as the changing nature of labor, the uncertainty surrounding regulation, and the transition from a profit-oriented to a purpose-oriented organization. We begin by describing the six themes leading to organizational disruptions in which interviewees' comments elicit ethical deliberation. These were identified at the EMNC, followed by the scenarios intervention in the ethics forum, in which two narratives were created in a 2 × 2 matrix. The description of the themes reflects our experience of using Van der Heijden's [20] questionnaire for interviews, not only to "set the agenda of the whole project" but also to understand the ethical reasoning of managers about the contextual environment and the disruptions that will possibly impact ethical culture.

### *5.8.1 Identification and Ethical Deliberation Surrounding Themes*

1) *From Profit to Purpose:* Our analysis suggests that there is a need to clearly understand what kind of orientation and purpose a company has and is expected to have. On the one hand, managers tend to emphasize market orientation that may be focused on short-term results and maximizing profit. The following example came from a European manager in response to the question *inheritances from the past.*

"Sooner or later we will have to go back to the product; and businesses have these cycles. It's true, that now I think the company is being managed from an overly financial perspective … Therefore, it's short term management, and in a business where investments span over 20 to 30 years, we sometimes look to the short term, which causes myopic decision making." European manager

On the other hand, we observed an engineering orientation that values product over profit and entails detailed analysis, strict time-management, forward thinking, and risk avoidance. The manager below, in response to a *pessimistic scenario*, viewed a future in which cultural challenges required a company to adopt more fluid models and more agile governance. While considering the fast pace of change, external and internal to the organization, managers may see that there is a need to adopt different corporate models and take certain risks.

"In terms of culture one of the challenges is how do we bring together a group of people that was taught to avoid risks, prepare everything perfectly and have a plan that is executed with perfection, in cultures where there isn't a plan, where you'll be testing in production." European manager

An addendum to the questionnaire asks managers to envision cultural shifts that the company will go through over the years. This was posed to a manager with 40-year tenure and the answer helped to identify the changes the company went through in relation to the external environment and its needs. According to the veteran manager from Europe, the company throughout its history has had different purposes that affected operations. The first 10–20 years of its existence as a public utility was dedicated to the consolidation of the institutional infrastructure of the electric sector. Subsequently, after privatization, the company adopted a market orientation. Today, the focus is on sustainability and investment in renewable energy.

2) *Cultural Consistency—Building a Culture Rather Than Imposing One*: We identified that cultural consistency is seen as a challenge for the coming years. However, in the complex business world in which companies have to operate today and given their transnational presence, it is difficult to envision a unified culture with the dissonant values in society in general. Internal corporate structures, as well as acquisitions and mergers make cultural integration even more difficult. In an added section of the questionnaire, we emphasized the discussion of organizational ethical culture with a question entitled *emotional perception*.

The European manager below talked about heterogeneity versus homogeneity in their corporate culture. The EMNC which is present throughout the electricity value chain is bound

to encounter cultural differences in generation, distribution, and commercialization that may create subcultures.

"There are different cultures and that's normal. Even so, I think there's an essence of excellence. There are values that are common and that I think they are strong in the company. It's something very strong and because of this it's difficult for me to see the attacks that I see in the press against the company. It's difficult because it structurally confronts the existing culture and with the culture that is lived, that is of rigor. And that's very transversal." European manager

A South American manager discussed the importance of building a culture together with a partner company and not imposing one. In this case, the partner had been a state-owned enterprise that had existed for many years with a different culture. The manager felt that imposing their culture on the partner company would not have a permanent effect. For the culture to acquire resiliency, it would be necessary to build it gradually to allow the partner company time to adapt to the new cultural values. The answer below refers to *creativity* on the organizational culture section of the questionnaire[10]. The sincere answer from the manager below gives us a perspective on the impact a predominant culture can have on subcultures.

"I feel that sometimes there is a misunderstanding of the role of partnerships and respect with the partner company. It's difficult to say if it's the company group as a whole or some people that represent the group, but I feel that sometimes there is a lack of respect for the partnership. We have to visualize that with the associate or partner we are leveraging value, however with different cultures and characteristics. Therefore, if you overrun the particularities of the different cultures within the group you will create points of conflict. However, if you work to understand the reasons for that specific culture you will bring people to your practices." South American manager from a partner company

3) *Role of Leadership:* As bearers of the knowledge of the complex systems that are organizations, these key actors are seen as capable of communicating to their subordinates how best they can identify themselves with the company and secure their place in the organization's hierarchy and in society. Many interviewees in both locations highlighted the importance of leadership for a company to have a solid ethical culture. In their understanding,

[10]The purpose of the question was to ask managers to reflect on methods that were applied in the company to consolidate an ethical culture and to give other options if the present methods were not working.

ethical behavior starts at the top and is disseminated to the rest of the organization. The rhetoric and practice of leaders influences the moral actions of employees. In Europe, for example, companies have worked with their top managers in developing projects and dynamics to value the importance of their influence in the company's ethical culture. A South American manager, when asked to define ethical culture for a question, entitled *information*, observed that in large companies, cultural shielding from ethically adverse events was more likely to occur, whereas in smaller businesses, management behavior has direct impact on employees.

4) *Regulation and Relationships With Public Institutions— Uncertainty and Knowledge Deficiency Among Political Actors:* Contextual decisions within the sector are constrained by governmental regulation and influenced by political pressure[11]. Corporate relationships with public institutions influence how regulations are developed; often they are outdated because they fail to keep up with the fast pace of technological development. In this theme, we identify four topics on the continuous discussion of an ethical relationship between businesses and government or what Crane and Matten [40] call "closeness of business government relations": biases, legitimacy, accountability, and social needs. The European manager answered to an *optimistic scenario* for the industry and for the company. The answer illustrates how flawed regulatory frameworks raise barriers to achieving positive or preferred scenarios by the company, which leads to possible scenarios in which business influence (lobbying) may result in a decrease of corporate/social legitimacy.

"This can cause a confluence of very strong biases that affect even the decision-making process. We in Europe, for example, have a CO2 market, in which we have a CO2 price. Therefore, this is a market in which politicians are completely involved. Thus, we are talking about an externality … consequently it is necessary to have a coherent political framework so that it can be correctly priced. This CO2 market has many imperfections which keeps the price of CO2 very low." European manager

[11]Notably, the South American subsidiary still suffers the consequences of poor energy planning by successive federal and state governments.

During the initial moments of the interview, when asked to describe a manager's role in the company, the same manager talked about the department's responsibility to include ethical reasoning and corporate cultural elements in their work.

"We are far from incorporating, in a direct way, into our work, into our day to day activities, themes related to our culture or questions relating to ethics, because these are concerns which are not urgent for what we do." European manager

Nevertheless, as evidenced by the manager's discussion on biases, decision-making, building a coherent regulatory frame- work, and appropriate CO2 pricing, these issues all involve ethical questions—if not explicitly, at least implicitly. In South America, the question *inheritances from the past* gives us a macro-perspective on how the company suffered from poor government planning and within this understanding, did not meet societal needs.

"When the government makes a mistake, it takes a long time for us to make the corrections … Our former president instituted a reform of the sector without prior consultation and forgot that the sector is a value chain." South American manager

5) *Digital and Technological Advances:* We look to a more decentralized energy market with prosumers[12] and a future in which companies will most likely focus on guaranteeing energy rather than providing it. This major refocusing will engender a transformation of the company and its culture and require managers to confront the ethical issues arising out of these changes. For an *optimistic scenario*, the European manager elicits what is possibly an ideal state for clients. Companies will need to adapt to this new paradigm by transitioning from an industry which produces energy to one that specializes in guaranteeing energy. The issue, later brought up by the manager, will be the role of the new players—companies such as Amazon, Google, and Facebook—who control most of our data and will have an advantage over electric companies when it comes to knowing what clients need and want. In this case, commercialization will be one of the areas in which utilities will experience the greatest change.

[12]According to Parag and Sovacool (2016) "prosuming refers to when energy costumers actively manage their own consumption and production of energy. It often describes consumers—households, businesses, communities, organizations, and other agents …." Y. Parag and B. K. Sovacool, "Electricity market design for the prosumer era," Nature Energy, vol. 1, pp. 1–6, 2016.

"In the future, in 2030 or 2040 there will maybe be some industries producing energy, however there will also be many smaller ones on the rooftops of every home. Therefore, the producer is now not only 'me,' but all of us." European manager

Even in an *optimistic scenario,* business managers pose questions about the ethical implications and challenges that organizations will encounter in the future. The following individual expressed this concern during a segment of the interview where the manager was asked to reflect upon a positive outcome for the electric sector and for the multinational itself.

"We are heading toward a world of robotics, therefore in this case we would be talking about the reduction in the number of jobs that we have for our personnel. What do we do with these people? How do we deal with this? We will go through this process; however, we should go through it considering this transition which would be an industrial revolution." South American manager

6) *Environment and Sustainability—Planning, Lack of Infrastructure, and Political Skepticism:* According to our interviewees, past investments in alternative energy sources were subject to "poor" government planning. Today, the rise of political populists who are anti-environmentalists may halt advances in clean energy technology. The following response to a *pessimistic scenario* gives us an idea of what factors could cause a crisis to the electric sector and to the company itself. The European manager below related a story of an extreme scenario where investments in infrastructure made today would be unnecessary for our needs in the future due to an evolution that may occur much faster than expected.

"The sector (electric) is evolving very quickly to a paradigm, and this paradigm may cause stranded assets, in other words, given the new paradigm, there were investments that were made in the present paradigm that do not fit anymore, they are not viable for the paradigm of the future." European manager

The managers thought deeply about the radical transformations anticipated in the energy sector driven by climate change and new technology and the potential consequences of these transformations. The managers in South America and Europe expressed concern about stranded assets and an overdependency on hydroelectric power and the impact these might have on employment and the communities where they operate. Finally, one of the European managers alerted us to the colossal investments that will be required for the energy transition and to achieve the reduction in carbon emissions. The manager observed that the balance

sheets of traditional businesses may be inadequate for the volume of investments that will be required. Envisioning a *pessimistic scenario,* this same European manager reflected on the future state of the world in the year 2030 in which the capacity for adaptation has been compromised because of failure to seriously address the issues of climate change. In the manager's view, too few people speak out about the difficult adaptive measures necessary to deal with the effects of climate change.

### *5.8.2 Observations of a Scenario Planning Intervention for Business Ethics*

According to a report by the Basque Institute of Competitiveness [41], the Basque Country is among the most digitally developed in the European Union. The scenario planning workshops developed in the ethics forum focused on the following question: In 2038, what will it mean to be an organization with a solid ethical culture within the context of a digitalized Basque Country and what ethical implications will the digital evolution have in their companies? Considering the diversity of companies participating in the ethics forum, the objective was to seek a common ground, promote learning, and explore scenario planning as a means to discuss possible future "fundamental ethical notions, categories," and challenges. This allowed the managers to draw upon their companies and alliances to come up with ideas for economic and digital growth in the Basque region and to explore what it means to be an ethical organization in a digital future. The group built two scenarios deductively in a 2 × 2 matrix with a focus on two critical uncertainties—*the level of state intervention* and the *changing nature of labor demand*. Out of these dynamics, two future scenarios were cocreated by the participants and organized into narratives*: Make Euskadi Great Again* and *Liquid Society*.

During the last workshop, the participants were inspired by these stories to discuss the underlying causes of each scenario, the circumstances, mental models, and values. They also identified the ethical challenges and explored their implications and what impacts the scenarios could have on business, the lives of the citizens, and the future of the Basque Country. To analyze the two narratives, we used Vickers' three judgments [42]—reality checks, values, and instrumentality. In this dynamic, we tried to provide considerations regarding the three interrelated axes, which according to Vickers, can influence the making

of "good" decisions. See Table 8 for the participants' questions and answers for each scenario[13].

*Table 8. Participants' Scenario Analysis: Vickers' Three Judgments*

| Judgments | Make Euskadi Great Again | Liquid Society |
|---|---|---|
| *Reality check: What is happening here? Identifying the early signs such as what indications of these alternative futures are already evident.* | • Processes of deregulation and lack of resources<br>• European regulation which affects the capacity of local administrations<br>• New economies<br>• Debilitated welfare state<br>• Inverted population pyramid<br>• Accelerated technological processes<br>• Technological advances which are ahead of regulation | • Regulation supports competitiveness.<br>• Strong influence of the internet.<br>• Fake news and a post-truth world.<br>• Changes in legislation affecting education<br>• High-demand for technology experts.<br>• Fines for tax evasion<br>• Favoring only the rich<br>• Regulation causes excesses and not as interventionist as the scenario depicts |
| *Values: What does it mean to us? Identifying the underlying causes of the scenarios, circumstances, mental models and values that bring it about.* | • Economic immediacy<br>• Individualism<br>• Creation of new needs<br>• Interpretation of today's capitalism | • Technology is absolute<br>• Efficiency and productivity<br>• Algorithms will dictate activities<br>• Instrumental rationality |
| *Instrumental: What are the ethical challenges of each scenario and what can we do?* | • To reverse the primacy of valuing ends over means<br>• Change in priority from the common interest to individual interest<br>• Weak civic consciousness<br>• Loss of professional values<br>• Difficulty in maintaining social communications<br>• Self-regulation by companies<br>• Maintain solid collaborative networks | • New paradigm of happiness – measurement of development through happiness index<br>• Transparent and harmonized regulation among countries<br>• Promotion of humanities and philosophy studies<br>• Response to representative democracy crises<br>• Integrating diverse cultures without diluting their uniqueness. |

### *5.8.3 Building the Scenarios*

Debating the ethical impact that digitalization will have on organizations produced some interesting ethical culture observations. From the scenarios, the participants believed that the Basque business community would undergo a cultural change from loss of a cooperative model and a brain drain. This could be a result of a deficiency in education or infrastructure and because Basque employers place a higher value on foreign professional training. However, in a scenario where the state had ceased to make companies accountable for their actions, Basque companies would assume responsibility for their own actions and self-regulate. We see that, in actuality, technology companies have been self-regulating. Recently,

[13]The questions for the judgments were also informed by a workshop at the OECD Forum 2018. The first author participated in this interactive session called Idea Factory—Rebooting International Co-operation: High Intensity Democracy.

many countries have been attempting to curb the unbridled self-regulating power of Internet companies and the United Kingdom has now proposed the toughest and most far-reaching legislation yet [43].

#### *5.8.4 Analyzing the Scenarios*

Ramírez and Wilkinson [1] introduced the use of Vickers' three judgments in the earlier stages of scenario planning in order to consider the purpose and to determine which type of judgment will best support a scenario planning project. To identify its usefulness during later planning stages, we attempted to use the three judgments at the end with the objective of introducing and emphasizing an ethical perspective (see Table 8). Take for example the concept of measuring the development of a country's economy with a gross national happiness (GNH) index as opposed to gross national product (GNP), as it appears in the judgment "Instrumental: Ethical challenges" of the *Liquid Society* scenario. This idea came from one of the participants during the last session. The observation below, from another participant in reference to the *Liquid Society* scenario, is applicable to both scenarios and clearly references the GNH index and its impact within the companies.

"Are we preparing people for these changes? Are people happier, do they feel free? How is the world of relationships? In these scenarios, how is the integration of the workforce, relationships on a small scale and vis-à-vis societal needs?" Basque manager and participant of the ethics forum

## 5.9 DISCUSSION

The study's framework, as we understood in developing it for the purposes of our research, has a philosophical approach, as to general assumptions and principles, to the use of scenario planning as a diagnostic tool for corporate ethical culture. Its purpose is to emphasize a pragmatic ethical perspective in practice. The steps we chose to follow for this framework are not unique. Futures studies [14], ethical culture studies [4], [19], and scenario methods with adaptive or transformative purposes [7], [20] incorporate these analytical steps at some point in the process of scenario building (see Figure 3). However, due to our ongoing experimentation with scenarios in the case studies and research for business ethics, we found that the steps which here we present as a framework to study ethical culture add to the diagnostic studies of ethical culture in organizations and give further relevance to scenario methods as useful tools for business ethics.

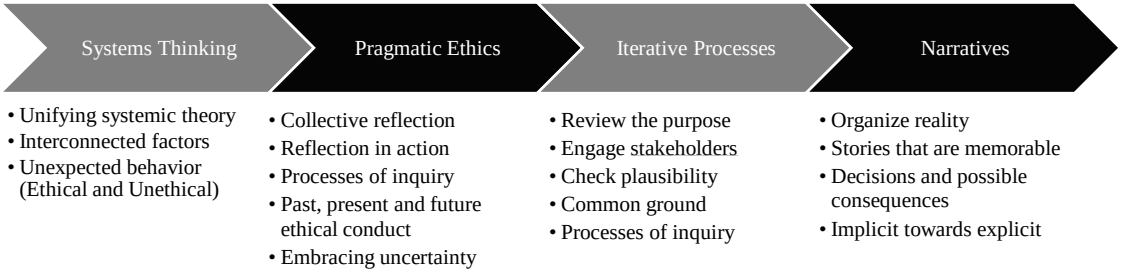


*Figure 3. Diagnostic framework for studying ethical culture*

### *5.9.1 Systems Thinking and Partial Truths*

Here, we reference Forrester [44], [45] in order to broaden our understanding of system dynamics through the inclusion of systems thinking and mental models, which were later researched by Senge [30]. Forrester [45] recalls the Indian fable of the four blind men who encountered an elephant. In the ensuing argument, it was seen that each man's description contained a part of the truth but not the whole. Forrester uses this story to explain how the lack of a "unifying systemic theory" fails to explain the "unexpected behavior" of a system. In today's much more complex and uncertain world, organizations need to look beyond the partial truths to see the whole in order to deal with demanding and high-risk market environments [46]. Complex systems necessitate the analysis of interconnected, interdisciplinary factors, where one element or partial truth can ignite unexpected behavior. The elephant fable is especially relevant when the dialogue-interviews and the interactions among top managers reveal particular "correct fragments" or partial truths of what is part of a larger system and complex behavior. Figure 4 exemplifies a reinforcing feedback loop[14] (R) for the theme *regulation and relationship with public institutions*. For the dialogue-interviews, each theme portrayed a metaphorical elephant and the managers' inputs were the partial truths that lead to a visualization of the theme and further understanding of the company's ethical reasoning and mental model of a business-regulator relationship.

Narrowing into scenarios, Figure 5 illustrates the central factors, variables or particular "correct fragments," as a causal loop (circular figures), of the *Make Euskadi Great Again* scenario cocreated in the ethics forum. The inherent nature of these factors may produce

[14]According to Meadows (2008), reinforcing feedback loops are "vicious or virtuous circles that can cause healthy growth or runaway destruction" D. H. Meadows, "Thinking in Systems: A Primer," Chelsea Green Publishing, 2008. This definition unmistakably reflects the South American manager's explanation about a provisionary measure which affected the whole value chain of the electric sector and consequently society.

secondary effects because of their interconnectedness—maximization of profits, economic boom, economic bust, environmental deterioration, and lack of talent (qualified labor pool).

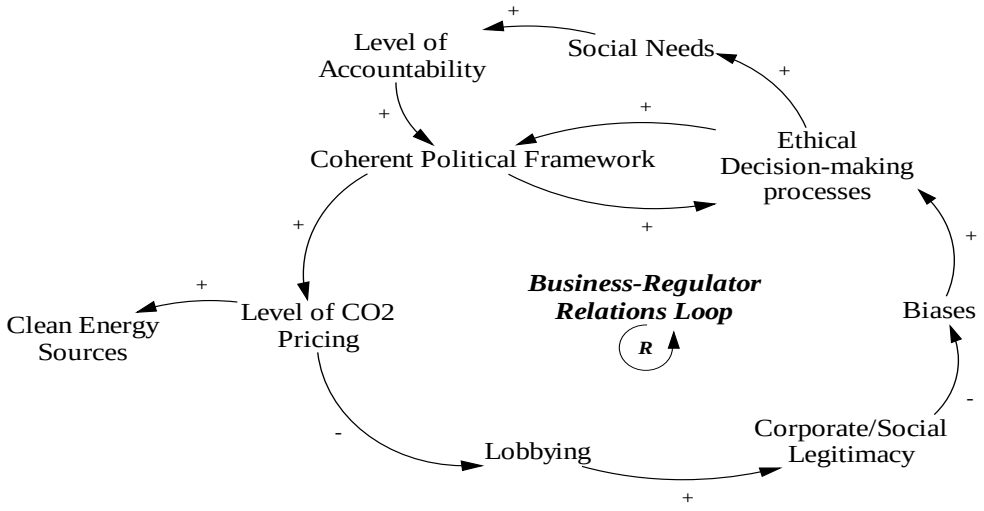


*Figure 4. Reinforcing feedback (R) for the theme Regulation and relationship with public institutions.*

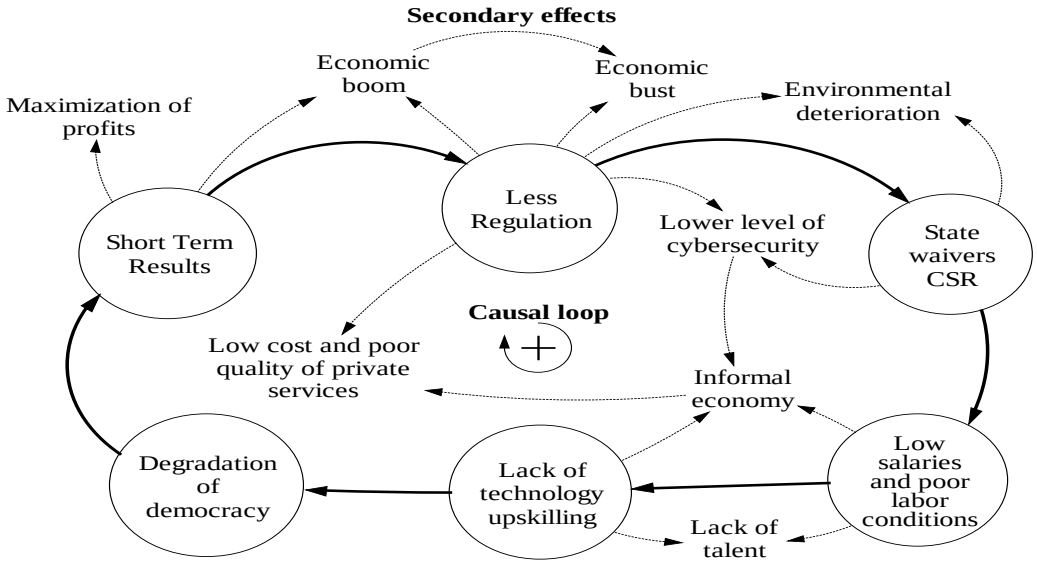


*Figure 5. Systems map of the 'Make Euskadi Great Again' scenario developed for the 3rd and final ethics forum workshop.*

### *5.9.2 Pragmatic Ethics*

Pragmatic ethics questions values, goals and ends, and the actions companies should take to maintain an ethical culture, given diverse circumstances. Pragmatic ethics also draws attention to the consequences that might be triggered by the causal relationships among the factors in a particular scenario or theme (see Figs. 2 and 3). An important component of this

study is to understand the role pragmatic ethics plays in scenario planning in organizations. According to Wicks and Freeman [47], pragmatism incorporates the notion of "usefulness" for research and interdisciplinary work in order to develop a humanistic, ethically oriented perspective in organization studies. Prospective analysis is one among many ways for pragmatic ethics to take its place in organizations where "fundamental ethical notions or categories arise out of [collective] reflection upon conduct" [48, p. 4]. Thus, scenario planners can catalyze collective discussions and problem framing [49] by adopting a qualitative multilevel analysis [50] based on inquiry and reflection-in-action [51].

During the identification of themes at the EMNC, our use of Allaire and Firsirotu's framework prompted this research to include a pragmatic approach. The components of the framework that were adapted for use in our research are social systems (qualitative multilevel analysis), history (conduct in the past), and contingency. In this study using scenario methods, the idea of contingency was adapted to an organization's "business idea" [20], which refers to conduct today and the trends that will determine business activity in the future. Our practical examples reflect the plurality of viewpoints from the top managers in the EMNC on the evolution of their company and industry (past, present, and future). The participation of the managers in the ethics forum collectively reflected their roles as moral agents in their companies and the impact of macro- contextual factors that made them rethink ethical culture for the future, which references the use of Vickers' three judgments (see Table 8).

#### *5.9.3 Iterative Processes*

Scenario building embraces moral pluralism and its practitioners need to understand that in order for it to be a useful tool for organizations and society, iterative processes must be part of it from the first step of the process and as a continuous circle of reflection. The processes of inquiry [37] should support the iterations and help to achieve a common ground with stakeholders and participants in the scenario building process and also to reconsider past and present ethical conduct. In the Basque ethics forum and workshops, we adopted this approach to enrich our ethical deliberation (see Table 9).

*Table 9. Iterative Steps: Ethics Forum*

| **Processes of inquiry: re-verify knowledge** | **Revisiting purposes** | **Re-perceiving ethical perspectives** | **Reassessing usefulness** | **Reassessing plausibility** | **Rethinking decision-making processes** |
|---|---|---|---|---|---|
| Discussions with academics and practitioners (1st workshop and, in between 2nd and 3rd workshop). Small survey for external experts to evaluate internal findings (between 1st and 2nd workshop) | Business idea framework (developed between 1st and 2nd workshop and presented in 3rd workshop). Discussion about end users and audience of the scenarios (during 1st workshop). | Meetings with the forum coordinating team (before 1st workshop and between 2nd and 3rd workshops). | Follow-up interviews (after 3rd workshop). | Systems Map for each scenario (created before and presented in 3rd workshop). Exemplify scenarios with early signs and evidence (during 3rd workshop). | Vickers' three judgments (during 3rd workshop). |

### *5.9.4 Narratives*

During the cocreation of scenarios and narratives, Aristotle's rhetoric comes to mind [52]. The construction of scenarios by diverse minds from diverse backgrounds elicits *pathos*, which brings out the emotion of participants in the process of cocreation and achieving a common ground; then, *logos*, which requires them to think logically about plausibility within each scenario; and finally, *ethos*, which reflects upon, character, mental models, and ethical implications that might emerge from each scenario. In our study, we emphasized to the top managers that not only their plans for actions, but also their narratives needed to be subjected to ethical judgment [53]. We believe it unlikely that the plans based on narratives would take ethics into account, if the narratives did not explicitly take ethical judgment into account.

## 5.10 MANAGERIAL IMPLICATIONS

With regard to the challenges of this study, we can say that the interviewees were all knowledgeable and receptive to a futures thinking approach about the place of ethics in their corporate culture. However, some did say that these kinds of deliberations were difficult and that in their day-to-day job, ethics and culture were not of pressing concern, and that they should be the responsibility of other departments such as human resources (HR) and compliance. This example was identified with one European manager in the theme *regulation and relationship with public institutions* where the manager stated that ethics and culture are not concerns in their day-to-day activities. The diverse backgrounds of the top managers and the different departments from which they come add value to the broad understanding of the multinational's ethical culture. The interviews made it clear that ethical considerations in organizational culture should not be the purview of any one department, such as HR. The

different backgrounds and experiences of employees in each department contribute to an understanding of how the company's culture was in the past, how it is today, and how it could evolve from an ethical standpoint. These are key steps to developing adaptive scenario planning which is also driven by a conceptualization of organizational ethics [22]. However, this does further introduce a discussion on which scenario planning method could better lead an organization to incorporate an ethical perspective [17], [54].[15]

The interconnectedness of the themes was enriched by the driving forces identified in the ethics forum and that were used in a 2 × 2 matrix to create the scenarios—*the changing nature of labor demand* compared to *the level of state intervention*, also influenced by technological advances, the regulatory framework that places purpose over profit, and the conflict between cultural distinction and consistency. Pragmatism comes into play when managers debate what actions they will need to take in order to maintain an ethical culture in their organizations, especially in dealing with an uncertain external environment.

The challenges and limitations of resources for the scenarios intervention determined that it would be experimental. The time available for the workshops was only three hours for each session, thus the depth of research possible on action plans was limited. Also, the sessions did not have consistency in participation which made it difficult for some participants to follow the evolution of the work. The coordinating team of the ethics forum, and the majority of the managers, were not familiar with scenarios until this introduction, thus the team spent part of the preparatory meetings attempting to understand how an ethical perspective would manifest itself throughout the process. It was unclear when it would appear in the workshops, and the facilitators expected that it would have to be explicitly pointed out to the managers at exact moments in the workshops. This was resolved as the workshops progressed and it became clear that ethics was integral to all aspects of the activity. During one follow-up interview, when a manager from the ethics forum was asked to explain how the process could be improved, their impression was that a supervisor was needed during the building of the

[15] Gordon [54] demonstrates that in normative scenarios, in which the development of scenarios help articulate a preferred future, an organization will have more influence over the driving forces applied in the axes of the 2 × 2 matrix and therefore, achieve better outcomes for the organization and its stakeholders. In a normative scenario setting, for example, stakeholders can be more easily persuaded to achieve a common ground and influence the external environment toward a better future

scenarios to point out to the participants which ethical aspects were missing. The manager concludes:

"Ethics is an obligation; because we are speaking about introducing ethical pluralism in these scenarios … so, it's as if just any opinion would not be valid. Then, if not just any opinion, but then one with an ethical framework … of pluralism."

These conundrums were among the reasons that it was deemed important by the authors to emphasize ethics in scenario planning through a framework (see Figure 3). For example, when identifying the factors from the contextual environment, the participants looked at the traditional PESTLE factors—political, economic, social, technological, legal, and environmental. Added to these for this analysis are the ethical factors as proposed by Van Woensel [55]. The acronym PESTLE becomes PESTLEE, where the final E stands for "ethical." This was discussed during the last workshop and the conclusion was drawn that ethical factors should not be separated as a distinct analysis because they should be inherently present along with all the other factors. Three published articles may be related to the concept of when to include ethical factors, and whether the subject of ethics should be discussed separately from organizational dynamics. The first is the well-known separation thesis by Freeman [56] in which he rejects the separation of business and ethics. The second article treats the topic of technology and ethics, as discussed in the scenario planning workshops in the Basque Country. Martin and Freeman [57] argue that the separation in the analysis of technology and business ethics should be rejected, and that the analysis of technology should not be visualized within a simplistic and linear perspective. The third article by Donaldson and Walsh [58] starts off by asking the reader to fill in the blank: "Law is to justice, as medicine is to health, as business is to…" Not an easy answer to give, however the paper concludes: "… as business is to optimized collective value."

#### *5.10.1 Scenarios for Corporate Culture and Ethics*

In this summary, we present some preliminary outcomes leading to possible conclusions (see Table 10). Although this is a small sample, there were observations that were consistently made by the interviewees, in ethnographic research in the EMNC, in the ethics forum, and in

an executive program dedicated to the understanding and practice of scenario planning.[16] From these examples and the experience of attempting to introduce scenario planning into business as a way to spark debate on ethics and culture, we suggest that further consideration of the processes that scenario building entails can serve as a preliminary diagnostic tool of organizational culture to develop an ethical framework. The template above refers to these two questions: Why would corporations be open to engage in scenarios for corporate culture and ethics? Why would corporations be reluctant to engage in scenarios for corporate culture and ethics? It is possible that the priorities of the corporation contradict the values that the corporation disseminates internally and externally. Nonetheless, the reluctance of a company to employ scenarios for corporate culture and ethics does not mean that the company does not promote ethical behavior. It could be due to the constraints of its internal structure and the environment in which it operates and/or the business model in which it is embedded. Corporations may believe that to take time to implement scenario planning for culture and ethics or to invest money in a process without an apparent monetary return is not viable. Also, within their corporate cultural characteristics, a focus on ethics could arouse fears of retaliation or conflict (both internal and external).

*Table 10. Diagnostic Template: Scenarios for Corporate Culture and Ethics*

| **Scenarios for corporate culture and ethics** | **Corporate values & goals** | **Ethical concerns** | **Cultural characteristics** | **Constraints: time and budget** |
|---|---|---|---|---|
| *Why would corporations be open to engage in scenarios for corporate culture and ethics?* | - To make culture part of corporate strategy.<br>- To engage with diverse stakeholders and build new social capital.<br>- To enable a more participative culture at all levels.<br>- To create awareness of ethical risks.<br>- To propose a humanistic approach.<br>- To create action plans for critical paths. | - Incorporate new perspectives on organizational values.<br>- Reframe mental models.<br>- Review past and present conduct.<br>- Value achieving a common ground with stakeholders<br>- Value moral pluralism and partial truths. | - Have a forward-looking culture<br>- Are open to engage in ongoing strategic conversations with different managerial levels.<br>- Have a strong culture against retaliation.<br>- See value in open and direct discussions.<br>- Are aware of the possible shortcomings of external consultancy. | - Understand that there is not enough time to incorporate scenarios for all decisions, however that it is a useful complementary tool for ongoing projects within the company and for certain decision making processes.<br>- Value the time to interact with internal and external stakeholders. |
| *Why would corporations be reluctant to engage in scenarios for corporate culture and ethics?* | - Because scenarios do not give identifiable monetary value. | - Fear of changing current values – social pressure.<br>- Would need but do not have an ethics officer | - Have a culture oriented towards short-term results.<br>- Fear of retaliation and conflict among | - Have difficulty in coordinating managerial agendas.<br>- Do not have enough time and budget. |

[16] The first author participated in an executive education program as an assistant researcher where his role was to provide impressions on the tasks undertaken by participants in the process of crafting scenarios. These impressions were also aligned with the first author's research interests in the usefulness of the methodology and the value of the tasks for business ethics and ethical reflection in organizations.

| | | | | |
|---|---|---|---|---|
| | - Because scenarios do not apply probabilistic evidence.<br>- Because the corporation wants forecasts and predictions.<br>- Because scenarios are not results-oriented. | for the scenario building process.<br>- Internal irreconcilable conflicting perspectives. | subordinates, managers and stakeholders.<br>- Prefer external consultants. | - Focus on fast decision making.<br>- Perceived as excessively time-consuming without near-term benefit. |

## 5.11 CONCLUSION

We began by saying that the field of organizational ethical culture can benefit by incorporating futures thinking and scenario planning as complementary diagnostic tools. This supported research in the field of ethical culture and futures studies on the use of a qualitative approach for multilevel analysis. The scope might be limited, but it did shed light on the capacity of organizations to institutionalize scenario planning not only to assist their strategists, but to promote an ethical culture and pay attention to cultural change. We also looked into the importance of ethics in planning strategies with a framework that could be used to diagnose disruptions and to anticipate changes in ethical culture. The study examples given revealed processes of applying an ethical perspective with scenario planning and futures thinking. This was demonstrated by the partial truths from the managers at the EMNC, which elicited six key themes affecting their organizational ethical culture. These themes were introduced at the ethics forum to validate the partial truths identified from the diversity of companies in the Basque Country and the capacity of these partial truths and moral pluralism to build future scenarios. All of the study participants were quite particular in how they defined their corporate culture and how they believed it would be affected in the future from an ethical standpoint. With the template (see Table 10) on “scenarios for corporate culture and ethics” that refers to the openness or reluctance of businesses to engage in scenario planning in organizations, it was possible to consider the elements, components, and processes of the scenario planning methodology to help us further understand what culture we have or what values the company may consider revisiting in order to apply these methods to diagnose disruptions that may impact their ethical culture.

There are certain echoes of the GLOBE project [59] on future orientation that may be transposed to internal corporate culture in our studies. With respect to our identification of ethical concerns within corporations, the take-away is that individuals and their personal

values tended to be similar and future-oriented and that they believed that “their cultures aren’t as forward thinking as they should be” [59]. We found considerable frustration expressed by individuals in both our studies about the difficulties in trying new approaches in the face of existing corporate values, goals, norms, and behaviors and internal and external environments. Thus, it may be that some of the frustration felt by the managers and by the participants in the ethics forum could be associated with another “pragmatic” component in relation to their perception of incremental risk in the future, including a greater risk of bad practice with respect to business ethics. This could be further studied by conducting research on ethical culture using a qualitative multilevel analysis tool such as scenario planning. There is also room here for research on organizations that have institutionalized scenario planning in order to analyze if the institutionalization or recurrent use of the methodology has helped strengthen organizational ethical culture.

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## STUDY THREE: From Profit to Purpose: How Electric Utility Multinationals Visualize Systemic Change and Adaptation of Organizational Ethical Culture through Scenarios for 2040

Rodrigo W. Dal Borgo and Pedro M. Sasia[17]

**ABSTRACT**

*This article explores how top executives from two electric utility multinationals visualize systemic change and adaptation of their ethical cultures in the future. Allaire and Firsirotu's framework for organizational culture was incorporated with scenario planning which focused on the influence that the contextual environment exerts on building an organizational ethical culture. The study relied on a holistic and a systems thinking approach to cluster and evaluate six key themes perceived to lead to disruptions in ethical culture. Consequently arriving at the aim to conceive four possible scenarios for 2040 on the future of organizational dynamics and ethical culture in the private electric utility sector. The attributions of relevance for organizational ethical culture and the interrelationships among six key themes demonstrated the greater significance of two themes: From profit to purpose and Environment and Sustainability. As the main driving forces, these two themes guided the development of the scenarios and provided further insights into the flow of power relations, agency, and leverage points for an organizational ethical system.*

***Keywords:*** *organizational ethical culture; business ethics; scenario planning; systems thinking; pragmatism; purpose over profit; sustainability; energy transition; electric utility multinationals; new business models*

### 5.12 INTRODUCTION

There are ongoing discussions concerning the transformation that companies may need to undergo in order to meet the needs of its constituents by placing greater value on purpose over profit [1–4]. Public distrust, loss of legitimacy and damaged reputations are among the reasons given for this movement for change away from a profit only oriented model to one

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that society calls for. On this specific issue, Piketty [5] has already argued against the concentration of wealth by the owners of capital, which consequently exacerbates inequality. Some multinationals concentrate wealth with the ultimate purpose, being to maximize profit solely to gratify shareholders. These actions by corporations contribute to corroborate Piketty's thesis on the correlation of long-term and persistent inequality creating social injustice and fomenting civil unrest. Eeckhout [3] argues, "we tend to accept that when firms do well, the economy does well. Competing firms that make profit create jobs and work benefits. Alas, currently dominant firms exert market power and do the opposite" (p. 75). Excessive market power is in many cases in detriment of social responsibility and contradicts the conceptions of what should constitute an ethical culture in organizations. Recently there were attempts made by CEOs of major corporations to change their profit-centered rhetoric to a purpose-centered rhetoric, as the letter from Larry Fink of BlackRock struck a chord and generated some momentum in the corporate environment and in the media. From a social and ethical perspective, companies are expected to realize that profits and even the longer-term survival of their corporations depend on cultural transformation and diagnosis of disruptions that impact and shape their ethical cultures [6]. However, it remains to be seen if what they say and do is spin or if they will make substantive changes to serve a social purpose. Here then, our concern is electric sector multinationals and their commitment to a fair and just energy transition guided by purpose. For this study, understanding the contextual environment is crucial for companies to be able to map out and diagnose external disruptions in ethical culture and the processes by which these disruptions will shape their responses to corporate purpose and to both ethical and unethical behavior. The scenario planning approach encourages companies to distinguish their immediate actors (transactional environment), with whom they have direct contact, from macro driving forces (contextual environment), over which the company has no control [7].

Tone at the top which is usually framed within a company's stated purpose should be recurrently revised. For this study, the dialogue that was established with top executives in two multinationals emphasizes the future role of leadership with increasing responsibility for moral agency and voices their concerns about rapid changes in the contextual environ- ment. Past studies have demonstrated and discussed the challenges encountered when attempting to apply qualitative multilevel analyses to organizational ethical culture [8–10]. Scenario

planning, a strategic foresight tool, is proposed as a valid methodology to fill this gap by virtue of its iterative and inquiry driven contextual and transactional analysis [11]. The IPCC [12] in this regard emphasizes the use of future scenarios "to explore conditions enabling goal-oriented futures while recognizing the significance of ethical considerations, the principle of equity, and societal transformation needed" (p. 52). Thus, this empirical study builds on different phases of past research [6,13] with two electric utility multinationals, hereinafter referred to as EUMa and EUMb. Based on six key themes, this article explores how top executives from the electric utility sector visualize systemic change and adaptation of their ethical cultures through scenarios for 2040. The first phase focused on futures thinking dialogue interviews with sixteen executives from EUMa in Europe and in its South American subsidiary. During this first phase executives reflected on the future development of their company and industry and the impact that these developments would trigger on their organizational culture and more specifically on the ethical dimension of their culture i.e., ethical culture. From this analysis, six key themes were diagnosed as potential disruptors to ethical culture in the electric sector: *From profit to purpose, Cultural consistency, The role of leadership, Regulation and relationship with public institutions, Digital and technological advances, and Environment and Sustainability* [6]. A subsequent phase was conducted in South America with six interviews at EUMa and seven interviews at EUMb where executives validated the themes, reflected on their positive and negative effects on ethical culture, and also identified weak signals that over time could amplify and cause disruption [13,14]. The final purpose of this phase was to elicit from the executives a systemic reflection on the causal relationships found among the themes. With this research, we confirmed the relevance of all six themes for organizational culture and identified a strong interconnection among them. These themes were above all transversally dependent upon *From profit to purpose* and *Environment and Sustainability* and shaped the narratives of the four future scenarios. None of the six themes work alone and many factors for an ethical business model transition may depend on issues external to the organization, such as new and old public policies and regulations. Hence, the aim of this article is to reassess the previous findings through an adapted framework and create four possible and plausible scenarios for 2040 on the future of organizational dynamics and ethical culture in the private electric utility sector. Thereby, we address the implications of the scenarios for both companies and their strategies for

sustainability, i.e., Sustainable Development Goals (SDGs), and ethical positioning. The process through which we arrived at the scenarios can transcend to other multinationals of the electric sector as well as to multinationals of other industries.

Here, this research wishes to contribute to the studies of organizational ethical culture by mapping possible disruptions highlighted by the executives and which, subsequently, led to diverse narratives for the future. With the analysis of the themes and development of the future scenarios, this research further wishes to contribute to understanding the processes of business model transitions that come to value purpose over profit within organizational dynamics, and that encompass ethical organizational means by which to tackle contextual and transactional challenges in order to pinpoint responsible approaches to change.

The rest of this article is organized as follows. Section 5.13 defines ethical culture as a complex system and relies on the theoretical background of organizational culture and ethical culture studies, systems theory, and pragmatism. Section 5.14 introduces the framework used for the analysis and the scenario planning methodology. Section 5.15 presents the results and discusses the process relating to all six components in the framework, the implications for ethical culture, and four possible future scenarios. Finally, in Section 5.16, we offer conclusions, indicate the implications of the scenarios and suggest directions for future research.

## 5.13 ETHICAL CULTURE AS A COMPLEX SYSTEM

### *5.13.1 Organizational Ethical Culture*

Schein [15] explains that there are roots of complexity leading to a definition of organizational culture as the “concept of organization itself is ambiguous”. In order to confront this ambiguity, Schein [15] recommends an understanding of the history and the dynamics that lead to the formation of a culture, where its strength should be “empirically deter- mined”. That is, there are different levels of culture that help create evidence and determine if a group or organization with cognitive abilities is prepared to learn, evolve and adjust itself according to the “external environment and its problems of internal integration”. Sasia [16] adds that the moral development of an organization depends upon untangling the webs of significance to which culture belongs [17] such as attempting to make sense of its fundamental elements (norms, symbols, conduct and structure), but most importantly to

‘permanent elements’ such as the type of rationality that inspires an organization and determines its ethical positioning. Schein [15], and Allaire and Firsirotu [18] had already illustrated organizational culture as a system, which contains subsystems and includes elements that are in complex relationships. As with systems and subsystems, organizational culture has subcultures. Within the subsystems of culture there is an ethical dimension called organizational ethical culture, which determines the aptitude of an organization to ensure moral reasoning and to build appropriate structures for the ethical development of the organization and its employees vis-à-vis social legitimacy, fairness, justice, responsibility and human rights. Treviño et al. [19] defined ethical culture “as a subset of organizational culture, representing a multidimensional interplay among various formal and informal systems of behavioral control that are capable of promoting either ethical or unethical behavior” (p. 451). The authors explain that the formal or explicit systems are constituted of policies, leadership authority, structures, rewards systems and training programs, while the informal or implicit systems refer to behaviors of employees and peers in relation to ethical norms. Therefore, ethical culture is a complex system which emphasizes “observable manifestations of culture such as structures, systems and organizational practices” [19] (p. 451), which influences ethical behavior, “cognitive processes” [20], and “provides guidance to employee ethical decision-making” [21]. This notion that ethical culture influences behavior determines that there are causal relationships that constitute an ethical culture. More so, if we consider that ethical culture is also a multidimensional construct of virtues [22,23], which an organization is, required to evaluate in order to put their subjective values into practice. Elements, factors, dimensions and characteristics either external or internal to the organization are interconnected and highlight the various types of relationships that may occur. These interconnections and relationships can demonstrate whether an ethical culture or ethical system is in a reinforcing or balanced feedback loop [24]: (1) Reinforcing feedback loop towards an ethical culture or reinforcing towards an unethical culture. (2) Balanced feedback loop for a stable and strong ethical culture or an ethical culture that can be resistant to change and is not current with evolving social needs.

Werhane [25] explains that a healthcare system and its subsystems are open, dynamic and revisable. The same logic is attributable to any organizational culture and its subcultures (viewed as systems) and to its ethical system, a subset of culture. An ethical system in

organizations is not a closed system, neither is it static. It evolves and adapts or at least it should. As the contextual environment is in constant shift, organizations need to be aligned to the values and the evolving *ethos* of society in order to focus on the well-being and interests of those who are affected by their actions. This is especially true, if we are to consider that culture matters and motivates expected actions of an organization when confronted with ethical challenges [26].

### *5.13.2 Systems Thinking and Pragmatism*

We invite the reader to embrace the theoretical conception that organizational ethical culture is a socioecological complex adaptive system. A system with interactions of complicated structures, patterns and composed of characteristics of aggregation, nonlinearity, diversity and flows [27]. Hence, similar to biological interactions, "the ecological nature of an organizational ethical system focuses on the interconnections and interdependencies between the organization and the many components that influence its functioning, be they external (environment, technology, government . . . ) or internal (employees, clients, competitors)" [13] (p. 82). We remind the reader that ethical system and ethical culture are used interchangeably throughout the article.

Bertalanffy [28] introduced the scientific concept of "wholeness" with general system theory (p. 37). The author suggests that a 'unitary conception of the world' and science is founded on the possibility of amplifying perspectives through the complex relationships and interactions among various organizational levels, disciplinary fields and relationships. The progress in engineering, most specifically power engineering, and the outbreak of World War II, with the use of cybernetic feedback, were the main driving forces for the development of a systems approach, due to the evolving complexity of interactions that the rise of technology stimulated in the field [28,29]. Additionally, systems theory and thinking built its reputation in organization and management studies [30–33], which led to its philosophical, social, environmental, political and ethical evolutionary importance [24,34,35]. Thus, systems thinking has been acknowledged as a relevant theoretical, practical and operational science of business ethics [25,36–41].

Werhane [39] argues, for example, that with a multiple perspective approach, ethical issues can be examined, first, from a sociological point of view and, second, by establishing

boundaries. With the latter, a systemic overview can be beneficial for organizations seeking to assess and to strengthen their ethical cultures by identifying boundaries to their moral development i.e., as they are either influenced externally by regulatory barriers, political instability or evolving societal values, or internally by moral agency and the future role of leadership. From a sociological point of view, we can review the effect of an organization's purpose and goals for the functioning of its ethical structure, interrelationships and ethical rationality.

Organizations are purposeful systems [36,37]. However, the purposes of these systems first need to be articulated if they are to guide an organization for the common good of society and to optimize 'collective value' [2]. On the tenets of pragmatism, Ackoff [37] reminds us that American pragmatism considers meaning, as a near equivalent to purpose, to be valuable when we attempt to understand where it leads us in practice. Organizations should ask themselves where their purpose will lead them, whom they will benefit and to whom they might engender harm. The ultimate meaning of an organization's purpose and the ethical challenges that an organization might face are posed through iterative inquiry, which can generate the necessary knowledge for responsible practices and actions. Dewey [42] argues that "inquiry is a continuing process". The settlement of beliefs is a progressive matter where further inquiry will only help to define knowledge. Moreover, American pragmatism is "a philosophy in which diagrammatic representations of relationships per se are seen to constitute an important part of scientific inquiry" [43] (p. 479).

## 5.14 FRAMEWORK AND METHOD

### *5.14.1 Framework: Adapted from Allaire and Firsirotu (1984)*

Allaire and Firsirotu [18] in 1984 proposed an integrated conceptualization of organizational culture in which the authors address the issues of social legitimacy and determinants of change and adaptation in organizations. In order to arrive at their framework, the authors aligned the analysis and classification of studies in cultural anthropology with literature in the fields of management and organization studies. Their conceptual framework has provided the foundation and inspiration for this article due to its holistic conceptualization of organizational culture and due to the relevance it gives to the influence culture receives from the contextual environment, and most specifically, to the understanding of corporate cultural

legitimacy. For the purposes of this study, which applies the scenario planning methodology with a systems thinking approach, Figure 6 is an adapted version of Allaire and Firsirotu's framework. Descriptions in each component of the framework lead us towards the creation of possible emerging future systems of ethical culture and their dynamics according to a systemic analysis of the different driving forces, trends, assumptions and characteristics. The steps and components of the framework are:

(1) *History:* an overview of interviewees' historical perspective of the sector and of the organizations is introduced. This overview also reveals historical corporate and sector transformations.

(2) *PESTLE:* introduces the—political, environmental, social, technological, legal and economic—analysis of the sector. This analysis considers the driving forces that were perceived by interviewees to influence corporate culture and transitions to new business models.

(3) *Business Idea:* according to van der Heijden [44] "the Business Idea is the organization's mental model of the forces behind its current and future success" (p. 63). It is illustrated as a reinforcing feedback loop, which can amplify a healthy culture or re- inforce tendencies of a toxic culture. While van der Heijden conflates the articulation of the Business Idea with an organization's success and profitable growth, this article articulates the Business Idea in terms of managing success and development of an ethical culture. The articulated business idea was reassessed in this study with the scenarios in order to identify leverage points and improve its ethical coherency e.g., reviewing which Sustainable Development Goals are addressed in each of the scenarios and which ones need to be reconsidered.

(4) *Cultural System:* refers to interviewees' underlying assumptions and beliefs of the organization's culture, beyond codes of ethics and explicit corporate values. This component also considers corporate reports and ethnographic research conducted during two residencies at EUMa.

(5) *Socio-structural System:* refers to structures, strategies, policies and processes that are developed by the organizations to build or maintain an ethical culture at EUMa and EUMb. Here there is an emphasis on evidence from EUMa where the author of this article

had two corporate residencies, and from a seminar presentation by an executive of EUMa at an ethics forum.

(6) *Organizational Output:* combines findings from other components of the framework (PESTLE, History, Business Idea, Cultural System, Socio-structural System) to introduce six key themes as possible disruptors of ethical culture. A preliminary causal loop diagram (CLD), which demonstrates interconnections of two key themes—From profit to purpose and Environment and Sustainability—and their top terms, are presented. Subsequently, four future scenarios to the year 2040 were built based on the reflections of interviewees on the relevance and influence of the key themes for organizational ethical culture.

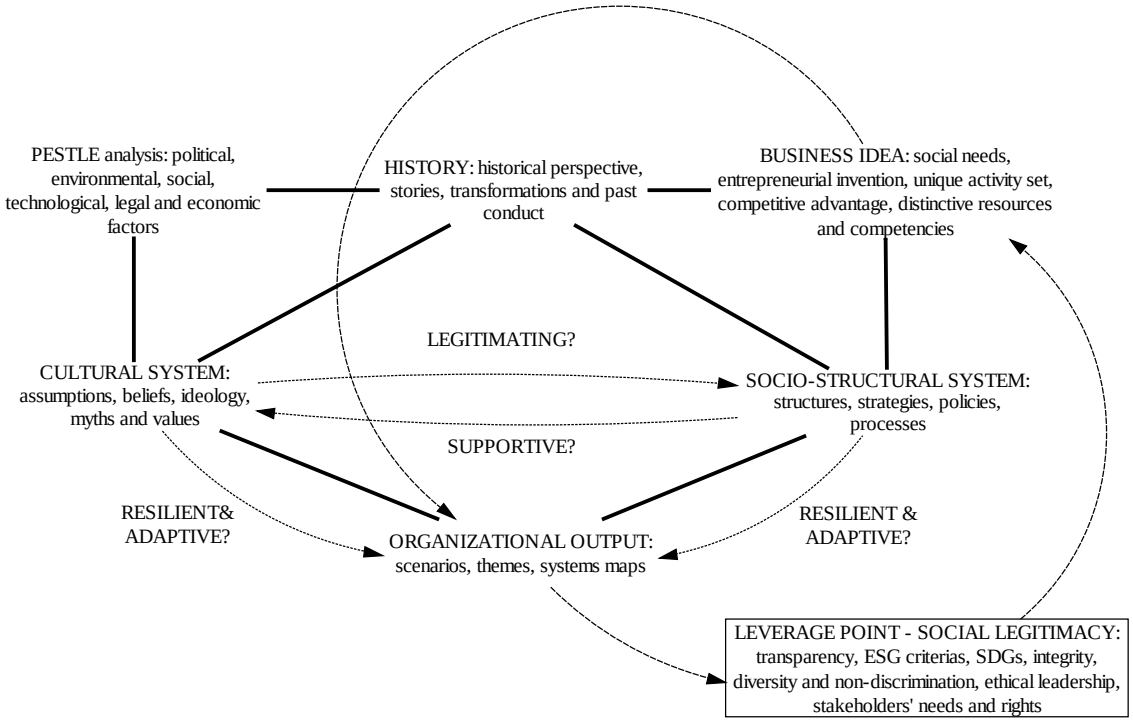


*Figure 6. Framework used for analysis adapted from Allaire and Firsirotu (1984).*

### *5.14.2 Methodology: Scenario Planning*

Scenario planning is a methodology to envision various possible and plausible futures in the format of scenarios or narratives. Organizations have applied scenario planning to deal with turbulent and uncertain contextual environments and to be better prepared strategically for futures that might unfold. It has been a useful tool to reframe strategy [45], support decision-makers [46], maximize innovation capacity [47] and support policy making [48].

Furthermore, this foresight methodology also advocates for an eminently human and social perspective [49], which has the potential to transcend to the corporate setting as a diagnostic tool for ethical culture [6] and to assess an organization's ethical culture [13].

Inspired by an inductive method of intuitive logics [50] and with an adaptive scenario-based planning approach [44], by which our reality should see ethical culture as a complex adaptive system, the scenarios are informed by causality and interconnections through the framework (Figure 6). Here is where systems thinking has played an important role in making sense of the complexity of ethical culture and building future possibilities. The art and science of scenario planning is realized by its usefulness in making sense of a system as a whole, as opposed to separate isolated parts thereof [44,51,52,53]. The importance here is to perceive those parts as interconnected and interdependent in order to visualize possible future scenarios and to ensure that they are plausible. Therefore, this study embraces the contributions that complexity science has for futures studies [54] and the importance of socio-ecology to scenario building [55].

### *5.14.3 Data Collection and Data Analysis*

The following section and subsections are depictions of each of the components encountered in the framework (see Figure 6) which are first retrieved from the interviews conducted at EUMa and EUMb, second, by ethnographic research conducted at EUMa during two residencies in the organization and third, with the support of literature and reports, either corporate reports or from international organizations. There were two phases of the research which included a total of 29 interviews with top executives from two private electric utilities. The first phase interviewed 16 executives of EUMa in the European headquarters and in a South American subsidiary (see Table 11) by which six key themes were identified by the executives to potentially disrupt and influence ethical culture (see [6]). A subsequent phase of the research was conducted in South American subsidiaries of two European multinationals (EUMa and EUMb). In three South American cities, 13 more interviews were conducted with executives (see Table 12). This phase aimed to validate the relevance of the previously identified six key themes for ethical culture, their interdependencies and their interrelationships. For this final phase, each executive was interviewed with reference to a specific theme related to their expertise and knowledge with the theme e.g., the theme

Environment and Sustainability was conducted with the heads of sustainability in the organizations or with executives who had dedicated work to this field. All interviews were carefully regulated, transcribed and coded using a qualitative analysis software (Table 13). The following section goes over each component of the framework, which leads us to the organizational output with the six key themes, two systems maps and four future scenarios.

*Table 11. First Phase Interviewees at EUMa*

| European Headquarters | South American Subsidiary |
|---|---|
| Head of Energy Planning<br>Head of Sustainability and Risk Management<br>Head of Innovation<br>Head of Organizational Development<br>Head of Human Resources<br>Head of Stakeholder Management<br>Executive Board<br>General Director | Head of Tax & Accounting<br>General Counsel<br>Head of Regulation & Energy Planning<br>Head of Planning & Control<br>Head of Internal Audit & Compliance<br>Director/President of Partner Company<br>Head of Construction & Operations<br>Head of Distribution |

*Table 12. Second Phase Interviewees in South America (EUMa and EUMb) and Associated Themes.*

| EUMa Interviewees | Theme | EUMb Interviewees | Theme |
|---|---|---|---|
| Regulatory Executive Manager | Regulation and relationship with public institutions | Head of Strategy and Regulation Officer | Regulation and relationship with public institutions |
| Sustainability Executive Manager | Environment and Sustainability | Head Administrative Officer, with emphasis in CSR and Sustainability | Environment and Sustainability |
| Head of Mergers and Acquisitions | From profit to purpose | Deputy Ethics & Compliance Officer | From profit to purpose |
| Vice President of Generation | The role of leadership | General Counsel | The role of leadership |
| Vice President: Strategy and Business Development | Digitalization and technological advances | Head of Commercial and Innovation | Digital and technological advances |
| Head of Transformation | Cultural consistency | Head of People and Culture | Cultural consistency |
| | | Head of Strategy, Communications and CSR | From profit to purpose |

*Table 13. Description of Electric Utilities and Regulation of Interviews.*

| Electric Utility Multinationals | |
|---|---|
| Sector | Electric Power / Gas |
| Market | European/Global |
| Number of Interviews | 29 |
| Average Interview Length | 71 min |
| Average Transcript Length | 6568 words |

## 5.15 RESULTS AND DISCUSSION

This section covers the framework introduced in Section 5.14 and leads us to the development of future scenarios. The interviews for the study took place over the course of a European Commission doctoral fellowship (2016–2020) to research the topic—promoting ethical culture in multinational companies. The research was accomplished before the COVID-19 pandemic and the exacerbated climate events that have accompanied it. Many of the concerns expressed by the executives during the time of the interviews are largely the same as the concerns and disruptions which we are experiencing in the present e.g., water crises (droughts), climate change, high energy prices for consumers, CO2 pricing, transition to tech business models, focus on renewable energy, upskilling workers etc. The COVID-19 pandemic exposed these concerns to media attention and thus the attention of a wider audience.

### *5.15.1 History – Historical Perspective*

The culture of an organization, considering the reach and size of multinationals such as EUMa and EUMb, is perceived to develop from a collective reasoning and this collective reasoning is influenced by foundational elements from their past. Therefore, this analysis of the historical perspective identified that the shared internal knowledge and organizational culture of these specific organizations of the electric sector were dependent upon how well the organizations read their contextual environments and were capable of adapting and changing accordingly, and thus contribute to the well-being of society. In Europe, for example, there was a clear belief that providing energy to society is a service of public interest, by which a number of obligations and attitudes define a utility's actions. The idea of being a public service raised awareness of the need for values such as transparency and honesty, reflected in how much energy is consumed and the true measurement of this in

homes, such that consumers have greater control over their own consumption and cost. These values are ever more relevant because electricity is a service upon which the welfare, and the livelihoods of populations depend. Looking back, from Thomas Edison's light bulb, which shaped modern society, to Charles Proteus Steinmetz contributions to the field of electrical engineering, the growing dependency on the electric sector proliferated as there were further technological advances accompanied by exponential socioeconomic growth. Society's dependency is conditioned by utilities that act throughout the entire value chain of generation, distribution and transmission, which confronts the concept of public service and the balance between fair corporate profit and its crucial corporate purpose as a social service.

Ultimately, some of the main drivers of cultural change are connected to the way organizations and their employees position themselves in respect of their setting and how these organizations insert themselves into given societies. Therefore, according to the executives in the two electric utilities, which are globally present and over time have acquired several other companies, there is a need to recognize the complexity of building a 'sane' organizational culture and the challenges faced in doing so. Increasingly, every geography and business unit has its own particularities and identities.

In South America, the executives expressed the belief that their European counterparts (headquarters) respected the organizational cultures of the acquired local companies because the existing management teams and core employees were retained. For strategic transitions in South America, they had sought to maintain cultural traditions and dynamics whilst recognizing the need to adapt to a new business environment. Additionally, both multinationals had undergone similar transformations i.e., from government entity in Europe to privatization, and to expanding their worldwide market and becoming international players with South American subsidiaries. External challenges were also encountered with respect to past government decisions and provisionary measures, which in the interviewees' perceptions delayed progress in the South American sector and in innovation and development to this day. Government regulations oblige companies to adapt to new sets of rules, which in some cases may result in losses to income. To an even greater extent, the executives considered that the implementation of new regulations disregarded the fact that the electric sector is a value chain. Thus, the capacity of financial resilience to changes in the

regulatory system also depends on exogenous environmental factors such as water crises. In this South American example, the companies and other actors of the electric sector, resorted to legal action in order to be exempted from bearing the burden of the costs resulting from what they understood to be a poor regulatory framework, further aggravated by a drought, which resulted in a water crisis. Over the years, this has transformed the companies' strategic positioning in the sector to refocus management attention and efforts to devote more resources to building strong in-house legal departments, which in turn instigated a culture of litigation. Nevertheless, EUMa, in South America, took this opportunity to diagnose the issues affecting the sector imposed by the barriers and impediments in the regulatory framework. EUMa dedicated internal resources to participate in public hearings and propose options and socially relevant initiatives to government, which should spur government to enable and simplify mechanisms for the development of renewable energy. This demonstrates that the relationship of the structuring of "corporate governance practices on performance" and "country rules" [56] is a case in point on how regulatory bodies may influence the tone at the top of an organization and its cultural characteristics and ethical positioning.

### *5.15.2 PESTLE Analysis – Setting the Contextual Scene*

This section covers the PESTLE analysis component of the framework. The objective of identifying and depicting a picture of macro and micro driving forces is supported by the logic of distinguishing the current situation of the electric sector and the externalities that will influence its evolution and may impose change in the organization's ethical culture. The driving forces are categorized by a PESTLE—political, environmental, social, technological, legal, and economic—analysis with a description of each PESTLE setting.

#### Political Setting

Political division and instability pose a risk for the electric sector. However, according to interviewees from EUMa and EUMb, aspired values guide them to implement an infrastructure and vision in which renewable energy such as solar and wind prevail whilst substituting coal. The political risk itself is actually related to extreme events that may occur with a *coup d'état*, a World War or government takeover of private electric companies. Yet, the actions of individual climate change skeptics have little to no effect on an environmental

agenda set by the businesses [57]. The greater purpose of decarbonization and other climate actions may actually demonstrate the commitment and cohesion of businesses to assume corporate political responsibility [58].

Furthermore, one of the greatest challenges will be to adopt a model, which will guarantee more stability to the electric sector in relation to lower costs (for the sector and for consumers), transparency, and economic and socio-environmental sustainability. This is a long-term path to achievement, which needs imminent action and political support to avoid wasted time [59]. With political and economic stability, the electric sector will benefit from investments in order to continue with a renewable energy transition. The purpose for which the electric sector pursues the decarbonization of its markets also depends on government participation. However, the executives argued that the technological development for renewable energy has become more competitive than fossil fuel technology and has facilitated climate action even when there is a lack of political support. Arguably, two driving forces for the electric sector are technological advances and a coherent political framework for the development of energy policies. Therefore, educating politicians is seen by the executives as an option by which to reach a more stable and transparent regulatory system, since climate change may be perceived by some political actors as a long-term issue.

Finally, this takes us back to a growing demand from society on the influence that private companies should exert in the political realm to ensure responsible actions, or as interviewees expressed, to ensure a coherent political framework for the development of energy policies. This is a change in an organization's ethical culture towards an agenda for multinational activism that would demonstrate commitment to a continued effort to promote equality, justice and fairness despite a political ideology differing from that of government leadership. Noticeably, a code of conduct and corporate training on the meaning of multinational activism, expressing its reach and limitations, should be developed and disseminated throughout any influential organization.

### Environmental Setting

For the executives of EUMa and EUMb on both continents, Europe and South America, there was a deep concern about droughts and water shortages as underlying contextual factors for future crises in the sector. With extreme climate conditions, they viewed this to be an

unpredictable alteration, which places countries that are overly dependent on hydropower to the test as to whether they would be able to transition among different renewable models during shortages. The electric sector, therefore, would need to adapt itself to these climatic circumstances, particularly when the country has a strong hydraulic dependency.

The most controversial subject is the production of thermal energy based on oil and coal. One of the urgent strategic sustainability objectives of EUMa and EUMb is to decarbonize. However, there is a shared understanding by the executives that achieving 100% clean energy will be financially and politically challenging. Wind and solar energy have been evolving more rapidly over the years. Nevertheless, they are still intermittent energy sources, which at some point will need the support of low cost thermal energy power. Decentralization is based on the principle of divestment of the thermoelectric plants, especially coal-fired plants. Divestments allow the sector to shift its focus to renewable energy generation (solar, wind or hydroelectric). These are perceived to be the strategic foci of electric utility companies.

Undoubtedly, the electric sector is going through a transformation and the main catalyst for this transformation is climate change. One interviewee observed that the sector was responsible for 1/3 of CO2 global emissions. If we were to specify only coal-fired electricity generation, the sector would have accounted for 30% of global CO2 emissions [60]. In 2020, two primary factors contributed to a 2% decrease in global CO2 emissions, the result of lower electricity demand due to the COVID-19 pandemic and an increase in wind and solar generation. Yet, the electric sector is far from an ideal transformation, as it has not fully undertaken the necessary actions to confront climate change, and with coal energy generation expected to pick up in 2021 [61]. This entails necessary measures of adaptation to climate change such as the European Union Adaptation Strategy and the European Green Deal. We may consider, on the other hand, that these adaptive measures need systemic commitment to actions. In practice, this has shown to be elusive and unattainable. IPCC [62] reports that "very few countries, regions, communities or businesses" are capable of adapting to the Paris Accord's ambitions without, for example, achieving SDGs in developing countries (p. 319).

Although there is still excessive dependency on fossil fuels, renewable energy will gain more terrain and thermal energy, such as coal and gas, will have their role diminished in supplying energy and producing electricity. This has been shown during the last ten years [63] with

global electricity generation from coal decreasing and renewables on the rise. In addition, the lower cost of technologies has supported this trend. Finally, the executives understood that a robust global financial intermediation system would be necessary to confront the colossal investments to support the energy transition, which was seen to be beyond the structural, operational and financial capacities of some organizations.

Global warming has dire consequences for our environment. For this reason, the IPCC [64] states in its 5th Assessment report that there is a need for mitigation and adaptation efforts to confront climate change. Climate change will affect livelihoods in society as a whole, with greatest impact on the most vulnerable populations. Corporations and specifically, for the purposes of this article, electric utilities, need to adapt, change and build their ethical cultures around principles that will guarantee an equitable, fair and just energy transition. Already for decades, international organizations, such as UNESCO, have been working under consultative and collaborative frameworks to establish ethical principles for climate change adaptation and mitigation. UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) has produced several reports for this awareness [65,66,67,68]. These are principles that electric utilities can incorporate into their decision-making processes, codes of conduct, values and corporate training for ethical awareness in processes that seek to accelerate a just and fair energy transition.

## Social Setting

There is a question about the social role that energy plays and if companies in the sector are meeting the needs of society. In 2019, 770 million people had no access to electricity, which is a considerable decrease from 2018 when 860 million had no access and 940 million in 2016. Without access to modern energy, populations are affected by poor sanitation, the absence of clean water and precarious healthcare [69,70,71]. Not only does the electric sector have this vital social role to continue improving energy access to the world population, it also has to consider the means by which it is attempting to achieve this goal. The executives conveyed their convictions that companies will need to consider challenges regarding the increase in energy consumption without at the same time increasing greenhouse gas emissions, as well as the effects of climate change and the impact of displacing native populations to build hydroelectric dams and power plants. Energy transitions towards a low

carbon economy require alternatives for workers who may lose their jobs and livelihoods due to overall deficient planning of job replacement and upskilling, e.g., coal miners. For this, an ethical culture in the electric sector should address social needs within sustainability standards from a climate action vantage point, but also from an economic point of view for affected populations. In order to enable a just energy transition and avoid a high occurrence of unethical behavior in the energy sector towards society [23] action plans are needed for energy workers and communities [72].

Aside from the importance of policymakers in providing a just transition, there are organizational opportunities to build a culture that upskills employees and future employees in order to qualify professionals for new organizational dynamics. This future preparedness for upcoming professionals requires focused efforts of new leadership to continue to guide the organizations towards sustainable goals and develop further the fulfillment of pressing social needs. Another aspect of upskilling takes into consideration automation and job loss. The new industrial revolution has placed challenges and targets to be reached by companies in order to avoid doomsday scenarios, in which robots are the cause of massive unemployment. A risk which is real if governments and companies do not target factors of structural change such as new skills, rapid ageing population, adapting social protections and unemployment caused by the COVID-19 pandemic [73,74,75]. On the other hand, with innovation, a recent study has shown an increase in employment in the renewable energy sector [76].

**Technological Setting**

Today the sector is shifting towards the needs of consumers as being autonomous energy producers (prosumers); therefore, this shift is trailed by decentralized solutions where we find new roles in the management of information, data processing and digitalization. According to the interviewees, this will cause a corporate cultural revolution on the relationship between electric companies and their clients. Consequently, the production of electricity in large centralized electric power plants and thermal power stations may soon be used strategically as backups for growing distributed generation systems. For this to happen, disruptive technologies such as solar energy, battery storage, hydrogen energy storage, robots and automation will need to continue to evolve and become increasingly competitive [77,78].

Furthermore, a great challenge for the sector is that these disruptive technologies are expected to make traditional assets obsolete in economic terms. There is a concern expressed by the executives about the level of investment and the high risks private companies may encounter, knowing that there are no clearly identifiable actors to bear these risks.

New technologies are also shifting organizations to new business models. Traditional cultures in electric utility companies are facing this change, especially due to the increase in the use of renewable energies and distributed generation. An industry that for over a century has made only minor changes in its business model now is aware that it will need to draw nearer to models similar to those found in technology companies, which may become new players in the sector (Amazon, Google, Apple, etc.). These tech companies have a competitive advantage on the use of data and their intimate knowledge of their clients, an asset that the electric sector companies do not have. Therefore, digitalization and innovation in the sector is a necessity for an approach to attract and retain customers, which will guarantee a closer relationship. Here are where technological advances with big data, blockchain, artificial intelligence and deep learning are becoming more widely studied and applied in the electric utility sector.

The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems [79] details how the involvement of "several hundred participants", from the scientific community, worked on the development of autonomous and intelligent systems, reflected on ethical principles, gave recommendations and identified issues that may impact society with new technologies. Among the various issues considered in the report, three are relevant for this discussion of the concern about the technological transition in the work environment and the inevitable replacement of humans by autonomous intelligent systems: 1. the protection of worker rights and their psychological and mental well-being; 2. the altered workplace relationships and the nature of work; 3. government policy adaptation and societal change that holds out future prospects with expectations for education and training. Solid ethical cultures in the sector should be well equipped to address these issues and be already aware of toxic cultures that have been encountered in tech companies and other sectors e.g., abuse of a dominant position (anti-competitive), data privacy issues and harassment in the workplace.

## Legal Setting

The terms “high level of judicialization” and “judicial (in)security” appeared often in the interviews in reference to an uncertain and unstable regulatory system. Interviewees emphasized that the electric sector like any other sector needs a stable and safe regulatory system for consumers and investors. With this, consumers will receive energy at a fairer and lower cost and investors need this stability to be willing to invest. Development in the sector may also be stalled with high tax rates on energy, making products and new technologies more expensive for the end user. The electric sector in South America, for example, has promoted public hearings to discuss reforms of the sector, with regards to transmission, generation, and distribution. The purpose of hearings is to steer towards a more open and modern legislation that will facilitate the development of distributed generation and lower the cost of renewable energy technologies. A stable legal framework would confront future challenges to obtain the right investments needed for a clean energy transition. Technology is understood to be the actual driving force for this transition.

The barriers encountered to an energy transition have a complex relationship with the development of regulatory frameworks. Laws and regulations are perceived by the executives to be outdated and have not kept a pace of technological advances. The regulatory framework influences the ways in which the sector evolves and counterintuitively can advantage options that are neither cost effective nor in the interest of companies, consumers or society. Executives are troubled in relation to the financial and economic sustainability of the electric sector because it depends on meaningful changes in the regulatory framework. These needed regulatory changes are difficult to achieve and then to implement as they depend first on political will and then on regulators’ activities. The World Energy Outlook 2018 report [80] introduces three possible future scenarios for the energy sector: Current Policies Scenario, New Policies Scenario and Sustainable Development Scenario. There is considerable emphasis on the development and choices among policies that will affect the energy system in the future. In the New Policies Scenario, for example, policies “play a critical role, notably those relating to energy efficiency, renewable resources, measures to curb air pollution and the phasing-out of fossil fuel subsidies” [80] (p. 38). Regulatory barriers, that are consistent with existing policies, are discussed in the Current Policies scenario. The scenario depicts the rise of fossil fuels and “leaves only a small amount of headroom for renewables” [80] (p.

38). There is uncertainty with respect to the demand for electricity that is predicted to increase in the future as "governments are pushing to achieve full electrification by 2030" [80] (p. 386).

According to interviewees at EUMb, legal and the regulatory systems influence the way companies in the electric sector relate to and communicate with the market i.e., positioning of the brand and the necessary competencies, skills and ethical awareness of employees. Changes in regulation may result in a more restricted or more open market, however, the latter is a current trend engendering a shift in business models and culture. A more open market and the ability to sell energy to end users that are more diverse offers the possibility of diversifying the brand and the workforce. Executives appeared to intuitively perceive that these changes might transform the way companies deal with new time frames i.e., short term contracts for end consumers versus long term contracts for large industries. They fear, however, that short termism may disseminate or exacerbate a culture of instant achievement and profit tallying within the company.

**Economic Setting**

Although, since the pre-industrial era, growth in economic activity is one of the underlying factors for the increase in greenhouse gas emissions it is also the key factor which drives and ensures the development of clean energy technologies and climate change adaptation [64]. Economic diversification and more equitable distribution of wealth would encourage the stability needed by the electric sector, which works primarily with mid to long-term planning horizons. This planning depends on financial stability and sustainability. Without this stability, the sector faces an uncertain environment for short-term demand.

The market needs incentives for the sector to respond to adaptation and mitigation options such as "innovation and investment in environmentally sound technologies" [64] (p. 26). Interviewees commented on the inertia of the energy sector to reduce carbon emissions, which the IPCC considers to be constraints to adaptation and mitigation options for the reduction of climate-related risks. Markets cannot be designed for an outdated logic still based on the production of energy with coal and gas. There is a need for other types of markets designed and regulated by government, which would provide better economic incentives for decarbonization. For example, subsidies have been granted to increase

renewable energy technologies and to reduce greenhouse gas emissions. However, some interviewees discussed the possibility of society rejecting the logic of subsidizing renewables, primarily due to the prevalence of low-cost renewable energy technology already in the grid. In Brazil, lawmakers have debated new regulations on subsidies for distributed generation, which ultimately tax the 'poor' for the introduction of photovoltaic panels. This is a technology not used by low-income populations [81]. Companies in the electric sector, which value an equitable and fair transition for all levels of society, should continue to engage and disseminate knowledge to stakeholders on the role that subsidies played in the process of promoting renewable energy and the consequences of continuing with them today i.e., a debate on who benefits and who is negatively affected by the subsidies.

#### *5.15.3 Business Idea – Corporate Survival and Development*

From the collected evidence at EUMa and EUMb, this section attempts to articulate a unified 'Business Idea' for both electric utilities. Here we propose a unified business idea for EUMa and EUMb due to the fact that both organizations have various common grounds when it comes to van der Heijden's definition regarding the organization's mental model. These private utilities are similar companies operating in similar value chains; with similar historical backgrounds, as discussed in the History subsection; and similar future ambitions for their businesses i.e., relationship with consumers, renewable energy generation, relationship with society, organizational structure, new market/players etc. From the interviews and field research we were able to intersect these similarities and articulate the business idea in Figure 7. Van der Heijden [44] explains that the "Business Idea is the organization's mental model of the forces behind its current and future success" (p. 63). Additionally, the author introduces this concept for scenario planning in order to make "explicit those aspects of the organization that are crucially tied up with the question of survival and development" (p. xxiii). Through the lens of organizational ethical culture and aligning future scenarios with the articulated Business Idea, organizations are able to conduct an ethical reinterpretation of corporate strategies and policies i.e., reviewing and wind-tunneling their strategies for sustainability in future scenarios.

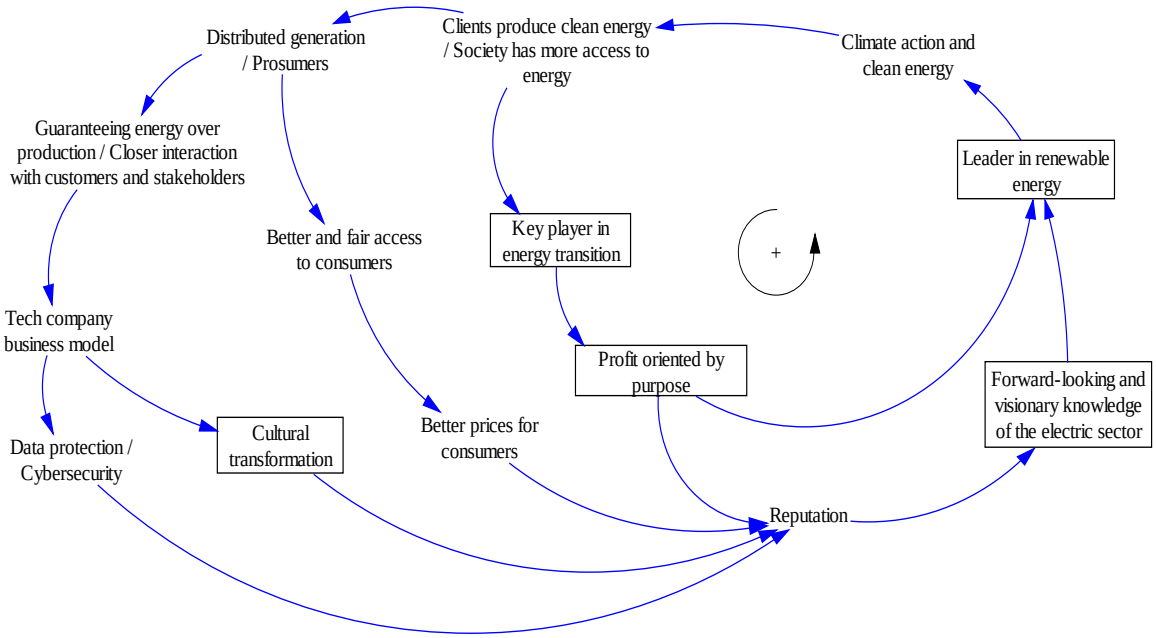


*Figure 7. Articulated Business Idea from two private electric utility multinationals (EUMa and EUMb).*

The introduction of the business idea to the framework of this article has the objective to articulate, with a positive feedback loop, a combined mental model of EUMa and EUMb in terms of current positioning, social needs and business opportunities, which would lead to new business models, entry into new markets and distinctive competencies. With the articulated business idea in Figure 7, it is possible to visualize the interviewees' strategic priorities and their conception of business model transitions towards climate action by developing clean energy sources, improving technologies for distributed generation and empowering consumers to become prosumers. This transition to prosumers provided insights into the capacity of the organizations to prioritize their roles as guarantors of energy over their roles as producers. A closer interaction with the customers and stakeholders had already begun to revolutionize the commercial divisions of electric sector companies. Not only in the electric sector but also in other sectors e.g., finance with fintechs, the tech business model was seen as the most coherent form for transition to secure future success and what is believed to contemplate the needs of consumers. As explained in the technological setting of the PESTLE analysis, major tech companies (Amazon, Google, Apple, Facebook) are expected to be new players in the electric sector and already have the competitive advantage of data storage capabilities and intimate knowledge of their clients. This would give tech companies the advantage in guaranteeing energy for clients. The tech business model consequently

would entail a cultural transformation in electric sector companies and the need for them to support advanced data protection regulations and invest in improved cybersecurity mechanisms.

The positive feedback loop (Figure 7) leads to the attention electric companies pay to obtaining and maintaining a good reputation, consistent with their organizational codes of ethics and through their actions. However, reputation should not be the only aspect to consider. More importantly, organizational legitimacy is scrutinized for the achievement of social acceptance. The analysis and scrutiny of reputation, on the other hand, tends to be limited to comparisons among organizations [82,83].

The terms that appear in rectangles in Figure 7 are the distinctive competencies, which according to van der Heijden [44] "must belong to the firm as an institution, and not exclusively to its members individually" (p. 68). For example, the capacity of EUMa having achieved a successful cultural transformation, in the past, demonstrates a distinctiveness that other organizations emulate with difficulty considering the "depth and complexity" of organizational culture [84]. For this recognized achievement in change-management encountered by leadership in organizations, recent research has focused on proposing assessments to minimize the risk of "failed change" and necessary interventions to accomplish successful organizational change [85].

#### *5.15.4 Cultural System*

The cultural system for this analysis considers but does not emphasize the publicized definitions of culture that EUMa and EUMb share publicly on their websites and in their reports as values and norms. This is first to ensure anonymity of the organizations and second to avoid bias. The objective here is primarily to make explicit through the interviews, at EUMa and EUMb, and with the ethnographic research conducted during residencies at EUMa, what the interviewees' underlying assumptions and beliefs are that reveal mental models of their cultural systems. Table 14 introduces some of the pertinent characteristics of this cultural system and the following explanation gives an overview of what these characteristics mean for EUMa and EUMb. However, this is a partial observation from interviewees and may not provide a global understanding of the cultural system of these two multinational organizations.

*Table 14. Cultural System: pertinent characteristics.*

| | |
|---|---|
| Risk aversion<br>Market-oriented versus Engineering-oriented<br>Axiological and Deontological<br>Subcultures<br>Zero tolerance for ethical mal practices and violations<br>Promotes Inclusiveness<br>Ethics beyond compliance | Shared Knowledge<br>Innovation<br>Forward-thinking<br>Uncertainty avoidance<br>Organizational Learning<br>Corporate University<br>Generates trust<br>Reputational concern |

**Pertinent Characteristics**

*Risk aversion:* Organizations in the electric sector have developed a culture of risk aversion or a culture which attempts to protect itself by minimizing risk. That is, each step to be taken is carefully calculated and planned before any decision is made. There is a general assumption expressed by the executives that the organizations in the sector will eventually shift towards a fluid organizational structure with more agile governance focused on innovation and influenced by the business models of big technology companies. With this new business model, more risks would have to be taken in certain situations and would need to be trialed in test hubs or directly in the production process. A risk aversion culture was believed to be overly cautious, with meticulous planning before execution and strict adherence to engineering principles that are to guarantee safety. This was coupled with a reputational concern and compliance with standards of due diligence.

Hofstede [86] explains that "uncertainty avoidance does not equal risk avoidance" (p. 148) and that risk is expressed in terms of probability, while uncertainty cannot be given a probable weight. Although the characteristic here is *risk aversion* and not risk avoidance, there is still a tendency to equate *uncertainty avoidance* with *risk aversion*. Nevertheless, with Hofstede's distinction between risk and uncertainty, *uncertainty avoidance* pertains to EUMa and EUMb confronting ambiguity and valuing logical structure, clear interpretation and predictability [86]. The relationship of these two characteristics is considered "not equal", but to be interpreted in terms of causality.

*Market-oriented versus Engineering-oriented:* Within this line of reasoning, and from our research at EUMa and EUMb, we encounter an organizational tendency towards *market*

*orientation* overshadowing the representative *engineering orientation* with detailed analysis and long-term planning encountered in electric utility companies. The pressure for financial results, may result in management easily neglecting risk, with short-term myopic decision-making processes and, thus, prioritize immediate financial return over quality service. There is an underlying assumption and belief from interviewees that a transition from a market oriented business model will eventually need to transition back to an engineering oriented business model in order to guarantee long-term safety and quality of services for clients and employees. From a cultural perspective, the market orientation may clash with a proposed *forward thinking* embodiment of the organization in terms of financial responsibility and strategic priorities for sustainability and long-term climate action. Market orientation for this study is presumed and to be understood to connote financial and results driven. This is a reference to the market power of organizations, increasing productivity and disregarding internal fairness and external social welfare [3].

*Axiological and deontological:* "Axiological ethic is an ethic of value. It pays attention to a person's first-order preferences or values. While deontologies are generally retrospective in that they call to mind existing precedent, expectations, rules and norms" [87] (p. 312). Both in South America and in Europe EUMa and EUMb manifest a clear normative ethical perspective regarding the actions taken by the electric utilities. That is, a deontological conception where the rules are followed and played by the book, which may concur to *zero tolerance for ethical mal practices and violations*. Business ethics is ultimately connected to compliance, however, EUMa and EUMb have disseminated through their cultural system that *ethics beyond compliance* is an indispensable characteristic to consider when evaluating actions and decision-making processes and also where axiology fits well for an environmental ethic anent universal care and the development of relationships for cooperation [87] e.g., towards a fair energy transition.

*Subcultures:* Multinational companies have a variety of business units, which develop a number of *subcultures*. This is due to the particularity of each business unit, the specialization of the employees of a specific unit, their ultimate responsibilities within that unit, employee tenure and geographical contexts. Mergers and Acquisitions (M & As) also markedly affect the creation of subcultures which makes integration of corporate core values ever more

challenging. Values remind us of the axiological approach to generate relationships, cooperation and *shared knowledge* in order to disseminate these core values throughout organizations, despite the particularities of distinct business units. In order to avoid subculture silos, EUMa and EUMb have promoted processes to facilitate shared knowledge practices to disseminate core values of their organizations. Consequently, shared knowledge builds innovation capacity within and among subcultures and generates *organizational learning* networks by which to generate trust among all corporate levels.

*Promoting inclusiveness:* Inclusiveness was portrayed to be at the forefront of the interviewees' minds, which highlights the importance of diversity to the development of an ethical culture. Promotion of inclusiveness is a task that some organizations have been willing to ensure with diversity (gender, race, nationalities and sexual orientation) non-discrimination and a plurality of worldviews. A *corporate university*, which at EUMa has an important role in developing the organization's culture, can provide training on inclusiveness and elicit the consciousness of employees to respect and accept diversity in the workplace.

### *5.15.5 Socio-Structural System*

The socio-structural system presents the pertinent characteristics of EUMa and EUMb (see Appendix B, Table 17). These characteristics are specifically associated with the structures, strategies, processes and policies that these organizations put into practice to build their organizational ethical cultures. In Table 17, each characteristic is given a short definition and notes its relationship to the organization's ethical culture. A more detailed analysis of EUMa's socio-structural system is provided in the following sub-section as the result of two residency periods at the organization's headquarters in Europe and a seminar presentation by an executive of EUMa at an ethics forum. This depiction gives an overview and provides some insights for the socio-structural system table, which finally includes inputs for both electric utility multinationals.

**EUMa's Socio-Structural Overview**

*Ethical risks:* For EUMa, within the purview of ethical performance is the impact on reputation. Ethics is observed not to be managed but analyzed through results and performance e.g., benchmarking ethical performance with an *external or internal ethics assessment*. EUMa's ethics office believes that the risks that are of most concern to the

organization are ethical failings that lead to malpractices. EUMa develops an ethical risk matrix to validate and assess the taxonomy of ethical risks and the degree to which they could lead to malpractices. These risks are categorized under management competencies, e.g., finance, information technology, regulation, procurement etc., and management levels, e.g., administrative, managerial, suppliers, clients etc. Furthermore, leadership is considered essential to the minimization of risks and to maintaining a solid organizational culture and high levels of ethical awareness. Workshops for senior management on ethical risk were participatory processes to develop tone at the top and had as their ultimate purpose to mitigate and avoid future ethical risks. Other methodologies have been used to identify risk and internal outputs, such as the Committee of Sponsoring Organizations (COSO) framework. The purpose of applying different methodologies for risk management is to provide *transversal integration* and to stimulate discussions between departments, committees, stakeholders and geographies.

Although EUMa is a major player in Europe, worldwide it may be considered a "medium" transnational corporation, which allows it greater capacity and flexibility for readjustment and strategizing for the future. In order to build a business ethics management system three objectives are considered by EUMa. First, ensure high levels of ethical awareness. Second, minimize ethical malpractices. Third, maintain a culture through trust, values and transparency.

*Ombudsperson/Ethics Officer:* Following the signing of the *Sarbanes-Oxley Act* in 2002, multinational companies that were listed on the United States stock exchange needed to comply with a set of regulations for financial transparency. This obliged EUMa to create a channel for the reporting of malpractices. This also led to the development of their first *code of ethics* and the organization of an *ethics committee*. Subsequently, EUMa appointed an *Ombudsperson*, by whom complaints could be received anonymously. Specifically at EUMa, the ombudsperson and the *ethics officer* are two distinct figures within the organization, however, there is an exchange of information between the departments. The obligations vis-à-vis ethics within the company require different approaches. For example, the ethics officer will have a greater focus on sustainability.

Following the years after the development of EUMa's code of ethics, the organization found within workshops and ethics training tools the means to strengthen their ethical culture, generate trust and disseminate know-how.

Some examples are:

- Tone at the Top;
- Evaluation and management of competencies for collaborators and managers;
- Online Training;
- Story-telling with short films and questionnaires for employees to elicit ethical reflections;
- Partnership with universities and ethics forums;
- Training their suppliers, as the company is aware that within the supply chain ethical malpractice may appear.

Zaal, Jeurissen and Groenland [21] studied the impact that distinct ethical culture dimensions [23] in the financial sector have on unethical behavior towards customers. Regarding the dimensions of 'supportability' and 'feasibility', the authors found that organizations, which are structurally organized to allocate "time, resources and information" to train employees about ethical conduct, responsibility, and norms, will demonstrate "less perceived frequency of unethical behavior towards customers" (p. 839). The ombudsperson, with the support of a department, provides strategic options, procedures and processes to organize this organizational structure for the company and for the employees to "identify and endorse norms and rules", and for employees to "experience trust and respect in their working environment" (p. 839).

*Measuring Ethics:* EUMa has relied on benchmarking to assess its ethical culture. One of the institutions that measure ethical performance for EUMa applies a more compliance-oriented measurement of ethics. Internally, EUMa has created its own ethics assessment tool, which was elaborated through a partnership with a local university. This creates some controversy about whether ethics can be measured or not. However, there are some questions that elicit its functionality for the organization concerning—communication of ethical performance internally and externally; capacity to evaluate incidents, mal practices and risks; and the

management of the company's reputation. Other tools for measurement include evaluation from raters, evaluation through marketing, and *exit interviews*.

### *5.15.6 Six Key Themes Complex System*

Each of the six key themes here presented has been discussed in prior research [6]. This section also derives from an analysis, which revealed the top terms identified with the support of the framework (see Table 15). These top terms were clustered into six key themes [13]. This section complements prior research conducted by the authors of this article and introduces systems maps as sense-making tools towards emerging future systems. The first systems map created (see Appendix C, Figure 9), was developed with NVivo, a qualitative analysis software, and refers to the questionnaires used with executives during a second round of interviews in South America at EUMa and EUMb. It reveals the relationships among the themes through the 'child' nodes, which are the topics of questions posed to the executives within a specific theme. As explained in the Framework and Method section, the executives were each given a theme to reflect upon, according to their expertise and departmental responsibilities. Some executives had knowledge about different themes, and therefore, questions were exchanged and transferred. Another condition for questions to be transferred from one theme to another pertained to the importance of the theme for the topic of corporate culture, as it can be noted with the theme *From profit to purpose*, which was demonstrated to have relationships with all of the themes (16 relationships in total). This might be interpreted as a bias on the part of the researchers to impose the universality of one theme and its influence over other themes during the interviews. However, interviewees, when asked to provide input on the relevancy of the themes for the ethical culture of the organization and to identify potential interconnections among themes, consistently attributed a higher level of importance to the themes *From profit to Purpose* and *Environment and Sustainability*. Thus, interviewees underscored the transversal influences of these two themes on all other themes for the development of an ethical culture.

*Table 15. Top terms for each cluster*

| Six key themes - Clusters | Top Terms from interviews |
|---|---|
| **From profit to purpose** | Client autonomy, Better prices for consumers, Climate action, Data privacy and protection, Consumers want greener products, The focus on guaranteeing energy over production, Transitioning to an ecosystem of smaller companies, Market orientation versus engineering orientation, ~10% of world population without access to electricity, Society rejecting the logic of subsidizing renewables, A business model focused on quality services rather than solely on return on assets, Future business models surrounding energy storage, Distributed generation |
| **Cultural consistency** | From job for life to entrepreneurship, New generations inspired by tech culture, Mergers and acquisitions, The importance of subcultures, Culture building rather than imposing, Transitioning to an ecosystem of smaller companies, Importance of core values |
| **The role of leadership** | Tone from the top, Retirement of senior executives and the need for generational renewal, Less hierarchy, New generations inspired by tech culture, Creating new leadership positions due to novelties of the sector, The necessary competencies for future leaders, Ethical leadership and influence on subordinates |
| **Regulation and relationship with public institutions** | CO2 market and pricing, Coherent political framework, Coherent legal framework, Judicial (in)security, Modernizing legislation for the electric sector, Regulating distributed generation, High 'judicialization' of the electric sector, (Un)stable regulatory environment, Favorable regulatory guidelines for decentralization, Outdated regulations as opposed to technological evolution, Lobbying, Lack of political and regulator motivation for change |
| **Digital and technological advances** | Distributed generation, From consumers to prosumers, Capacity of energy storage, Use of electric cars, Digital revolution affecting businesses in the electric sector, Robotization, The effect of big data analytics and cryptocurrencies on businesses, Consolidation of renewable energy, Arrive at a business model similar to what tech companies have today, Use of technology to further understand the client's needs, Tech companies as new players, Data privacy and protection, Improving customer relationship and loyalty through digitalization, Influence of blockchain in the electric sector, Impact of AI in the workforce |
| **Environment and sustainability** | Water crises, CO2 market and pricing, Climate change, Renewable energy, Necessary adaptive measures to climate change, Environmental impact, Decarbonization, Low carbon economy, Energy sector inertia to change, High dependency on fossil fuels, Sustainable development goals, Limit global temperature increase below 2 degrees Celsius, Stranded assets, Colossal investments for the energy transition |

All six themes supported the building process to arrive at future scenarios. Nevertheless, there was a greater attribution to the level of importance and uncertainty surrounding the themes *From profit to purpose* and *Environment and Sustainability* that illustrate business model transitions towards climate action and sustainability. The following systems map (Figure 8) uses all top terms from both these themes and adds specific terms from other themes in order to elaborate the future scenarios. A description of the top terms used for the systems map in Figure 8 are provided in the Glossary (see Appendix A, Table 16). The systems map is supported by literature, by the expertise of the interviewees and especially driven by the purpose of the research which questions systemic change and adaptation of ethical culture. A business model transition towards climate action does not only depend on the will-power of organizations but also on various factors which may facilitate, or not, achieving ethical strategic priorities of the SDGs, as illustrated in three components of the framework (PESTLE, History and Business Idea).

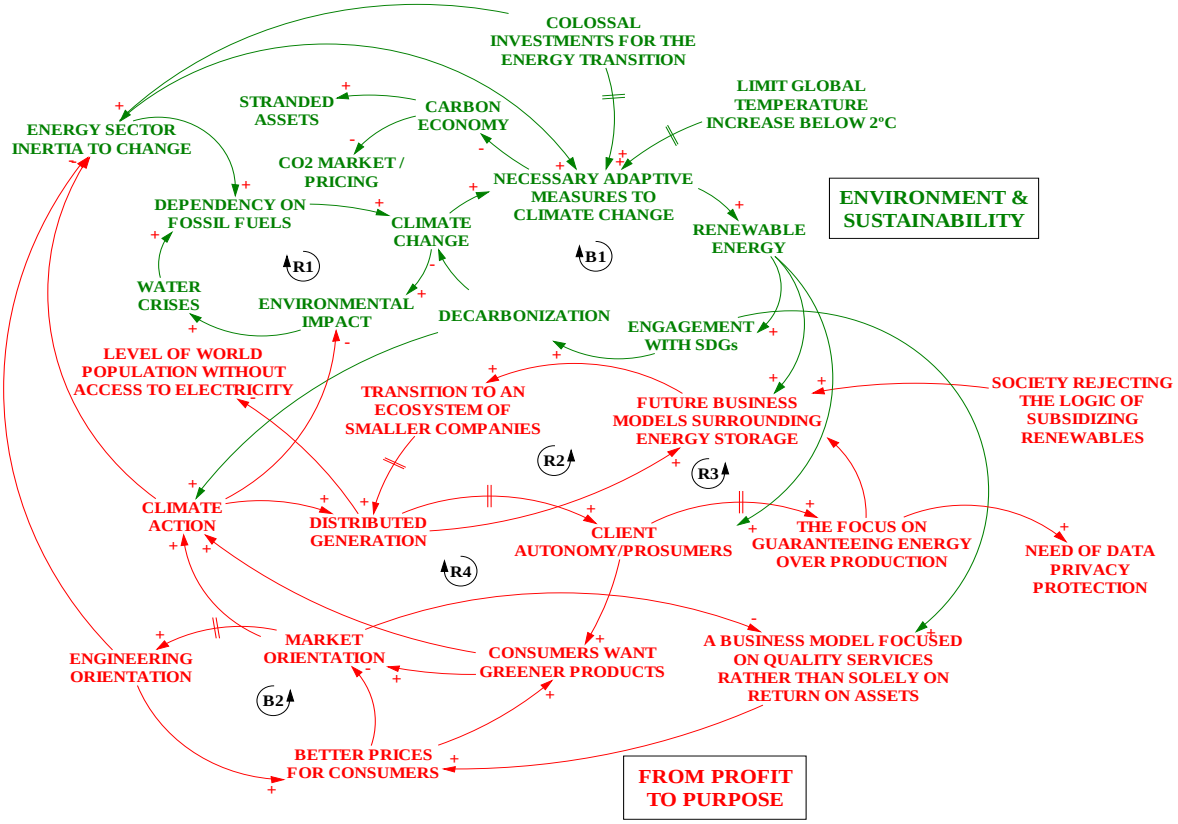


*Figure 8. Preliminary causal loop diagram (CLD) of the themes From profit to purpose and Environment & Sustainability.*

### *5.15.7 Four Scenarios to 2040 on Future Organizational Dynamics and Ethical Culture in the Private Electric Utility Sector*

**Scenario 1: From Profit to Purpose and Environment and Sustainability—From the Perspective of the Theme the Role of Leadership**

A central issue is whether or not organizations can make the transition from what have been dominant profit maximization practices to a fundamental transformation to purpose-oriented practices, which deliver value for all stakeholders, foremost including customers and society.

In 2040, new governance models have dictated the evolution of the value chain of the electric utility sector relative to generation, distribution, transmission and commercialization. The sector has experienced a human capital challenge with the retirement of more than 40% of the workforce, including management and leaders. The generational renewal process has attempted to align the incoming cohorts with the new profiles and their competencies and skills that are greatly different from those of past generations. The new generations are fully digitally literate, more concerned with safety and well-being, and attentive to analytics. Differently from those companies that were prepared for this transition, this endeavor has been a struggle for the companies in the sector that did not prepare their human capital for the necessary new skills that incoming leaders need. This scenario proposes that many companies have adapted their corporate governance structures and consequently the Chief Ethics Officer (CEthO) now is either just as highly ranked or above the Chief Executive Officer (CEO). Both sit on the board of directors, where the CEthO is usually vice chair. Although, companies have been highly influenced by tech culture, the ethical leader at the forefront in this scenario guides the business model focused on the quality of services rather than solely on the return on assets. In this future, it is the CEthO who must answer to shareholders and stakeholders in order to ensure that the company is firstly a purpose-oriented business for the collective value. The conceptualization of CEO activism and multinational activism during the 2020s played a major role that uplifted the importance of the CEthO. Other companies, that did not count on a CEthO for top leadership, transitioned with the Chief AI Officer (CAIO) or Chief Technology Officer (CTO), which was to be expected given the escalating dependence on technology in the early 2020s. In these companies, the status quo was maintained and little to no progress was made in terms of business ethics in a digitalized world.

The CEthO is a figure who is able to maintain the ultimate purpose of companies, which is to certify the best interests of society, customers, employees, shareholders and other stakeholders. Profit is the means and not the end in this business model. Furthermore, the CEthO has the necessary competencies for climate action and progress towards a continued fair energy transition. The leadership of corporations is motivated by all (she, he, they or other gender neutral pronouns) who understand the humanistic importance of being a leader and who rely on ethical frameworks for decision making that goes beyond share value. Alternatively, due to the delay in guaranteeing a higher level of importance to the role of Chief Ethics Officer, the necessary adaptive measures for climate change were stalled, and in 2040 we are still dealing with a dependency on fossil fuels in specific industries. Ultimately, for this reason, the electric sector inertia to change still exists and feeds into a reinforcing feedback loop towards runaway collapse (see R1 in CLD figure).

**Present weak signal:** CEOs, multinationals, central banks and investors capitalizing on eco-social activism or legitimately concerned therewith, are indicators of how the electric utility companies will need to learn to internalize into their ethical cultures the rising social empowerment of their employees and of society. Growing demands for more just work environments and for a sustainable energy transition will prescribe the competencies of the leader of the future.

### Scenario 2: From Profit to Purpose and Environment and Sustainability—From the Perspective of the Theme Regulation and Relationship with Public Institutions

According to the World Energy Outlook [88], in 2019, the electric sector represented 19% of energy consumption with prediction of an expected increase to 24% in 2040. In this scenario, in 2040, electricity has gained importance in the total energy consumption. This was largely accomplished with the electrification of transport, but also through the electrification of other utilities, such as heating (transition from gas/fuel to electric). Therefore, in this future the consumption of electricity increases through electrification. This is a future in which the production of electricity is decarbonized because it was able to achieve a successful renewable transition with the support of regulation. Regulation was able to manage the transition and align correctly the incentives of various agents in order to have the necessary investments for a decarbonized energy transition (see B1 in CLD figure). Nevertheless, regulatory milestones needed to be attained in order to ensure better policies,

decarbonize the economy and limit global temperature increase. This required not only the commitment of governments in building political and legal frameworks to favor mechanisms for climate action but also from companies with research and development (R&D) proposals to energy regulatory bodies and to financial and budget governmental entities to modernize the sector and generate a culture of trust, transparency and responsible investing. The corporate relationship and a collaborative development with public institutions needed to evolve with trust building processes during the 2020s and through the 2030s in order to avoid further judicial insecurity and to act as a protagonist in helping to shift the behavior of government for the benefit of society. This transparent and trust building ethical culture of electric utilities, for the well-being of society and the environment, played an important role in securing a climate action agenda independently of political ideology and interests.

The regulatory system, assisted by purpose oriented electric utility companies, guaranteed an open market to help ensure better prices for consumers with renewable energy production and fair access to renewable energy technologies for all levels of society. Electricity is now sold to domestic microgrid end users. This enabled company cultures to understand the diversity of their consumers and consequently diversify their workforce, intensify necessary competencies, and build ethical awareness on how to manage a closer digital relationship with customers. Finally, after a regulatory transition in 2030, Environmental, Social and Governance (ESG) reporting in 2040 has continued to be mandatory in the European Union and companies on the United States stock exchange. Consequently, most electric utility multinationals in South America and around the world need to abide to ESG reporting. This regulation also gave companies the leverage with ESG reporting to disseminate further a foresight culture to report on resilience and future crises assessments for each criterion.

**Present weak signal:** The signals that arrive from a regulatory perspective are probably the most difficult to detect across all four scenarios. The International Energy Agency has dedicated large-scale reports on future scenarios for the energy sector affected by current policy frameworks and these scenarios are recurrently revised. An up to date regulatory framework for a technology-intensive sector is dependent on a business-regulator productive relationship, as is an up to date regulatory framework for a social-intensive and purpose-oriented sector directed to further energy transition.

### Scenario 3: From Profit to Purpose and Environment and Sustainability—From the Perspective of the Theme Digital and Technological Advances

In 2040, new players have established themselves in the electric utility sector. Google, Apple, Amazon, Tesla and Facebook are among the tech companies who are now guaranteeing energy for their clients. The technological evolution was a roadmap of adaptation for the electric utility companies and led to a revolution in the relationship between electric utilities and clients. In this scenario, we are now definitely within a decentralized logic of assets. Society is producing its own energy (primarily with solar panels) which gave an impulse to the corporate–customer relationship. Traditional electric companies transitioned to become various smaller companies, which are the driving forces for decarbonization and complete electrification of mobility and transportation.

Electric utilities and new players that recently joined the sector are closer than ever to their clients and are present inside the clients' homes guaranteeing energy and with a business model to provide solutions based on client data. This is primarily accomplished with Artificial Intelligence (AI) and Machine Learning (ML), which provide information and make operational decisions. In this scenario, where technological autonomy is more prevalent, errors may occur, and after a review of regulations passed in the 2030s the companies will be held responsible for unethical actions that AI may cause, and not the technology itself. In this scenario, the customers in both South American and European countries have the opportunity to freely choose a supplier. The electric utilities had to go through a transformation where they are companies in service to customers. Prediction of their needs has become the skill set and foci of the culture of the organizations in the sector. This organizational cultural transition was one of the main turning points for the companies during the 2020s and 2030s.

In terms of guarantee and solutions, the corporate–customer relationship has become so close that electric utilities are now entering the insurance market, having understood that electricity is not the entirety of their business. Many electric utilities that did not adapt to the digital revolution were substituted by tech companies, which over the past decades had the advantage of possessing large quantities of customer data. More so, pressured by regulatory bodies and due to increasing and insurgent cyber-attacks during the 2020s and 2030s, tech

companies are also now at a competitive advantage with their cybersecurity mechanisms to certify the privacy and protection of clients' data.

As the culture of technology evolved during the 2020s and 2030s, in the year 2040 we are still learning how to deal with the fast pace of innovation and high-tech advances. Nevertheless, this scenario shows us that companies needed to strengthen a culture of collaboration to avoid the sense of individualism that technology fosters and to comply with the many regulations created to promote civilized online relationships, data privacy protection, cybersecurity and respect for a more diverse corporate environment.

**Present weak signal:** Towards the end of 2010s and in the beginning of 2020s technology was consolidated as a collaborative and bridging tool, however, it demonstrated capacity to also create divides and explicit opinions and views against minorities, facilitate access to disinformation/misinformation and disseminate online hate which transcends to the political and social realms. We are still learning how to filter and regulate these unethical actions. For this, in the 2020s attention should be given to signs of shifting behaviors that are a result of emerging new technologies and those that will eventually be used in the sector e.g., blockchain and machine learning.

### Scenario 4: From Profit to Purpose and Environment and Sustainability—From the Perspective of the Theme Cultural Consistency

In 2040, the shift to an energy tech model has obliged electric utilities to hire employees that have the same competencies or competencies superior to those who work at established tech companies such as Google, Tesla and Amazon. The term job for life has lost its meaning and there is a clear conceptualization of professional liquidity and ephemeral contracts in organizations. Employees are younger and entrepreneurial who after 3 to 4 years at an electric utility will start their own businesses with the support and interest of the electric utility company. Many other employees are hired only for short-term contracts and for specific projects without a clear connection to the company culture.

An electric utility multinational is no longer a company with a well-defined border, it is rather an ecosystem of small companies around the main multinational in a very loose way. During the 2020s and 2030s, M&As were intensified in order to keep up with innovation and technological evolution, which were at first favorable for the energy transition. Intensified

M&As weakened corporate purpose to benefit collective well-being and provide value for society. This is due to a business model that focused on acquiring emerging businesses in order that traditional electric utility multinationals could monopolize the market and suppress competition from other electric utilities and also from tech companies which are the new players in the sector. A grab and get all culture is the norm. What should have been a reinforcing feedback loop (see R2 in CLD) towards an evolution of distributed generation and widespread production of clean energy turned into a market-oriented model focused primarily on maximizing profit. The large ecosystem of smaller companies surrounding the core electric utility multinational made guaranteeing cultural consistency through the dissemination of core values a near to impossible task, which consequently affected the ethical culture of electric utilities with a persistence of mal practices.

**Present weak signal:** Multinationals find it difficult to achieve a common ground that will sensitize and educate a conglomeration of business units on issues of environmental and social responsibility. Lack of commitment to core values and diminished appreciation for subcultures may be some of the causes. With a larger ecosystem of subcultures this can accumulate over time and, therefore, the necessary measures to ensure connectivity, purpose, and a sense of belonging need to be implemented and accounted for structurally and methodologically.

## 5.16 CONCLUSIONS AND SCENARIO IMPLICATIONS

Scenario planning often focuses on mental models. As a rule, these are exceedingly difficult to penetrate, access, approach, modify or change. We are similar to the four blind men in the Indian fable groping the elephant, until we peek out from behind our blindfolds. Conventionally and by necessity businesses and activities in general function based on projections and predictions, so that when asked to consider pure possibilities outside the box, it is difficult for anyone to make that leap, to suspend beliefs.

The participant executives delivered fragments of the past and present as they perceived them to be and extrapolated to possible futures within their individual and collective realms of understanding. This research and their contributions took place for the most part in the years 2017, 2018 and 2019, before the 2020/2021 COVID-19 pandemic and the several catastrophic climate and technological events during this time. These repeatedly pointed to

ethical failures and magnified worldwide attention on them and on the responsibilities of industries, governments and leaders. Consequently, these have resulted in the increased engagement of industry leaders in issues of ethics and climate and social responsibility. However, it is evident that the participant executives already had these same concerns before the impacts of 2020/2021. The optimism, pessimism and neutralities of their visions of futures, interestingly, do not contemplate pandemics and their effects on the fabric of society or their own industry.

It is important to highlight that the scenarios here presented express broadly encouraging outcomes. This is a result of the optimistic assumptions shared by most interviewees as to where they believed the sector and their organizations were headed. Although their perceived mental models may have been constrained and limited by encouraging futures, the executives did not disregard challenges and barriers in their roadmaps to the future of their organizations, industry and sector.

As concluding comments for this article, we present an initial discussion of the Sustainable Development Goals (SDGs) that stand out across all four scenarios and how they may be observed as leverage points for specific scenarios. We also review the articulated business idea with respect to the adaptation to new business models and implications of closer business–customer relationships.

### *5.16.1 Scenario Implications and Business Idea Review*

Within an electric utility ethical system, the capacity to implement changes intended to achieve and adapt to a sustainable future depends on the confluence of distinct agencies such as policy-makers, leadership and society. Leaders as decision makers and moral agents in the electric sector need to take into account the flow of power and the tensions within current power structures, which may either impede or drive transformation. In organizations the importance of leadership committing to the 17 SDGs and their 169 targets is fundamental. EUMa and EUMb rely on SDGs [89] to support their corporate strategies for sustainability. Prioritizing some or all of the SDGs in multinationals and their subsidiaries is largely dependent on the type of industry and geographical context, chiefly guided by corporate strategy from headquarters. Increased accountability delegated to multinationals with SDGs at the fore of organizational goals, such as the appointment of a CEthO suggested in *Scenario*

*1*, is positive leverage for corporate transformation and reflects the need to understand the contextual realities of the multinational in different geographies. European headquarters, for example, may not always contemplate in their system the social challenges faced in South America. For this, *Scenario 1* reminds us of SDG 4 (quality education), SDG 5 (gender equality) and SDG 8 (decent work and economic growth) with respect to incoming cohorts of employees and leaders with new competencies. The generational transition in the labor market and the new competencies of employees require investments to improve education in the host society where the electric utility provides its services. This addresses SDG 10 (reduced inequalities) by providing the new generation access to new knowledge, new jobs and stability to build their careers and become leaders within an ethical framework. Furthermore, rethinking the contexts in which an electric utility multinational provides services it should be imperative to consider the economic and social deficiencies of the various countries where they operate. In South America again, SDG 1 (no poverty) and SDG 2 (zero hunger) are far from being met.

*Scenario 2, Scenario 3* and *Scenario 4* have, as a key feature, the joint commitment between government and private electric utilities aiming to ensure a fair energy transition for customers and stakeholders. Scenario 4 considers this government-business relationship from the perspective of the creation of numerous business units and a lack of cohesion in core values. The key features for these three scenarios approach SDG 17 (partnerships for the goals), with regards to assuring climate action with SDG 13, and a trust building ethical culture in electric utilities to assist in the development of necessary policies that will facilitate innovation with SDG 9 (industry, innovation and infrastructure). They also address necessary commitments to guarantee better prices for consumers through renewable energy with SDG 7 (affordable and clean energy), improve the quality of living in sustainable cities and communities with SDG 11 e.g., electrification of mobility, and guarantee responsible consumption and production of energy with SDG 12.

These three scenarios provide further insight into how the relationship between customers and electric utilities is changing. A closer relationship with clients and consumers and the transition to new business models means that there is room in future planning to reinforce ethical behavior with stakeholders and to understand the many facets of the ethical

responsibilities that pertain to this closer business–consumer relationship [90,91,92,93,94]. Furthermore, as exemplified by the articulated business idea in sub-section 5.15.3, a transition to new business models is already becoming a strategic concern for companies in the electric sector, which will challenge their current beliefs, values and capacity to accomplish the energy transition [95].

With a review of the articulated business idea, we see that both electric utilities for this research are in agreement about the development of infrastructure, technologies, and policies for renewable energy in favor of an advocated energy transition. This transition and a closer relationship with consumers, in the business idea, aims to provide better prices to consumers as renewable energy has a lower cost to generate and operate. In 2021, for example, we have seen, in countries around the world, record increases in prices due to regulations on CO2 pricing and impact of climate change. We can also consider that this was aggravated by the lack of past public and private commitment to and investment in renewable energy. Additionally, there is the need to include evidence of SDGs as leverage points in an organizational ethical system which stood out across all four scenarios. According to the executives, securing profit, which is only then oriented by purpose, was in their perception the most coherent path forward in order to be able to commit to the energy transition, to guarantee corporate strategies for sustainability and to ensure an ethical positioning in society. This leadership perception tends more to the organizational culture of maximization of corporate earnings, which still prevails and is seen as the only way to fulfill an ultimate goal for collective value. Beyond expectations for the implementation and improvement of policies and of government mobilization, ideally, businesses should embrace the opportunity to anticipate the public sector as protagonists for climate action and to propose to government an ethical analysis on ‘climate-mitigation assessments’. Companies should recognize their role as champions of the necessary cultural change across the whole of the ‘climate-change community’. Lenzi et al. [96] argue, for example, that “ethicists need to be involved from the outset in developing, modeling and evaluating scenarios for reducing emissions” (p. 304). In a corporate setting with a strong purpose-oriented structure, there could be more investment and capability to train ethicists in “climate mitigation research” and, backed by science, they would better understand the impact of new technologies used in the energy transition. This argument would concur with and further incentivize three distinctive competencies, of EUMa

and EUMb, articulated in the business idea (cultural transformation, key player in energy transition and forward-looking and visionary knowledge of the electric sector). On the other hand, ethicists can revise and improve corporate rationality in two other distinctive competencies, profit oriented by purpose and leader in renewable energy. The first may be conditioned by recurrent fine-tuning of corporate purpose, and the latter by changing the corporate rationality to consolidate the organization as a reference in renewable energy, rather than striving only to be the leader.

The IPCC's 6th assessment released during the final editing of this article details in an almost 4000-page report the dire consequences of human activity on global warming. With a dedicated summary for policy makers, the report clarifies that the public sector is a key actor and there are urgent policies and adaptive measures that need to be implemented by governments around the world. Clearly, the report should not be overlooked by businesses and especially by the private electric sector, which is a major player in confronting climate change, by reducing carbon emissions and devoting efforts to the production of clean energy with renewable sources.

### *5.16.2 Future Research and Limitations*

From the tenets of pragmatism and systems thinking future research can question the collective goals and functioning of these possible new business models. It is imperative to challenge current assumptions and reframe strategies that although they may exhibit purposeful ambitions for the energy transition, they may still overlook ethical responsibilities when guided primarily by profit. This gives further room for researchers to use scenarios on the future of the electric utility sector and, with this, to review and address the challenges to tackling intergenerational fairness and justice [12,97]. A subject, which has gained momentum in foresight and futures studies, however, with little or no concrete scientific research.

The research for this article was limited to the participation of top executives through dialogue interviews. Scenario planning is a participatory and iterative process. These inclusive dynamics of the methodology attempt to narrow the gap of limitations for when the process arrives at its future outcomes and strategic implementation. Nevertheless, this is infrequently the case with scenario planning. There is a continuous process of revision of

scenarios, which is exhaustively required with the added participation of experts and stakeholders, to improve plausibility and relevance of scenarios for a given subject. Chiefly, when confronting organizational ethics, participatory environments for reflection are ideal. However, even when participatory environments are organized, structured and facilitated, they are not always capable of including the "highest levels of accountability" and "democratic values" of all who represent the socio-political ecosystem [98]. Duckett et al. [98] debate the relevance of Habermas' Theory of Communicative Action in an attempt to arrive at 'ideal speech situations' and improved democratic participatory dynamics with scenario planning. Yet still, organizational barriers and cultural particularities may reveal organizational reluctance to engage in an ideal participatory, democratic and inclusive environment to reflect upon ethics [6,99].

## Appendix A

*Table 16. Glossary for Causal Loop Diagram (CLD)*

| Term | Definition |
|---|---|
| *Client autonomy / Prosumers* | Equitable share as more of society produces and manages its own energy. |
| *Better prices for consumers* | Fair access to renewable energy systems that will guarantee and provide better prices for all consumers. |
| *Climate action* | Business models that align aspirational values to act on climate change with virtues in order to put those values into practice. |
| *Data privacy and protection* | Shift in business models which will require greater consideration of clients' data privacy and protection. |
| *Consumers want greener products* | Incentives to facilitate the use of environmentally friendly products by consumers. |
| *The focus on guaranteeing energy over production* | Shift in business services within a reality of prosumers and distributed generation, which will guarantee energy for consumers rather than produce energy for consumers. |
| *Transitioning to an ecosystem of smaller companies* | Uninterrupted transformation of the electric sector towards a decentralized energy market. |
| *Market orientation* | Corporate short-termism and myopic culture with an over-riding financial perspective. |
| *Engineering orientation* | Corporate long-termism, attentive to detail and risk averse. |

| | |
|---|---|
| *~10% (Level) of world population without access to electricity* | Technology, measures, and services available to provide fair access to electricity. |
| *Society rejecting the logic of subsidizing renewables* | Multitude of available technologies for renewable energy, reduction of costs with renewable energy at a comparative advantage over fossil fuels. |
| *A business model focused on quality services rather than solely on return on assets* | Shift in business culture (e.g., people-centered, forward thinking, responsible, inclusive and fair) |
| *Future business models surrounding energy storage* | Cultural transformation based on the relationship with consumers. |
| *Distributed generation* | Variety of technologies (solar panels, wind turbines) that will enable the generation of clean energy by clients. |
| *Water crises* | Droughts and lack of water resources to produce energy. In regions that have not sufficiently invested in renewable energy this will lead to the need for using other back-up sources (e.g., thermal power). |
| *CO2 market and pricing* | A market with a political and regulatory framework which will influence decision-making in the electric sector towards social welfare (e.g., generating electricity with coal being more expensive than with gas). |
| *Climate change* | Human influence on the warming of the climate system with impacts on society and nature. The energy sector is the main generator of greenhouse gas emissions. |
| *Renewable energy* | Energy generation from natural resources (e.g., Solar energy, wind energy, hydro energy etc.) |
| *Necessary adaptive measures to climate change* | Organizational perception of climate change risks and uncertainties in order to incorporate ethical decision making processes to reduce emissions, decarbonize, upskill workers, enable a fair energy transition for workers and communities. |
| *Environmental impact* | Risks to human and ecological systems (e.g., droughts, sea level rise, temperature extremes, impacts on biodiversity and ecosystems, food security, impact on vulnerable and disadvantaged populations). |
| *Decarbonization* | Corporate purpose to reduce carbon intensity of electricity generation. |
| *Low carbon economy* | Efficient energy system less reliant on fuel combustion. |

| | |
|---|---|
| *Energy sector inertia to change* | Overdependence on fossil fuels, long term and costly investment in infrastructure for electric power plants or hydrocarbon exploration. Therefore, large investments in long-term assets causes inertia to undertake change towards a clean energy transition. Differently from the electric sector, which refers specifically to utilities working with hydropower, wind energy, solar energy, natural gas, nuclear energy and coal power plants, the energy sector, as a whole, also includes fossil fuels industries. |
| *Dependency on fossil fuels* | The degree of dependency on fossil fuels (e.g., coal, oil and natural gas) |
| *Sustainable Development Goals* | Cultural shift for corporate engagement and investment to act and respond to the Sustainable Development Goals. |
| *Limit global temperature increase below 2 degrees Celsius* | Corporate commitment and promotion of the Paris Accord to limit global warming below 2 degrees Celsius. |
| *Stranded assets* | Current investments for a clean energy transition to reduce greenhouse gas emissions may be insufficient for the future (e.g., gas as a bridge fuel for the energy transition and to substitute coal in the mid-term). |
| *Colossal investments for the energy transition* | Mobilization of investment and engagement of pivotal actors to finance the clean energy transition (private and public). Private sector moving into new businesses for energy transition. Who should bear the risk? |

## Appendix B

*Table 17. Socio-structural system EUMa & EUMb*

| Pertinent Characteristics | Description / Purpose |
|---|---|
| *Ombudsperson* | A corporate figure who receives anonymous complaints, manages ethical complaints, evaluates the ethical performance of the organization, and proposes strategies and projects to consolidate the organizational ethical culture (e.g., tone at the top and tone at the middle). The ombudsperson may work side by side with the compliance department; however, the ombudsperson is not responsible for compliance related issues. An ombudsperson leads the Ethics Committee and also participates in other committees as well. |
| *Ethics & Compliance Officer* | Usually a corporate figure with legal background who is responsible for both the legal and ethical branches of the organization. The responsibilities may overlap with those of the |

| | |
|---|---|
| | Ombudsperson such as proposing ethics programs and reviewing codes of ethics. |
| *Ethics Committee* | Governance, structure and dynamics of an Ethics Committee may differ across organizations. The Ethics Committee is usually chaired by a member of the Executive Board of Directors and supported by a Committee Secretary (Ethics Officer, Ombudsperson, and Compliance Officer). The committee and its members analyze ethical incidents, infringements and complaints, revises internal and external regulations, and assesses corporate practices and conduct, deferring to the Code of Ethics. The Environment & Sustainability Committee works closely with the Ethics Committee and, in some instances, they may be integrated as one. |
| *Transversal integration* | An organization has transversal integration when competencies are transferrable to any given department or business unit. EUMa and EUMb avoid creating organizational silos with integration strategies and/or cross-fertilization processes between units. Beyond competency development, a transversal integration enables the dissemination of core corporate values and enables cultural cohesion. |
| *Hierarchical structure* | The concept of hierarchical structure differs between geographies. EUMa and EUMb in South America demonstrated a capacity to adapt well to a more informal hierarchical structure, in which access to and proximity of leadership is more evident. EUMb in South America, for example, designed an open space setting for top executives who traditionally would have had their own enclosed offices. On the other hand, EUMa in Europe still struggles to adapt to a more informal setting where hierarchy is still predominant and evident. This is also influenced by local geographical culture. |
| *Exit interviews* | An exit interview or survey is conducted with employees who are leaving the company. These interviews help characterize if the employees were satisfied with their professional opportunities, achievements and relationships in the company. The interviews also try to identify if employees were respected by colleagues, pressured to act unethically, or had suffered retaliation. |
| *Code of Ethics and Conduct* | Codes of ethics and conduct are documents elaborated internally to guide the companies and its employees to follow moral and ethical standards. Codes of ethics may also be specific to professional expertise (e.g., financial officers), management levels (e.g., middle and top management) and to those external to the company (e.g., suppliers). Aside from the legal aspects that are introduced to codes of ethics, companies should also include in the documents ethical deliberations beyond compliance (e.g., responsibility, human rights, and fairness). |

| | |
|---|---|
| *Reputational monitoring and assessment* | Companies deem reputation important to ensure and benchmark market and social acceptability. EUMa and EUMb monitor their reputations with regards to their past and current practices/actions. Additionally, reputational risks are also assessed in order to avoid negative repercussions for the companies in the future. |
| *External ethics assessment* | Ethical assessments by external entities provide organizations certifications and a benchmarking of compliance and ethical performance, as well as enhancing reputation. |
| *Internal ethics assessment* | Internal ethical assessments holistically monitor the ethical performance and practices of companies. Other ethical assessments may support the ethics office to investigate weak signals or early warning signs for corporate preparedness. These signals may be related to a commercial, economic, or financial event, and may eventually develop into ethical incidents. |
| *Management of competencies* | An internal behavioral analysis is applied to manage and amplify the competencies of employees according to the evolution of the organization and its future context. As a means to improve the professional development of employees and integrate professional profiles of different geographies, this process identifies the new necessary competencies of employees from different levels in the company. |
| *Sarbanes-Oxley Act of 2002* | Following the copious ethical and legal misconduct of multinational corporations (e.g., Enron and WorldCom), the United States Congress passed the Sarbanes-Oxley Act of 2002. The law mandated the regulation of publicly traded companies on the United States stock exchanges. It regulated corporate conduct, set auditing standards and conduct, and ensured certification of financial statements from top executives in order to prevent fraudulent financial reporting [100]. |
| *Stakeholder engagement and management* | EUMa and EUMb have set internal structures and standards (e.g., AA1000 Stakeholder Engagement Standard) to identify, engage, manage and dialogue with stakeholders. Steps include: 1. Internal perception by mapping relevant stakeholders and identification of critical topics for stakeholder engagement; 2. External perception and stakeholder relationship through diagnostic procedures such as dialogue forums, surveys and workshops. |
| *Corporate University* | Corporate universities are strategically important for organizations to upskill and train employees, raise awareness and improve organizational learning. As mentioned in the cultural system section, the corporate university also has an important role in developing the organizational culture in EUMa. |
| *Strategic planning for sustainability* | Both EUMa and EUMb have outlined strategic priorities for sustainability. These strategies have been aligned to take action on some or all Sustainable Development Goals. |

# Appendix C

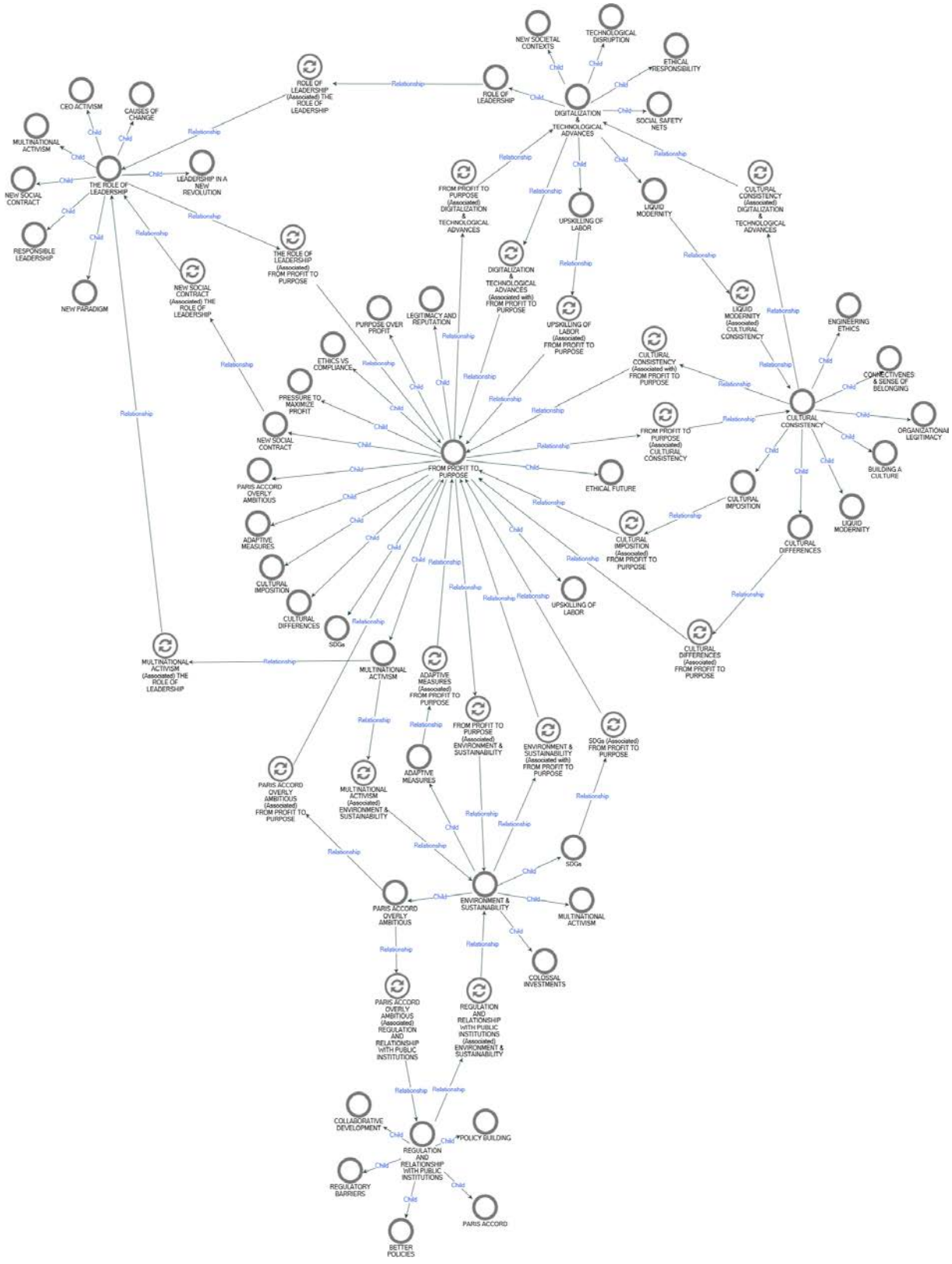


*Figure 9. NVivo software systems map of interview questions and themes (Relationships).*

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# APPENDIX

## APPENDIX A: FIRST PHASE FIELDWORK – INFORMED CONSENT

### Promotion of Ethical Culture in Transnational Companies

You are invited to participate in a research study conducted by Rodrigo Dal Borgo, who is a PhD candidate from the Centre for Applied Ethics at the University of Deusto. Mr. Dal Borgo is conducting this study for his doctoral thesis. Dr. Pedro Manuel Sasia Santos is his academic supervisor from the University of Deusto.

Your participation in this study is voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate.

**Purpose of the study**

The purpose of this study is to analyze how scenario planning, a method of prospective analysis, can consolidate or help to rethink a multinational's organizational ethical culture given the rapidly changing, turbulent and uncertain contextual (external) and transactional (internal) environments of today. Furthermore, the project wishes to understand how your company's ethical culture confronts, and is adaptive to, this critical combination of events, by identifying driving forces, ethical risks, individuals, groups and entities that could intervene in changes or not, and if their world view is consistent with the needs and concerns deriving from the contextual environment.

There is a need to deeply consider who and what will reshape the future, the degrees of influence wielded by these three: civil society, business and government, and the interactions and relationships among them and with other stakeholders.

The objective of scenario planning should be to help adapt or consolidate the organizational culture by making external and internal stakeholders 'question their model of reality and 'rethink their world view'. A central hypothesis is that by interaction among external and internal stakeholders new and possibly heretofore unimagined ethical risks will be revealed, which in turn will enable stakeholders to visualize alternative pathways for the future. In order to proceed with this project, a series of interviews will be conducted and subsequently four workshops will be held in which a diverse group of stakeholders will debate among themselves in order to arrive at a common ground and envision the future role of organizational culture.

During this initial phase of the field work the focus will be on open ended and dialogue interviews. I will ask you to give feedback on subjects of your own expertise and on different factors and trends that you believe could impact the organizational culture.

**Expected outcomes**

The possible contributions of this work, carried out through prospective analysis, are to prepare stakeholders and decision makers for an uncertain future, for the dynamics of organizational change in business and government, to incorporate ethical perspectives while analyzing future scenarios, to confront long term concerns as possible ethical risks and to mobilize and align key stakeholders. Furthermore, with the advances of technology new ethical considerations will arise and here there is a need of a forward looking and multiple scenario analysis to prepare organizations and society to respond to ethical risks and their consequences. This requires interdisciplinary and inter-sectoral approaches where social, technological, environmental, economic and political players interact and share their realities and knowledge. Probably one of the main challenges, in dealing with diverse stakeholders while analyzing trends, uncertainties, ethical risks and driving forces, is achieving a common ground, underpinning fairness and generating trust. I would hope that this project would serve as a lesson and paradigm to be applied in similar contexts and that my work could contribute to the research and to the further development of the practice and study of the promotion of organizational ethical culture.

**Potential risks**

There are no potential risks within the parameters of the study because the identity of participants is confidential and this study does not entail any physical or interventional aspects. However, due to an interactive and participatory methodology, disagreements may occur and it is exactly the purpose of this method to achieve a common ground and generate trust among participants in order to agree upon diverse possible future scenarios.

**Potential benefits and compensation**

There is no financial benefit or compensation for your participation in this project. Still, this proposal of interaction among external and internal stakeholders who are knowledgeable and informed aims to promote an ethical culture and also organizational learning which is intended to benefit the organization as a whole as well as the individual stakeholders and employees of the corporation. Considering the size, importance and reach of the company, better governance and policies can also have a significant impact and influence on the well-being of society as a whole.

**Confidentiality & Protection of data**

- There is a confidentiality agreement and a collaboration agreement signed by Deusto International Research School (DIRS), the Centre for Applied Ethics – University of Deusto, the participating corporation, the supervisor and the PhD candidate.

- All information and data collected during the interviews and workshops will remain confidential and securely stored. Digital resources will be used to collect, process and store data.

- The anonymity of the participants will be safeguarded. The interviews and workshops will be recorded and the recordings will be used only by the researcher and, exceptionally if needed, by the project supervisor.

- I will store and organize consent forms for every corresponding interview in order to guarantee that all participants in the interviews or workshops had signed them prior to the activities.

- I will not use your name in any of the information derived from this study or in any of the research reports. Any information used for publication will not identify you individually.

**Participation and Withdrawal**

Participation in this study is voluntary and you may withdraw at any time.


**Contact details of PhD Candidate / Researcher**

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PhD Candidate and Assistant Researcher

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**I understand the procedures described above and I agree to participate.**

_____

**Printed Name of Participant and Job Title**

_____

**Signature of Participant and Date**

_____

**Signature of Witness and Date**

## APPENDIX B: SECOND PHASE FIELD WORK – INFORMED CONSENT

**PROJECT TITLE:** *Promotion of Ethical Culture in Transnational Companies: An interdisciplinary case study on the practical relevance of future scenarios to elicit cultural futures*

You are invited to participate in a research study conducted by Rodrigo Dal Borgo, who is a PhD candidate from the Centre for Applied Ethics at the University of Deusto. Mr. Dal Borgo is conducting this study for his doctoral thesis. Dr. Pedro Manuel Sasia Santos is his academic supervisor from the University of Deusto.

Your participation in this study is voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate.

### RECAP OF THE STUDY

The first phase of the research was initiated with futures thinking dialogue interviews conducted at a multinational energy company in Europe and its subsidiary in South America. With the interviews we proposed to focus on the possible future cultural changes and on how the company may need to adapt to ethical challenges as they are encountered in society and within the organization in the future. This futures thinking exercise developed with top managers helped to identify partial truths which supported logical clusters to then elicit six key themes that may shape the company's ethical culture in the future.

Six key themes: From profit to purpose, Cultural consistency, The role of leadership, Regulation and relationships with public institutions, Digital and technological advances, Environment and Sustainability.

These results were presented in a paper entitled Towards a diagnosis of organizational ethical culture with futures thinking and scenario planning. The paper was sent to the journal IEEE Transactions on Engineering Management and is undergoing review.

### PURPOSE OF THE CURRENT STUDY

Following the scenario planning methodology and based on the themes identified thus far, the purpose of the current study is threefold: First, to identify weak signals for each theme through interviews; second, review the trends and weak signals that were identified within the themes; and third, consider how they could disrupt, amplify, or accumulate overtime.

### EXPECTED OUTCOMES

The possible contributions of this work is to integrate this research as a compliment to help prepare companies for an uncertain future, for the dynamics of organizational resilience, adaptation and change, to incorporate ethical perspectives while analyzing future scenarios, to confront long term concerns as possible ethical risks and to mobilize and align top managers to think about the future of their organizational cultures and ethical challenges that they may face ahead.

**POTENTIAL RISKS**

There are no potential risks within the parameters of the study because the identity of participants is confidential and this study does not entail any physical or interventional aspects.

**POTENTIAL BENEFITS AND COMPENSATION**

There is no financial benefit or compensation for your participation in this project.

**CONFIDENTIALITY & DATA PROTECTION OF DATA**

- There is a confidentiality agreement and a collaboration agreement signed by Deusto International Research School (DIRS), the Centre for Applied Ethics – University of Deusto, the PhD's supervisor and the PhD candidate.

- All information such as names, e-mails, positions and data collected during the interviews and workshops will remain confidential and securely stored. Digital resources will be used to collect, process and store data.

- The anonymity of the participants will be safeguarded. The interviews will be recorded, and the recordings will be used only by the researcher and, exceptionally if needed, shared with the project supervisor for knowledge and not for use.

- I will store and organize consent forms for every corresponding interview in order to guarantee that all participants in the interviews or focus groups had signed them prior to the activities.

- I will not use your name in any of the information derived from this study or in any of the research reports. Any information used for publication will not identify you individually and I will not share any other information that permits identification.

**PARTICIPATION AND WITHDRAWAL**

Participation in this study is voluntary and you may withdraw at any time

**Contact details of PhD Candidate / Researcher**

Mr. Rodrigo Dal Borgo

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I understand the procedures described above and I agree to participate.

_____

**Printed Name of Participant and Job Title**

_____

**Signature of Participant and Date**

_____

**Signature of Witness and Date**

## APPENDIX C: FIRST PHASE FIELD WORK QUESTIONNAIRE

The following are introductory exploratory general questions about what you think and perceive about your sector and your general environment. The time horizon to consider is up to 2025. There are no right or wrong answers. These thoughts together with those of others are to help you and all of us to try to better understand where we are at present, where we have been in the recent past and where we think we might be heading in the near future. This will serve as a beginning to a process whereby you may choose to join workshops to discuss these and similar issues that are of interest to you.

1. *Clairvoyant*: If you could speak with an energy sector oracle from 2025, what three things would you like to know about the sector?
2. *Bad scenario*: If your company or the energy sector were to have a significant crisis by the year 2025, what might have caused the collapse and why?
3. *Good scenario*: If the energy sector were thriving, growing and moving in a genuinely positive direction by 2025, what would be true of it? I.e. What things would be right/good/positive about it?
4. *Inheritances from the past*:
    a) What has surprised you, pleasantly or unpleasantly, about your company and the energy sector in recent years?
    b) What have been the memorable turns and why?
5. *Important decisions ahead and priorities*:
    a) What are the major challenges to be faced by your company and energy sector professionals in the next five years?
    b) What are the obstacles to be overcome that keep you awake at night?
6. *Constraints in the system and changes that need to be made*:
    a) What would hinder the field from moving past these obstacles?
    b) What forces could constrain your company or the energy sector?
7. *Epitaph*: Imagine that your program is in danger of being completely cut. What is your argument for keeping it?
8. *Addendum*: What would be some signs that your company or the energy sector is moving in a positive direction?
9. *Addendum 2*: Any other uncertainties in the environment that might impact the future of your company or the energy sector?

**De Bono's Thinking Hats**

| | |
|---|---|
| White Hat: Information | What defines an organizational culture?<br>What defines an ethical organizational culture? |
| Red Hat: Emotional perception | What are your experiences with successful and unsuccessful organizational cultures?<br>In your past experiences and future perceptions, what defines a successful organizational culture?<br>In your view what elements and methods are important? |
| Black Hat: Challenges | Why are certain aspects or methods not helping? What problems are there with using quantitative methods? |
| Yellow hat: Positive view | What aspects and methods do help? In what ways are quantitative methods good for the organizational culture? How can qualitative methods also help? |
| Green hat: Creativity | If the methods applied by the organization to consolidate an organizational culture did not work, what else can be done? |
| Blue hat: Summary and conclusions | What did you learn from the methods applied by your company to consolidate or strengthen the ethical organizational culture? |

## APPENDIX D: SECOND PHASE FIELDWORK QUESTIONNAIRE

**A multiplicity of interviews that will help identify the weak signals of the six key themes that may influence organizational culture.**

1. **Organizational Culture:**
    a. What signs of Health can you identify of your company's Organizational Culture?
    b. What signs of Illness can you identify of your company's Organizational Culture?
2. **Future of Work**
    a. Do you have an example of how your company deals with the challenges and especially the ethical challenges related to the Future of Work?
        i. What do you consider to be successful engagement with these challenges?
        ii. How are you and your department and employees involved?
3. **Six Key Themes and Interconnections**
    a. Interviews conducted in Europe and in South America, during the first phase of research helped identify **Six Key Themes** that may shape the future of organizational culture**.**
        i. Which ones do you think are most relevant at this time and are there any that stand out more than others to you?
        ii. In your view, which of the themes have causal relationships or are most strongly interconnected?

**THEME:**

**Cultural Consistency**

1. **Cultural differences:** Studies have shown that Mergers & Acquisitions can fail due to organizational cultural issues. Seen that large companies are constantly selling and buying other companies, how can cultural differences be respected when M&As are made?
1. **Cultural imposition:** What are the ethical challenges when we attempt to seek cultural consistency? Is there a way to avoid cultural imposition?
2. **Building a culture:** How can a culture be built rather than imposed? What are the measures taken to do so?
3. **Connectiveness & Sense of Belonging:** Considering that in a multinational different cultures are normal, however there is a concern to maintain the same values across these different cultures. What are the elements to create connectiveness and a sense of belonging?
4. **Liquid Modernity:** We could interpret that the modern world favors extreme individualism and lack of stability. What role do companies play in this change of nature and behavior, what is the importance of promoting collaboration and shared values within the company due this sense of individualism and lack of stability that technology has developed in our society?

5. **Engineering Ethics:** In 2003, NASA faced scrutiny and investigation following a disaster with the Columbia space shuttle. One of the main causes for the accident was attributed to its organizational culture and in their report NASA issued one whole chapter on the organizational causes of the accident. How would you identify failures in current engineering ethics and culture? Based on my prior research and studies on engineering ethics, how do you deal with the fact that engineering ethics has shifted the focus onto big technological issues as opposed to the basic engineering that is paramount for public safety and welfare?
6. **Organizational legitimacy:** In terms of identifying organizational legitimacy it is possible to define that legitimacy is a congruence between the organization and its cultural environment. Therefore, "cultural definitions determine how the organization is built, how it is run and simultaneously, how it is understood and evaluated" by society (Suchman, 1995). In your work and in your organization, how is organizational legitimacy understood?
7. **Social Safety Nets:** By aligning technology and the future of work an important element is social security, the social safety net of the future. How can current social protection systems be developed to be more flexible to adapt to changes in working patterns?
8. **Role of leadership:** How is the role of leadership changing due to technological advances? What is the profile of an ethical leader in the future?
9. **Weal signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information. Therefore, I ask you what is or are the weak signals that you can identify or think of when we discuss the cultural consistency the company? How do we connect it with other pieces of information or corporate cultural elements?

**THEME:**

**Digitalization and technological advances**

1. **New societal contexts:** Considering that in the future we will have more and more prosumers, how is that changing the way that multinational companies in the electric sector perceive themselves in a new societal context? What will be their role in the future?
2. **Upskilling of labour:** In the rich world, recently, news articles have reported that technology has been helping to develop more jobs. Is the rhetoric that technology taking is taking jobs away and creating more unemployment, is this a hoax? Or is the rich world actually giving people the necessary skills for the future?
3. Continuing on this topic on necessary skills that people need for the future, what type of serious work is being done in Brazil to educate and upskill the existing workers as well as the population in general?

4. **Ethical responsibility:** In a world where technology is fully autonomous, whose responsibility will it be when errors occur? For example, who will be responsible for the unethical actions that A.I. may engage in?
5. **Technological disruption:** For the electric sector, what technologies can and will considerably disrupt the sector and the companies? In this context, what kinds of disruptions are possible?
6. **Liquid modernity:** We could interpret that the modern world favors extreme individualism and lack of stability. What role do companies play in this change of nature, what is the importance of promoting collaboration and shared values within the company due the sense of individualism and lack of stability that technology has developed in our society?
7. **Role of leadership:** How is the role of leadership changing due to the technological advances? What is the profile of an ethical leader in the future?
8. **Social Safety Nets:** By aligning technology and the future of work an important element is social security, the social safety net of the future. How can current social protection systems be developed to be more flexible to adapt to changes in working patterns?
9. **Weak signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information, therefore I ask: In your view, what is or what are the weak signals that you can identify or think of when we discuss about the digital and technological advances today? How do we connect this weak signal with other pieces of information or corporate cultural elements?

**THEME:**

**Environment & Sustainability**

1. **Multinational activism:** In a Forum I participated in Europe, one of the participants asked two CEOs to imagine a world in which a populist leader such as Le Pen, in France, or Geert Wilders in the Netherlands came to power. He then posed to the CEOs, how that would change their "activism". As seen from abroad, the external view, is that this is the reality in Brazil, where Bolsonaro is reported to be a populist far-right leader in power. How then could Bolsonsaro's leadership influence a multinational's activism?
2. **Paris Accord Overly Ambitious:** According to a recent IPCC report very few countries, regions, cities, communities or businesses are capable to adapting to the Paris Accord's ambitions. With this in consideration how do you reconcile that and what can be done to accelerate the environmental goals? What are the different positions you know of and which ones do you take most seriously? As an ethical prerogative, what can companies like yours do to accelerate the achievement of the goals both for themselves and communities?

3. **Adaptive Measures:** Do you think that few necessary adaptive measures are being discussed to confront climate change and that issues on climate change are not being taken seriously?
4. **Colossal Investments:** We could say that many measures to adapt need colossal investments that are required for an energy transition and to achieve the reduction in carbon emissions. Do you believe that the balance sheets (balanço patrimonial) of traditional businesses are inadequate for the volume of investments that will be required in the future? Why? Are huge investments the only way?
5. **SDG Goals:** Are companies doing enough to achieve the SDGs? What more can we do? Do you see companies using SDGs for image and not for purpose?

**Weak Signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information. Therefore, I ask: In your view, what is or what are the weak signals that you can identify or think of when we discuss about climate change and sustainability today and in the future? How do we connect it with other pieces of information or corporate cultural elements?

**THEME:**

**From profit to purpose**

1. **Purpose over profit:** There has been a recurrent discussion about companies giving more importance to purpose rather than focusing on maximizing profit. Some terms such as CEO activism or Chief Truth Officer have been coined recently in literature and among leaders of multinationals. How do you see companies putting purpose over profit? Is it a trend that can be consolidated in the future?
2. Can the goal not to seek to make a record profit be possible? If so, how? If not, why not?
3. **Ethics vs Compliance:** What cultural approach does your company have towards ethics & compliance?
4. **Ethical future:** How does the company visualize this question of adaptation towards an ethical future? What are the important key elements to be an ethical company in the future?
5. **Multinational activism:** In a Forum I participated in Europe, one of the participants asked two CEOs to imagine a world in which a populist leader such as Le Pen, in France, or Geert Wilders in the Netherlands came to power. He then posed to the CEOs, how that would change their “activism”. As seen from abroad, the external view, is that this is the reality in Brazil, where Bolsonaro is reported to be a populist far-right leader in power. How then could Bolsonsaro’s leadership influence a multinational’s activism?
6. **Ethical positioning:** Consequently, how can this situation influence the ethical positioning and culture of the company?
7. **Legitimacy and Reputation:** Public distrust, lack of legitimacy and damaged reputations are reasons why companies may transform their culture from profit to

purpose. How can this transformation be the way to regain trust, reputation and fix damaged legitimacy? What else should be done? How does your department act on these issues of legitimacy and reputation?

8. **SDG Goals:** Are companies doing enough to achieve the SDGs? What more can we do? Do you see companies using SDGs for image and not for purpose?
9. **New societal contract:** There has been reflections on building a new societal contract. What should we expect from businesses to rethink a new societal contract?
10. **Pressure to maximize profit:** Quote from Gabriela Ramos OECD Chief of Staff: "Companies are willing to do more for purpose, however the pressure to maximize profits will impede that." Do you agree with her? How do you believe the pressure against doing more for purpose is exerted and how does it work internally?
11. **Weak Signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information. Therefore, I ask you, what are the weak signals that you can identify or think of when we discuss the corporate transformation from profit to purpose? Is this related to an ethical awareness and how do we connect weak signals with other pieces of information or corporate cultural elements?

**THEME:**

**Regulation and relationship with public institutions**

1. **Regulatory barriers:** How does regulation influence the ethical culture of a company? Here we may think about regulatory barriers and outdated regulations that do not keep up with the fast-changing pace of technology.
2. What are the regulatory barriers in discussion right now that are relevant for the company's ethical positioning and for the ethical positioning of the electric sector itself?
3. What are the main regulatory issues being discussed now in the electric sector that the company sees as important and positive and also those that are detrimental to a purposeful evolution of the company?
4. **Collaborative development:** How does your company maintain a close discussion with public institutions in order to develop regulations that are necessary for the well-being of stakeholders and society?
5. **Better policies:** In your view what are the necessary measures in order to develop better policies?
6. **Paris Accord:** A recent IPCC report talks about the challenges in transitioning to a 1.5 degree Celsius world and that the possibility of keeping global temperature well below 2 degrees Celsius is overly ambitious and probably not possible for the stipulated time frame. Do you agree, and if so what are the impediments for this considering the necessary measures that developing and developed countries would need to take?
7. **Policy Building:** With regards to policy building there can be support from three pillars: Design, entitled to expertness; Legitimacy, which discusses fairness; and

Implementation, which discusses reality in which policies are implemented. How does the interaction with public institutions, with regards to policies and regulation, reflect on what we can, what we want and what we must do?

8. **Weak Signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information, therefore I ask you what are the weak signals that you can identify or think of when we discuss about the development of better policies and regulation? How do we connect it with other pieces of information or corporate cultural elements?

**THEME:**

**The role of leadership**

1. **Multinational Activism:** In a Forum in which I participated in Europe, one of the participants asked two CEOs to imagine a world in which a populist leader such as Le Pen, in France, or Geert Wilders in the Netherlands came to power. He then posed to the CEOs, how that would change their "activism". How do you think Bolsonsaro's leadership can influence a multinational's activism? As seen from abroad, the external view, is that this is the reality in Brazil, where Bolsonaro is reported to be a populist far-right leader in power as Trump, Orban and Salvini and others are.
2. **CEO Activism:** What does CEO activism mean to you? How does that differ from how CEOs acted in the past and how they should act today and act in the future?
3. **Causes of change:** What is causing changes in the role of leadership?
4. **Leadership in a new revolution:** What does it mean to lead through a new industrial revolution driven by technology? In this environment, how do leaders balance the delivery of short-term results with good [moral, ethical management] of people and resources for the future?
5. **Responsible leadership:** How can we go about the process of rethinking responsible leadership in the Fourth Industrial Revolution? What behaviors most effectively drive organizations and society to a more sustainable inclusive future?
6. **New paradigm:** Can we think about a new leadership paradigm for the fourth industrial revolution? What might that paradigm be in order to promote an ethical culture?
7. **Hierarchical legitimacy:** How is it possible to rebuild hierarchical legitimacy?
8. **Societal Contract:** There have been reflections on building a new societal contract including such things as valuing life-long learning, rethinking retirement, affordable healthcare, financial literacy. Do you think that we need to reconsider a societal contract? What can we expect from businesses and how will they engage in rethinking a new societal contract?
9. **Weak signals:** A weak signal is a disconnected piece of information that at first appears to be background noise but can be recognized as part of a significant pattern by viewing it through a frame or connecting it with other pieces of information, therefore I ask: In your view, what is or what are the weak signals that you can

identify or think of when we discuss about the role of leadership today and in the future? How do we connect it with other pieces of information or corporate cultural elements?

Deusto
Research Ethics Committee

**APPENDIX E: UNIVERSITY OF DEUSTO RESEARCH ETHICS COMMITTEE REPORT Ref.: ETK-25/16-17**

Assessment of the PhD project entitled "Promotion of Ethical Culture in Transnational Companies", submitted by Pedro Manuel Sasia Santos, in his capacity as supervisor of the PhD project, carried out by Rodrigo Dal Borgo.

As documented in the record of the proceedings of the meeting held on 19 July 2017, the University of Deusto Research Ethics Committee qualifies the project as: FAVOURABLE REPORT

After reading the provided documentation, the research ethics committee of the University of Deusto states that the project is appropriate from an ethical point of view.

The project purpose is clearly defined: aspects such as how research participants will be recruited, informed consent procedures to be applied are all suitably addressed from an ethical standpoint. The project demonstrates being aware of the ethical aspects associated to their execution and suggests suitable mechanisms to control those ethical aspects.

The project takes into account the new Data Protection Regulation (EU) 2016/679, which was approved by the EU Commission and Council in April 2016, about 1) consent form activities; 2) access to own data and right to be forgotten; 3) the use of data for public interest and profiling and 4) responsibilities of the controller and the processor.

Issued and signed in Bilbao on 20 July 2017.

Cristina de la Cruz Ayuso
Coordinator, Research Ethics Committee

## APPENDIX F: FUTURE SCENARIOS FROM THE ETHICS FORUM (DIRÉCTICA)

Considering the diversity of companies participating in DIRÉCTICA, the objective has been to seek a common ground and promote a learning process in an experimental scenario planning project. This has allowed the managers to draw upon their companies and alliances for ideas that have been put forward for Basque economic and digital growth and for what it means to be an ethical organization in a digital future.

Since the beginning we have been referring to a future in which the Basque Country will be facing a context of high digital dependency. Two questions arose from this:

1. **In 2038, what will it mean to be an organization with a solid ethical culture in the context of a digitalized Basque Country?**
2. **What ethical implications will the digital evolution have for our companies?**

During our last scenarios workshop as a group we discussed and chose two critical uncertainties in order to develop the scenarios: The Level of State Intervention and The Changing Nature of Labor Demand.

The group constructed two scenarios deductively in a 2x2 matrix. Here below we express these scenarios as short stories in the year of 2038 in order to organize the outcomes and to continue conversations in subsequent workshops for plausibility check. The exercise also elicits further ethical questioning: In each of the scenarios what is the ethical responsibility of the companies in the Basque Country and the responsibility of the leadership within them?

### Scenario 'Make Euskadi Great Again'. (Low Level of State Intervention x Low Adaptation to Labor Demand)

*The first scenario "Make Euskadi Great Again" tells a story in which the Basque Country has a high supply of digital infrastructure and companies influence economic and social conditions significantly. The Government values short term results, is non-interventionist, establishes regulatory frameworks that favor the interests of the companies and cuts back regulation.*

*Therefore, some companies with low added value products or services have adapted and offer low wage jobs and poor working conditions in order to compete with robotics. While other companies, that adopted the technological model but did not upskill their local employees for new technologies, suffered a shortage of talent. Consequently, in order to fill the gap resulting from unqualified local labor, high-tech companies have been fighting for talent from outside the region. In 2038 there is an increase of the informal economy and more companies take advantage of the unregulated environment.*

*These government policies resulted in a short-term economic boom followed by a bust, with a subsequent long period of low economic growth.*

*The state gave up its role as an important player in promoting corporate responsibility and as the conservative state cuts back on regulation this produces environmental deterioration, weakened labor unions and higher levels of social and economic inequality.*

*With the weakening of the welfare state and as the social safety net is cut back, there is a backlash from the poor segment of the population which results in the degradation of democracy and by which democracy loses reputation.*

*The weakening of the welfare state reduces public services significantly. This scenario also suggests an inverted population pyramid with increased percentage of an ageing population which does not have access to public services and institutions. Many of the low wage jobs offered are in low cost, low quality private health and social services, which replaced what used to be public services.*

**Scenario 'The Liquid Society' (High Level of State Intervention x High adaptation to labor demand)**

*The Liquid Society tells a story of a digitalized Basque Country which is highly regulated and the Government intervenes regularly within economic activity. International companies see this as an excessively regulatory framework. Some companies have been migrating to other regions that are less regulated and where they will find public institutions that are not intervening in how technology can be developed and used.*

*In 2038, citizens have high online civic participation through the Internet. With the advances of civic tech, Basque citizens have more political engagement and influence. Laws are implemented and influenced through online participation of the citizens who are able to have easier access to and contact with politicians. Politicians are confronted daily with civic questioning and are expected to give immediate answers and make improvements.*

*Employment is high and society is divided in two classes: Rich (Majority) and Poor (immigrant workforce). Nevertheless, this brings about social upheaval all the while erroneously assuming that the Gig Economy actually favors society and that all parts of Basque society are receiving the necessary education or training for the technological job market. The Basque population is more heterogeneous and due to the past influx of immigrants and refugees, the region now has a larger foreign-born population plus their first and second generation offspring.*

*However, as was identified in the past, those who fall outside the social safety net for one reason or another are socially discriminated against and frowned upon by the rest of the population, thereby creating an outsider underclass.*

**Questions to begin a strategic conversation:**

1. What new questions do the scenarios elicit?
2. Are the stories plausible enough to challenge and to be used?
3. If not, what would make them more plausible?

4. What would you add into or take out of the stories?