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Management Styles and Decision-Making: Pro-Ecological Strategy Approach

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Abstract: Management style and decision-making create an organization's culture and influence its performance also in the pro-ecological dimension. Therefore, this paper's originality lies in how it explores the effect of management style to inform our understanding of decision-making when using a sustainable approach. However, the cause-and-effect relations between decisions and management style remain vastly unexplored. The paper's aim is to explore whether the management style serves as a basis for decision-making or if it is an effect of decisions. This research addresses a research question: *is the management style a basis for decision-making or an effect of the decisions in a pro-ecological context?* We used a comprehensive literature review by using inductive and deductive approaches to analyze the relations between decision-making and management style. The paper also illustrates how organizational culture images can inform accounts of business realities influencing organizations' green strategies. The analogies followed relations between color symbol and guiding metaphor. The article presents a theoretical discussion on the influence of management style on decision-making in the organization, based on original literature research in pro-ecological strategy related decisions. As a result, a decision-making style model is proposed. This nonorthodox approach might open up new avenues of thought in the field of decision-making, management styles, and pro-ecological strategy. Theoretical and managerial implications and directions for future research are also addressed.

Keywords: managerial decision; management metaphors; organizational culture; pro-ecological strategy; management style; sustainable development

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1. Introduction

Modern organizations have to survive in a rapidly changing, competitive business environment, protect the natural environment [1] and act responsibly in society [2]. They also create, through decisions, their pro-ecological strategies [3–6]. This research considers the following definition of pro-ecological strategy—a "structural strategy aimed at changing the circumstances in which behavioral decisions are made to protect the natural environment, such as the provision of recycling facilities" [7].

Decisions are a fundamental element of every human action [8], based on mental activities [9], but in this research, we are dedicated to discussing the relations between management styles and decision-making in a pro-ecological approach, as opposed to discussing the decision-making process itself [10]. It is not clear if the specific management styles are decision effects or the opposite. However, there is also a research gap identified in the literature [11–13], related to the cause-and-effect relations between decisions and organization culture. In the scientific literature, there is an awareness of strategy execution barriers in the decision-making process [14,15], and growing attention has been paid to organizations' strategies related to ecological aspects [16,17]. The scientific literature's

dominant view presents the management styles as metaphors [18–21]. An in-depth analysis of organizations, in the context of the relations between management style and decisions, is underdeveloped [22,23]. Therefore, in this research, we address the following research question: *is management style a basis for decision-making or an effect of the decisions in a pro-ecological context?* This paper's primary goal is to answer this scientific question, which reflects the presented research gap.

In this literature review article, we set future research assumptions by focusing on the analysis of explicit components of the decision-making process [24]—i.e., the choices [8] and the key green decision-makers [4]. Therefore, this paper is an overview of some of the most common management styles [18,23] combined with the decision-making factors from a sustainable development and greening business approach [25]. This paper is a comprehensive literature review and serves the prepare planned research with public administration entities and organizations dedicated to their management styles and relations between them in the matter of pro-ecological strategies and renewable energy investments.

This research contributes to the existing body of literature as follows. We postulate that management style is more fundamental to the process and is not an effect or a result of the decision-making process in the ecological context. We illustrated our research with our own proposed figures and model for a pro-ecological sustainable strategy approach. There are a group of endogenous (internal) organizational factors that influence managers' decision-making. This approach allows changes in the organization and evolution of management style. Among the most important factors are those creating an organizational culture (with shared views, values, and ideas) related to the organization's functioning in the changing business environment [26,27]. Another contribution is that our findings proved and allowed us to set future research assumptions in the pro-ecological strategy approach.

The article is organized as follows. Firstly, after this introduction, we present a literature review divided into six subsections, each dedicated to one specific aspect. Secondly, we discuss our literature review. Thirdly, we consider our research assumptions to be further discussed. In this section, we also present managerial implications and future research proposals and the limitations of this study.

2. Theoretical Background

2.1. Organization Culture

Management is science often associated with business [28,29], economics, psychology [30], and philosophy [31,32]. In addition to management, a harmonization [30] of activities within the organization is achieved as a result of acceptance by the participants of the organization of the system of norms [33] and values embedded in its organizational culture relating to shared views, ideology, values, beliefs, and expectations [34,35]. There is no consensus on the organizational culture definition; however, its impact on organizational performance and results are widely recognized [36], especially when a pro-ecological approach is measured [37]. The internal coherence of this system and the degree of adjusting the management mechanisms used in the organization are determinants of the effectiveness of the organization's functioning [3,38]. Commanding the correctness of the above observation, we can indicate that the organizational culture creates a kind of "decision algorithm" that gives meaning and direction to actions carried out by the organization [39–41].

Failures in adjusting the management mechanisms to the organizational culture cause the emergence of the phenomenon of dissonance in decision-making processes, which leads to a reduction in the effectiveness of the organization's functioning [41,42]. Organizational culture is not a time-stable monolith [40,43]. On the contrary, under the influence of changes taking place in the environment, it is subject to changes and transformations [25]. These changes have are slow and related to different strategies [26]. The complexity of transformation processes is deepened by the nature of organizational culture [25,44]. A culture [45], is a factor stabilizing an organization's functioning [46] and organizing decision-making processes. On the other hand, this can be a factor inhibiting the process

of introducing changes to the management style [1,23]. However, there should be a good diagnosis of the organization's culture to assess which type of behavior is dominant in the organization [47]. Changes in the organizational culture and management style are possible but based on a discussion of desirable behaviors, aligned with the adopted profile of a desirable and constructive organizational culture. In the pro-ecological strategy context, failure and instability occur when there is a dissonance between the announced strategy and its execution. Employees and customers are very much aware of the need for conservation and sustainability and they lose their trust if such phenomena appear [48,49].

Organizations create an environment for decision-making that impacts the organizations themselves and the natural and business environment, which can be recognized as organizational culture [50]. This internal environment, which supports the decision-making process, can be described as an organizational culture [23,27]. There is always an organizational culture, such as weather or atmosphere [51,52], which are terms often associated with the organizational management styles or organizational character [51] or spirit [53]. These similarities to the natural environment elements are justified due to changes the pro-ecological approach induces in the organizational culture [54,55]. The changes in the organization's culture are important for change management, motivation, and leadership (Figure 1) [56].

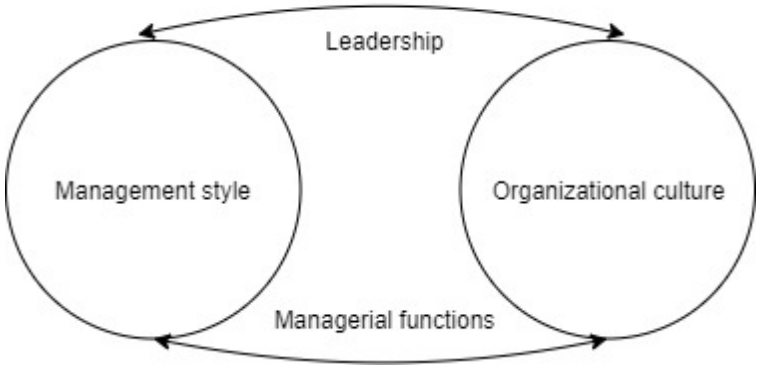

Figure 1. Management style and organizational culture relations. Source: Authors' elaboration based on [36].

Organizational managers are responsible for balancing the relative stability of the organizational culture [33,57]. This balance guarantees the maintenance of the organization's identity and its constant transformation. This balance is a condition for keeping up with changes in the environment [57] while being aware of the difficulties that arise both in the processes of diagnosing and transforming organizational culture [58]. The importance of managers as an organization's leaders and their influence on organizational culture is presented in Figure 1.

Then, leadership is an immanent part of the managerial activity and, through managerial functions, managers influence the organization's culture [23,46]. On the other hand, their management style influences the leadership and culture in the organization [56,59]. The management style is related to the organizational culture and therefore should be a balance between these two organizational characteristics. The interactions between management style and organizational culture do not indicate one element as superior—they are equal.

2.2. Decision-Making Process

Decision-making, either intellectually or practically, is more often a group process than a single person task [60], since a group makes better decisions due to the bounded rationality effect of one single decision-maker [8]. In 1960, Raiffa and Schlaifer [61], from Harvard Business School, initiated decision theory [62]. Strategic decision-making is

currently the subject of research in organizational theory and strategic management [63] and has become a widely known and well-developed area in business management.

Decisions can be defined as a set of choices between proposed solutions, and can be expressed in the sentence: "When we make choices, we make a decision" [64]. Decision-making is a cognitive process that results in the selection of alternatives and the choice of options or directions of action. In a theoretical approach, decision-making is an intellectual and rational process. Decisions are taken based on selecting criteria or strategies [25]. In business practice, decision-making is a less specific process and is influenced by many factors, such as values, norms, interests, or context. Decision-making is regarded as a concordance test showing the match between subjective factors related to the decision-maker and the expected impact of alternative options or actions [65]. Decision problems require the consideration of many issues and factors and, therefore, they become more and more complicated because of [62]:

1. having complicated, comprehensive structures;
2. relating to multiple objectives;
3. associatation with uncertainty and risk;
4. relation to multiple stakeholders.

Making decisions means also making choices and solving problems. In a broader sense, managing an organization concerns setting goals and ways of achieving them and shaping the organization's future. Conscious and rational, as opposed to random, choices are made in the management decision-making process [66]. Making choices should be preceded by making the right decision. Such a decision is based on relevant information and brings the expected results. The decision is a process, not a matter of the moment. The decision itself is important, but most people remember the result of the decision. In the decision-making literature, the mechanisms are not precisely defined [1,67,68]. The judgment of the decision-making process is distorted by the influence of intelligence, intuition, common sense, and luck. Organizations use decision trees, influence diagrams, simulation models, and alternative forms of decision support to deal with the complexity of decision-making problems and help make a decision. Additionally, the need to integrate management with psychological aspects of decision-making [62] is currently underlined.

Decision-making takes place when there are alternative choices that could be made. One solution is selecting a decision from several potential variants. The choice of a variant should consider various factors, such as an achievement of the organization's goals, resources, regulations in force, planned effects, and expected benefits. The dilemma between priority of decision-making process and management style is comprehensively presented in Figure 2. This figure shows the decision-making chain as a process of decision-making and its effects on making a decision. At the exit, i.e., before making a decision, internal factors (related to the organization) and external factors (determined by the environment) were taken into account [69,70]. In turn, at the exit—after making a decision—a solution is chosen and the organization can assess the effects (positive or negative).

Figure 3 shows some critical steps in the decision-making process [46] as a cycle (not a chain, as in Figure 2). Decision-making is usually preceded by decision analysis. This analysis step allows us to better understand the problem [71]. The decision-making process precedes the collection, selection, and analysis of information. As a result, the decision-maker should obtain knowledge that determines the decision-making process [62]. This provides a framework that will help clarify and formulate the judgment. The starting point is the judgment of the situation or problem.

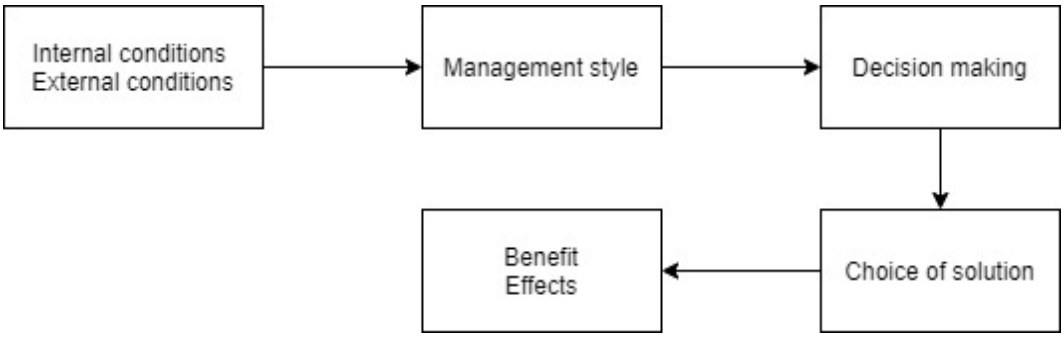

Figure 2. The decision-making chain. Source: Authors' elaboration.

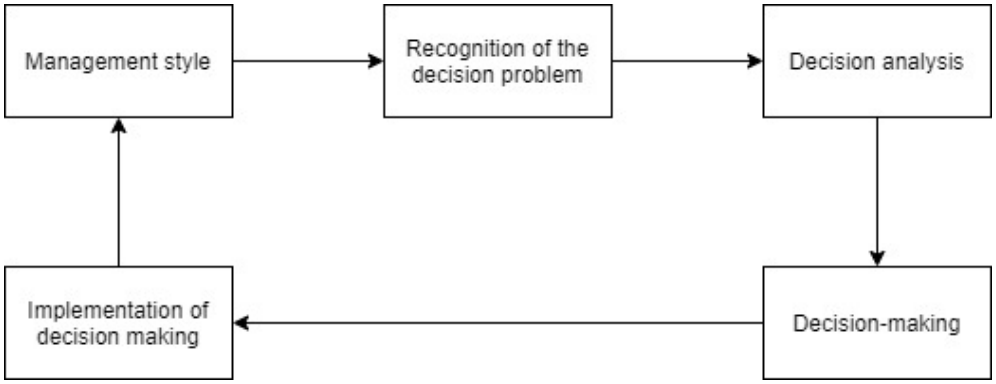

Figure 3. The cycle of crucial steps in the decision-making process. Source: Authors' elaboration.

Bearing in mind the assumption that management style influences decision-making, we proposed to expand the stages of the decision-making process with the management style. It is a nonorthodox perspective on the decision-making process. We are guided by the assumption that the management style would have a crucial influence on decision-making in the context of pro-ecological strategies (this element is elaborated in Section 2.6).

2.3. Manager as a Decision-Maker

When management is considered through an entrepreneurial and managerial decision logic [4], its practical aspects are more visible [5,72]. At the present, environmental protection is an important topic for a business practice, which needs to formulate a pro-ecological strategy and decision-making [73]. Decision-making at the highest organizational level has become difficult to manage due to the complexity of the changes of an organization's face [74,75] and due to time pressures [76]. The manager uses logic and intuition to control the process of thinking and acting. A manager's effectiveness depends on the techniques and skills related to strategic thinking [35]. A manager is conceived as a "multiplied man", who acts at the junction of two worlds: certainty and uncertainty [9,77].

Management styles create plans and styles of control and implementation (sequential plan and global or comprehensive plan) [9]. Manager's thinking cycles include mental activities related to problem-solving, decision-making, and strategic thinking, and these activities are independent. The factor that initiates a manager's thinking is problem identification. Then, the manager's thinking considers goals, plans, and action strategies [9].

Decision-making is an intellectual and strategical process [78] that affects people at different levels of management. In an organization, this activity requires the decision-maker to have appropriate power and use of knowledge, skills, and competencies (including human cognition, emotions, and social behavior) [79]. The decision-making process must take into account various factors and conditions that shape this process. A manager's

decision is conditioned by the awareness of the necessity to make choices and the assumed effects of the decisions [80].

The benefits of a decision can be considered in various ways, most often from the organization's perspective and other stakeholder groups [81–83]. Making a decision requires a comprehensive view of the organization and its environment. It is not only economic criteria that are important in this process. Ethics, morality, social responsibility, and, more recently, sustainable development are factors that can shape the decision-making process [16,80].

When making a decision, one should select an action variant [46]. There is a need to consider the effects and benefits assessed from the perspective of the organization's goals and development in the long term [80]. The decision-maker should be responsible for the consequences of the decision from the point of view of different areas and different stakeholders [84].

2.4. Management Styles

Over the years, organizations' management styles have changed dynamically. Organizations had to adapt employment conditions and the atmosphere of created relations [17,85,86] to societies' needs as a socio-economic environment, which is a resource of employees and customers [33]. The work atmosphere and conditions influence organizational effectiveness and increase the company's competitiveness in the market [87]. This translates into better financial results and enhances the organization's prestige and image [88].

We adopted Laloux's concept [20], which is a relatively new concept, and its extensive use in analyzing the culture of contemporary organizations. Each management style has specific patterns of action, behavior, rituals, and shared values [89]. The essential features of each management style are presented as a description and critical breakthroughs in Table 1. The used metaphors are presented in colors, from a primary organization (red) to the most developed (teal). These are represented by a range of basic colors to more complicated ones obtained by modifications to very basic colors. For example, orange is a result of the mix between the two basic colors red and yellow. There is a strong relation between color metaphor and guiding metaphor. The red organization is a wolf pack, based on the will of the leader. The resistance or negation in the execution of such will leads to "bloody" revenge. This color metaphor then represents not only the organization but also organizational culture. There are clear differences between organizations described by the colors in their general connection to the execution of "brown" [90] and green (pro-ecological) strategies [25]. The indicated colors of strategies in Table 1 is based on the division between brown (based on the linear approach and resource extensive, based on fossil fuel consumption) and green economies, where green is a synonym for sustainable, ecological, and pro-environmental [55,90].

As presented, some organizations have the option to change their management styles, and some do not. The potential change depends on internal and external factors and the need for change declared by the organization, and self-awareness about the possibility of change to be greener and pro-ecological. We can indicate several factors influencing the possibility of changing the management style. The first is the specificity of the activity or industry [87]. This has a strong influence on the "color" or metaphor of the organization [79]. As mentioned in the current examples, some industries have management styles other than the implemented one. Reluctance to change management style may result for various reasons [33]. The most important thing seems to be not having to make any changes: "*We do not change because we do not have to*". Such organizations implement a management style that matches their needs, goals, and strategies. It is equally essential that the management style has proven itself in the history of its existence, allowing it to survive and develop. In this type of organization, changes occurring in the environment are of no great importance to them. It can be assumed that even the changes taking place in the world have limited impacts on the organization's management style [20]. The style of management translates

into the strategy of the organization. The approach to environmental strategy can be reactive or proactive [25]. Red and orange styles determine the choice of a reactive and brown strategy, where companies act minimally, resulting from external pressure to formulate an environmental strategy [15,41]. Green and teal management styles remain in opposition to the brown strategy. They represent an active, open approach to green strategy, which is a result of the organization's priorities, values, and openness to new ideas and conditions for sustainable development [91].

Table 1. Management styles according to color taxonomy.

Management Style Color	Description	Guiding Metaphor	Key Breakthroughs	Current Examples	Decision Metaphor	Strategies
Red	Constant exercise of power by the chief to keep foot soldiers in line. Thrives in chaotic environments.	Wolf pack.	Division of labor; Command authority; Despotism.	Organized crime; Street gangs; Tribal militias.	Will.	Brown
Amber	Highly formal roles within a hierarchical pyramid. Top-down command and control. The future is the repetition of the past.	Army.	Formal roles (stable and scalable hierarchies); Stable and replicable processes.	Military; Most government organizations (public school systems, police departments); Religious organizations.	Pattern/Scheme; No discussion.	
Orange	The goal is to beat the competition; achieve profit and growth. Management by objectives (command and control over what, freedom over how).	Machine.	Innovation; Accountability; Meritocracy.	Multinational companies; Investment banks; Charter schools.	Rigid Procedures; Machine Oil; Consultations.	
Green	Focus on culture and empowerment to boost employee motivation. Stakeholders as a primary purpose.	Family.	Empowerment; Egalitarian management; Stakeholder model.	The business is known for idealistic practices (Starbucks, Zappos).	Discussion; Democratic decision; Consensus.	Green
Teal	Self-management replaces the hierarchical pyramid. Organizations are seen as living entities, oriented toward realizing their potentials.	Living organism.	Self-management; Wholeness; Evolutionary purpose.	A few pioneering organizations.	Independence; Mindfulness.	

Source: Authors' elaboration based on [20,33].

2.5. Management Styles as Differentiating Variables of Managerial Decision

According to the research of Rowe and Mason, the style of decision-making has a cognitive character. It refers to how an individual approaches a problem and uses the information to make a decision [92]. According to the research of Simon [93], intuition and emotions play an essential role in the decisions of a manager, and this was also proved in other research papers [94,95]. These results indicated a new direction of research, where

psychological factors, not related to knowledge and professional preparation, play an important role in the decision-making process [55,93]. The intuitive thinking and reflexive approach of decision-makers have a significant influence on decision-making. Another feature is Core Self-Evaluations (CSEs), which shapes the decision-making process. As indicated by [1], this feature's level is essential. CSE is formed at an average level that allows avoiding the trap of overconfidence and affects the achievement of better results.

Decision-makers who make quick decisions use much information and come up with many alternative solutions. The pace of decision-making is influenced by the ability to integrate strategic decisions and tactical plans [96]. Making a strategic decision in a changing, turbulent environment is difficult [97] because the changes are radical, and it is difficult to estimate the course of changes. The way to avoid making the wrong decision is through the "wait and see" strategy, which means waiting for the situation to unfold or following other decision-makers (benchmarking) [98]. In Figure 4, we present our research results on the relations between the management style and decision.

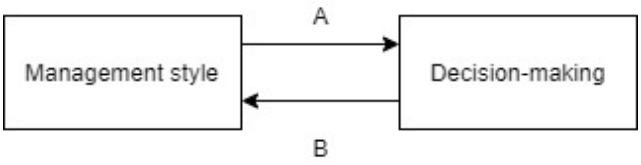

Figure 4. Management style and decision-making options. Source: Authors' elaboration.

The conducted theoretical study shows that management style can influence decisions (option A, Figure 4). The reverse situation is also possible when decision-making shapes the management style (option B, Figure 4). More often, we found a situation where the management style shapes decision-making, which can be seen in organizations such as red and amber taxonomies. These organizations can be defined as the opposite of a participatory management style. We deal with "hard-handed rule" prescriptive, unquestionable, and unchanging management styles in such organizations.

2.6. The Decision-Making Modalities in a Pro-Ecological Context

Relating the decision-making to the strategy, one can assume a decision-making strategy [99]. As indicated in Eisenhardt's research, in the modern approach to strategy, decision-makers ask themselves the question: *Where are we going?* They also ask the equally important question: *How do we want to get there?* [100]. Strategic decisions are connected to top management. Broadly understood, strategic decisions in terms of scale and impact are critical to the organization over the long term. Precisely because of their importance, strategic decisions are related to the strategy [101].

Strategic decision-making is a particular type of decision-making in uncertainty [102]. Such decision-making involves formulating goals, identifying the problem, generating alternative solutions, evaluating, and selecting [103]. The organization's success strategy emerges from the decision-making process, where collective intuition, avoiding political issues, shaping constructive conflicts, and maintaining momentum in decision-making is of strategic importance. Making a strategic decision is related to decision effectiveness and success in making a decision [104]. Referring to these studies' results, the answer to the question "*how*?" and the associated manager's decision-making process shapes the organization [100]. In a strategic decision, decision-making is essential, but the implementation of a strategic decision is equally important. It can be assumed that the problems are not so much about making a strategic decision, but about its implementation [66,105].

Even though managers play multiple roles in business operations, there are concerns with top executives' roles to integrate internal and external challenges in the decision of strategy formation [106,107]. According to Andrews, a strategy is a "rational decision-making process", where firms are looking for a possibility to adjust to internal and external contexts and conditions [25]. "Strategy-making in organizations is a multi-stage process

involving numerous individual decisions that are influenced by both internal and external considerations and which involve contested positions between the key actors involved. This is no less evident in the field of corporate greening as in other areas of organizational decision-making" [25]. The environmental strategy defines the organization's activities that influence the environment and points to environmentally friendly practices [25,108,109]. In this strategy, companies specify how they manage relations with the natural environment [41], and they adopt strategic attitudes and general environmental strategies [25].

The environmental strategy should be adapted to the conditions of the organization's internal and external environments. Researchers indicate many factors initiating environmental initiatives, resulting from external pressures [110] and internal conditions [111]. Most often, decision-makers in an organization make choices about environmental strategy [4] influenced by factors such as risk management and assessment of market opportunities, resistance to change, corporate reputation, market growth, product design and development, operational efficiency, capital budgeting, costing, human resource management, and the possibility of implementing an environmental strategy [25,69,111,112]. Technological progress and inventions (eco-innovations) are also key factors for the green performance of organizations [104,105]. Therefore, organizations may choose different environmental strategies depending on their organizational and ecological contexts. Businesses can make a variety of decisions on environmental strategies and issues to integrate environmental challenges into a company's strategy: from reactive and passive to a more proactive, innovative, and leadership-based approach [25,113]. Organizations carry out various environmental activities—a wide range of activities from minimal initiatives to merging the organization's strategy with pro-environmental activities. The version of the merger requires the organization to take into account resources, factors, and interests, and support from the organizational values and culture [69,114].

3. Discussion and Results

These strategic decisions are related to responsibility and freedom [4,31,115] or elasticity and rigidity [72,116], within the organization and its management style [30,117] in the pro-ecological strategy context. We assume that management style is a complex, not fully comprehensible, and ambiguous term. Management style contains several variables of a business operation—including organizing, planning, leadership, staffing, stimulation, control, communication, authority delegation, and so on [118]. Additionally, management styles also involve factors such as a manager's values, attitudes toward humanity, and organizational culture [119,120].

Rowe and Boulgarides [121] proposed a classification of decision-making styles from a psychological perspective. In the proposed theory, they indicated four forces that determine the style of decision-making [121,122]:

1. Directive style—relates to power and domination, clarity, cognitive simplicity.
2. Analytical style—represents a response to challenges and is characterized by cognitive complexity, systematic, and a slow decision-making process.
3. Conceptual style—relies on an idealistic, people-oriented, creative, achievement based on external rewards (such as praise and recognition) style.
4. Behavioral style—represents a people-oriented style, compromise-oriented, and good communication; it is characterized by cognitive simplicity.

As a result of our literature analysis, we created Figure 5, which combines decision-making participants (and processes) and organizational culture features: flexibility and freedom as the axes. Then, an additional axis is added comprising the management style.

The relations between management style and decision-making in an organization depend on several factors. The most important features are the specificity of the organization, its history, and the business industry. Analyzing the research results on decision-making and management style, we proposed a graphical presentation of the decision-making style diagram. We assumed that each of these styles would shape a different approach to decision-making. Although Figure 5 suggests that the freedom and flexibility drift towards

infinity along with the number of decision-makers, there is a point when the organization becomes anarchic [41].

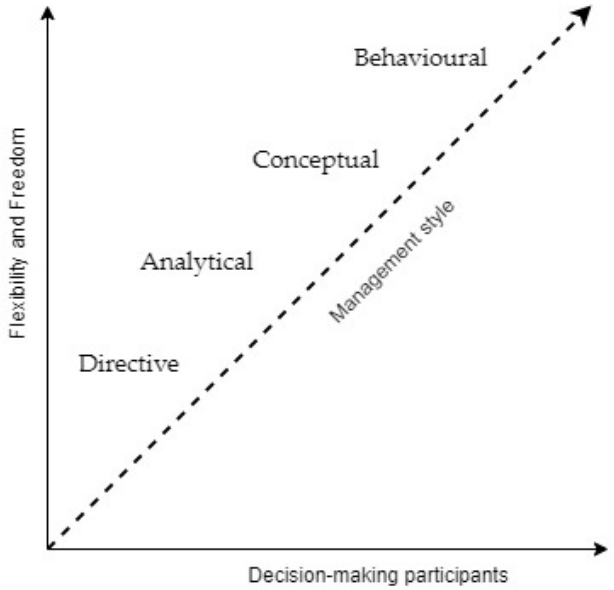

Figure 5. Styles of management in relation to number of decision-makers. Source: Authors' elaboration.

In Figure 5, we show that there is impossible unlimited growth in the dimensions of flexibility and freedom (*y* axis) and number of decision-makers (*x* axis). Then, we created Figure 6 where we reversed the axes (but there is a difference between *decision-making participants* and *decision-making effectiveness*). Therefore, Figures 5 and 6 are different. However, the number of decision-making participants (represented on *x* axis, Figure 5) and decision-making participants (*y* axis in Figure 6) are related. There is a breakpoint of the effectiveness in decision-making when there are too many decision-makers. Because of this observation, we introduced Figure 6, where the top point represents the breakpoint of the effectiveness [15].

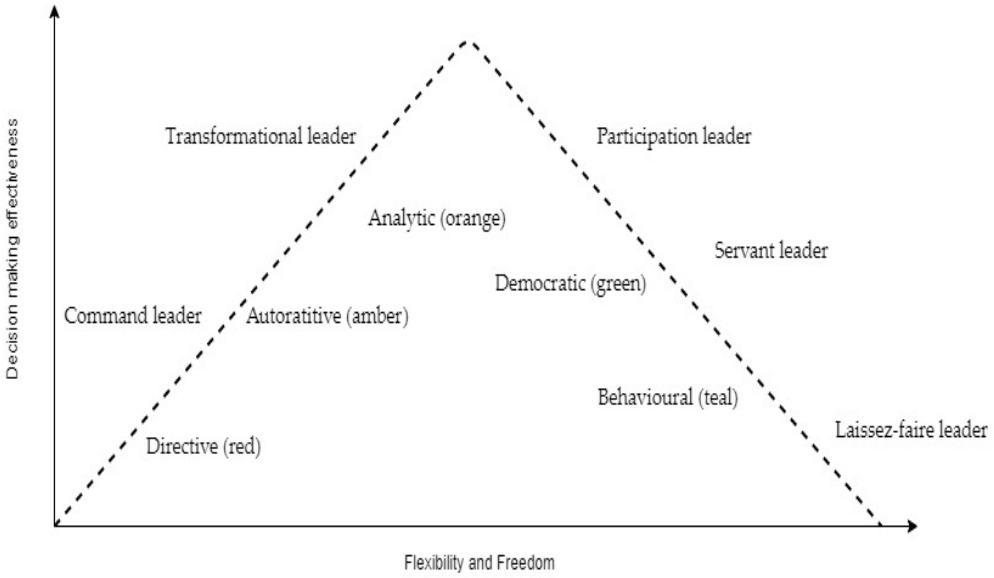

Figure 6. Decision-making styles and leader's typology diagram. Source: Authors' elaboration.

The decision-making effectiveness along with flexibility and freedom are limited. To avoid anarchy in an organization, there have to be common goals and values shared among team members. Another condition is to keep coherence between management style and organizational culture [49,123]. In the directive style, there is no place for flexibility and freedom in implementing the management style. This style can be described by the red management style metaphor. Additionally, the decision-making process is confined to the decision-maker, where employees have no voice. Each subsequent style of decision-making increases the flexibility and freedom and the participation of employees and stakeholders in making decisions. In the behavioral style of decision-making, flexibility, freedom, participation in making decisions is the greatest. In this conceptual paper, we propose a model to help recognize different decision-making styles as presented in Figure 6.

In Figure 6, we presented a decision-making styles diagram described by two factors: decision-making effectiveness and flexibility and freedom. We assumed that a high level of decision-making effectiveness is possible only in organizations with the appropriate flexibility and freedom. The optimal level of flexibility and freedom should be neither low nor too high. This is a situation that organizations strive for, but it is difficult to achieve and maintain. We matched the decision-making styles to the management styles. Each decision style was assigned a color according to the classification of management styles presented in Table 1. A low level of decision-making effectiveness and flexibility and freedom is characteristic of the directive and authoritative style.

It is accepted that different managers display different management styles in the course of their work [33]. Through their management styles, they also create different organizational cultures [23], one of the most explored characteristics of the organization in management science since its introduction to the academic debate [14]. On the other hand, there are well-known examples of managers who were inefficient in new organizations [41,85] because of the settled organization cultures or were not accepted with their management style [19,124]. The quality of strategic decisions influences performance [125] and is also essential for firms' survival [119]. Then, a balance between responsibility and freedom, stable or unstable strategies [57] seems to represent the choice dimensions of management style [10,23,115]

Individuals rule such organizations. In turn, the low level of decision-making effectiveness and the high level of flexibility and freedom cause chaos in an organization where everyone rules—i.e., no one is responsible for the decisions made. These organizations are represented by the colors green and teal. The analytical management style marked in orange is the closest to the optimal situation. This style allows for high decision-making effectiveness and high flexibility and freedom levels. Bearing in mind the research subject, we decided that it is worth relating the research results to leadership in an organization. The decision-making styles diagram allowed the identification of five types of leaders. Command leader refers to the directive and authoritative style of management. The *laissez-faire* leader is a teal behavioral style. The servant leader, on the other hand, is the green democratic management style. The transformation leader and participation leader refer to the orange analytic style of management.

In Figure 7, we present previously presented comprehensive ideas about formulating the green and pro-ecological strategy which results in green decisions. We based the proposed concept on the model of all known green strategies developed by Worthington. There are two unequal dimensions for such a conceptual model. The larger internal business environment inside the organization and external business environment, where only part of the strategy is communicated but all effects of decisions are visible outside of the organization (Figure 7).

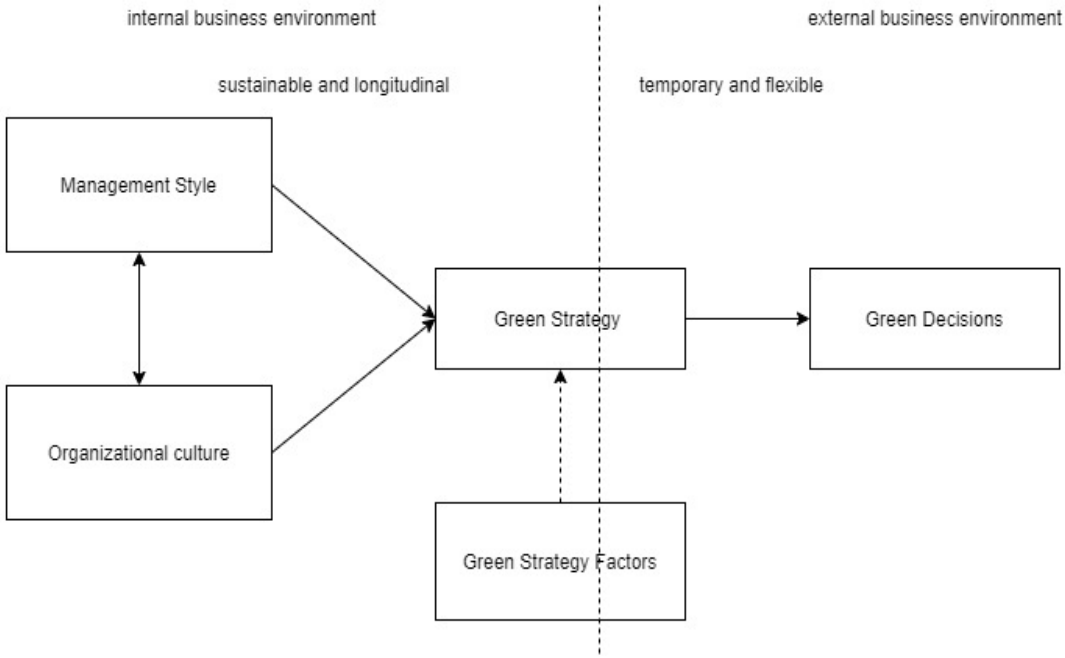

Figure 7. A conceptual model for a pro-ecological sustainable strategy approach. Source: Authors' elaboration.

There are other implications related to the sustainability and longitudinal character of organizational culture and management style, where change is slow, but affects the green strategy (presented in Figure 7). The division line shares strategy (there are sustainable and temporary strategies) and factors that influence it, and both have internal and external characters; additionally, the right side of Figure 7 represents the flexible and short-term elements.

4. Concluding Remarks

Decision-making concerns human activities in many areas of personal and professional life [9]. It is often compared to breathing because this activity is the essence of life and a natural process [62]. Relating decision-making to management and business, it must be pointed out that this theory is 60 years old, but this is still actual, especially in the pro-ecological strategy context.

In this paper, we provided a summary of the management theories by comparing decision-making with management style. Most prior literature on the decision-making process has focused on studying the process and looking for an answer to questions: *What is the process type? Is it ethical, rational, emotional, collective, or data-driven?* Researchers focused on the various factors that shaped the process and its effects on the works on decision-making, one of them being a need of natural environment protection and sustainability.

As a result of our research, we assumed that culture and strategy are potent factors in the decision-making process for green strategies. In research on organizational management and leadership, much attention has been paid to management style. Based on literature studies and analyses results, we concluded that decision-makers' influence on decision-making could not be questioned. However, external factors such as social opinions, economic trends, and environmental needs have to be taken into consideration. Then, green strategies or pro-ecological management styles are approaches that affect decisions and are influenced by the sustainable development idea. The sustainability concept is, without a doubt, the most influential factor on business; however, its impacts on the management or leadership styles and decision-making are not fully understood.

In this research, we assumed that management style is a factor that shapes decision-making in an organization Therefore, we answered the research question stated in the introduction section. Different management styles that decision-makers implement in orga-

nizations influence the course of decision-making. A change in management style should initiate changes in decision-making, which may or may not occur. Some organizations have not changed their management styles in the long run. In this situation, decision-making also does not change.

Our contribution to scientific development sheds light on ongoing discussions about research topics such as management styles, decision-making, culture, and pro-ecological strategies. We enriched the previous literature studies with a few suggestions, and figures, where we proposed a drawing approach to the studied issues. We presented the relationship between management style and organizational culture, including leadership and managerial functions (Figure 1). In the decision-making chain, we introduced a process of decision-making, taking into account internal and external conditions, management styles, and their effects on decision-making (Figure 2). In the cycle of crucial steps in the decision-making process, we have shown critical steps in this cycle (Figure 3). In Table 1, we used Laloux's concept for analyzing contemporary organizations' styles to show what style is conducive to brown and green strategies. In our considerations, we undertook theoretical research on the relationship between management style and decision-making, indicating that the management style shapes the decision-making process in organizations (Figure 4). Based on the results of research by other authors, we proposed an analytical display style of decision-making taking into account the impact of decision-makers and flexibility and freedom as factors shaping directive, analytical, conceptual, and behavioral management styles (Figure 5). In Figure 6, we used two factors, flexibility and freedom, with decision-making effectiveness to describe a color's decision-making style. We have indicated when the management style is based on the optimal level of flexibility and freedom. Our article has developed a conceptual model for a pro-ecological strategy approach (Figure 7). We proposed a model that combines management style and organizational culture with green strategies and green decisions in this work.

The presented findings have several important managerial implications. It is rare in scientific research to deal with the justification of decision-making concerning an organization's management style. Our research suggests that there are two types of situations. The first case is when management style influences decision-making. To recall the metaphor, these are organizations classified as red, amber, and orange taxonomies. The second situation is when decisions determine the management style. In this case, we are dealing with the green and teal taxonomies of organizations. It can be assumed that making wrong and unfavorable decisions can be changed by shaping the management style. In our research, we have shown how an organization can change by choosing a different management style. Such an evolution is possible, especially when decision-makers are aware of "what color" they function in and what organization they are striving for. This finally allows them to establish a green and pro-ecological strategy approach and strive for its execution.

Our analyses intend to help managers and entrepreneurs implement a decision-making strategy based on the management style to form a pro-ecological strategy. This document provides a framework for making a decision based on the implementation of the chosen management style. Such an understanding of business management allows for a conscious shaping of the decision-making organization's strategy decision-making. In this way, one can try out different solutions and shape organizations according to their own goals and needs.

Furthermore, some suggestions are provided for further studies related more to the pro-ecological strategy. In further research, one can focus on analyzing factors that influence managers' decision-making and what factors shape the style of managing the organization. Such information can help to shape the organization's management and support the decision-making process by implementing a specific management style. It will be interesting to refer to these activities' effects in the study of management style and decision-making. There is still an additional question: *How do management style and decision-making influence the organization's performance*? These are also questions related to the formulation of pro-ecological strategy and entrepreneurial decisions related to

sustainable development. This is because an introduction of additional evaluation criteria should allow for the selection of the most effective management and decision-making styles. In terms of management and decision-making styles, it is worth paying attention to the stakeholders. Bearing in mind the new challenges related to the destruction of the natural environment, it is worth shaping the management style and decision-making based on the stakeholders' needs. In particular, the influence of the organization's ecological governance and sustainable development should be considered, taking into account the modern four pillars of sustainable development: people, planet, partnership, and profit.

When examining the management style and decision-making in organizations implementing environmental strategies, it should be assumed that the organization's interior is vital. Goals, values, beliefs, and strategies must be consistent with the green strategy and with employees. The lack of convergence between the culture and style of management and green strategy and decision-making will be noticeable outside the organization. Such a situation can bring more significant damage to the company among employees. In organizations interested in the ecological strategies approach, it is difficult to overestimate Green Human Resources Management's role to educate and develop green employees. In turn, employees should acquire green qualifications. The success and credibility of green organizations depend on hiring the right employees—i.e., those who adjust to the company and accept their values and goals. Such a match may become a factor verifying the employee's position in a green organization, assuming that the company is a set of people who individually and as a group represent similar goals and values. The interest in green strategies should show that "the will to be green" among companies and employees will grow. Therefore, this subject is not only topical, with its importance and merits gradually increasing, not only to scientists, but also to business practitioners.

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