



Entrepreneurial University governance: The case of a Cooperative University

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Abstract

This article presents a case study of the Cooperative University of Mondragon to explore the intricate processes through which higher education institutions (HEIs) adopt an entrepreneurial university (EU) framework across their three core missions: teaching, research, and community outreach. Using a qualitative research design, this study examines the organizational strategies that Mondragon University's engineering faculty (MGEP) employs to embrace entrepreneurial behaviors (EBs), specifically by building on its peculiar cooperative governance model. The findings shed light on how MGEP, as a prominent example, leverages a long-term vision that centers its decision-making processes on entrepreneurship and the management tools and governance elements that favor collective participation and intrinsic motivation. This research advances our understanding of the evolving landscape of higher education and its entrepreneurial drift in the following ways: (1) by addressing the need for further exploration of governance in EUs; (2) by complementing existing studies on the role of university leadership in the adoption of EBs; and (3) by identifying strategies to overcome inherent barriers within large organizations that impede universities from being entrepreneurial. Overall, this study offers practical implications for the adoption of EBs in HEIs.

Keywords Cooperative governance · Entrepreneurial behavior · Entrepreneurial university · University of Mondragon · Higher education institution · Cooperative university

1 Introduction

Global forces and the demand for a knowledge-driven economy have spurred significant transformations in higher education institutions (HEIs) worldwide (Rothaermel et al., 2007; Sam & Van Der Sijde, 2014). These shifts have aimed to enhance adaptability to new demands by fostering the emergence of the “three-ring” entrepreneurial university (EU), which emphasizes teaching, research, and community outreach with a focus on cultivating not only job seekers but also job creators. An EU embodies strategic adaptability, entre-

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preneurial culture, and structures to achieve its objectives (Civera et al., 2021; Paleari et al., 2015), and it functions as both a knowledge producer and disseminator, fostering value creation throughout its whole ecosystem. Moreover, the EU has been increasingly acknowledged as a legitimate paradigm to which universities should adhere (Rothaermel et al., 2007) because it acts as a catalyst for both economic and social development (Etzkowitz et al., 2000; Lehmann et al., 2020), functions as a self-reliant entity actively seeking nonstate income (Shattock, 1999), and is committed to enhancing efficiency, effectiveness, and competitiveness (Capano & Pritoni, 2020).

Scholars have explored this transformation through the lens of strategic management concepts, such as dynamic capabilities (Heaton et al., 2023; Leih & Teece, 2016; Stolze & Sailer, 2022), and institutional perspectives (Bronstein & Reihlen, 2014; Centobelli et al., 2019), with a particular focus on technology transfer (Hahn et al., 2024; Meek & Gianodis, 2023). In particular, the concept of entrepreneurial orientation (EO) has emerged as a valuable emerging perspective that captures universities' shifts toward strategies based on the proactive identification of opportunities and quick reconfiguration of resources and structures (Riviezzo et al., 2019; Todorovic et al., 2011). EO describes a strategic orientation toward entrepreneurial behaviors (EBs; Covin & Slevin, 1991), such as innovativeness, risk-taking, and proactiveness (Covin & Slevin, 1991; Miller, 1983), in the pursuit of the three university missions (McKenny et al., 2018).

In the HEI literature, growing attention is being paid to the role played by governance mechanisms to better understand how HEIs adopt the EU framework and behave entrepreneurially across all missions (Audretsch, 2014; Klofsten et al., 2019; Urbano & Guerrero, 2013). In particular, the HEI literature reveals a tension between the enactment of EBs and shifts in governance structures, which converge toward more centralized and top-down decision-making processes (Nelles & Vorley, 2011; Sporn, 2001). The tension arises because the evolving socioeconomic landscape that has driven HEIs to behave more entrepreneurially has also induced shifts in their governance structures, often resulting in reduced democratic participation, autonomy, and accountability at the unit level, potentially hindering innovation (Erickson et al., 2021).

Despite this tension and the increasing complexity of HEI governance (Buckland, 2004; Meoli et al., 2019), the role that its components play in enabling university EBs remains underexplored, which has left intriguing gaps in current research. In this respect, exploring the nuances of specific governance models can provide valuable insights. Therefore, we focus on cooperative governance in organizations, which might stimulate EBs by creating a collaborative and participative atmosphere that fosters individual commitment and proactivity (Webb & Cheney, 2014; Wright et al., 2011). This form of governance incorporates unique elements that manage structures, processes, and responsibilities among key stakeholders, outlines decision-making procedures, and is grounded in cooperative principles such as participatory management, payment solidarity, and intercooperation (Chaves et al., 2008; Cheney et al., 2014; Jamaluddin et al., 2023; Mathuva et al., 2017). Thus, we pose the following research question: "How do cooperative governance and its elements affect EBs across all university missions?"

To answer this question, we adopted a qualitative research and single-case study design with a worker cooperative engineering faculty, Mondragon Goi Eskola Politeknikoa JMA S. Coop. (MGEP), as our single case. MGEP showcases university EBs (Wright et al., 2011) in institutions under a cooperative governance arrangement, and our findings indicate that

EBs at MGEP manifest across all three missions, drawing on Mondragon University's institutional identity, historical legacy, and current challenges. The analysis revealed three main governance mechanisms that enable cooperative governance to adopt EBs: (1) commitment to a long-term vision animated by shared ownership and a strong sense of devotion to the development of the region; (2) management tools to enable and encourage staff to actively identify and seize opportunities, including equity participation and incentives; and (3) the practice of linking decisions to the collective participation of stakeholders, which fosters a sense of shared vision and cohesion.

Our study makes three main contributions to the literature on EUs and HEIs. First, we answer the call for more research on governance and organizational structures within the EU (Cunningham et al., 2022; Klofsten et al., 2019). Our study adds to the literature by showing how governance that promotes individual participation in long-term university strategies and performance enables the sharing and internalization of entrepreneurial values among university members. Second, we complement the growing body of research on how leadership contributes to EBs in HEIs (Civera et al., 2020; Seeber et al., 2016; Siegel & Leih, 2018). We do so by underscoring the role that participative decision-making, bottom-up staff involvement, and valorizing individual initiative play in leading the organization to its objectives. Finally, our study contributes to a better understanding of how to alleviate some of the barriers to entrepreneurship that inherently characterize large organizations (Kirby, 2006). The cooperative governance of MGEP contains elements that represent valid alternatives to problems that typically limit the EBs of universities and their members.

2 Literature review

2.1 The entrepreneurial university (EU)

Globalization and the growing need for a knowledge-driven economy have driven the transformation of higher education (HE) in various countries (Rothaermel et al., 2007; Sam & Van Der Sijde, 2014). The transition has led to reforms in HE systems, such as those across Europe, intended to transform university practices and governance (Civera et al., 2021; Paleari et al., 2015) and to better equip them to adopt and comply with new demands. Consequently, the “three-ring” EU encompasses teaching, research, and community outreach (Audretsch & Belitski, 2021; Pugh et al., 2022). The introduction of entrepreneurialism into academia has influenced the educational and research missions of HEI worldwide to various degrees (Etzkowitz et al., 2000). Scholars now generally view the EU as a response to changing environments and as a result of the emergence of a more globalized HE sector (Nelles & Vorley, 2011). The EU is characterized by its ability to adapt strategically to shifts in industry and regional dynamics by utilizing resources in a creative manner and with the support of a cohesive entrepreneurial culture and the structures necessary to achieve its strategic objectives of teaching, research, and community outreach (Bronstein & Reihlen, 2014; Stolze, 2021). Furthermore, the EU serves as both a knowledge producer and mobilizer that disseminates knowledge to wider society and provides an atmosphere in which participants in the university ecosystem create and capture value that matters for the future. The essence of the EU is that it actively identifies opportunities and threats and moves quickly to shape value creation for its constituents (Guerrero et al., 2014; Teece & Heaton, forthcoming).

Moreover, the EU is considered a valid model for organizing universities (Etzkowitz et al., 2000; Rothaermel et al., 2007) because it serves as a catalyst for economic and social development, is a self-reliant organization seeking nonstate income (Shattock, 1999), and aims to become more efficient, effective, and competitive (Sporn, 2001).

Given the dynamic contexts in which universities navigate, a significant deviation from conventional methods of structure, organization, and operations has been employed (Kirby, 2006). In the initial stages of integrating an entrepreneurial paradigm, HEIs must exert significant effort to establish novel mechanisms and structures that institutionalize progressively over time and have significant effects on issues related to values, norms, and power within the organization (Scott, 2008). Examples include redefining academic tasks, establishing new rules and roles, formalizing collaborative arrangements, updating curricula to educate an increasingly diverse and globalized society and labor market (Cascavilla et al., 2022; Denson & Zhang, 2010; Minola et al., 2016; Silveyra-León et al., 2023), and creating centralized interface capabilities, such as technology transfer or university spin-off offices (Etzkowitz et al., 2000; Klofsten et al., 2019). Therefore, universities are facing a shifting institutional paradigm to become more entrepreneurial (Bronstein & Reihlen, 2014), which requires the establishment of specific organizational structures (Leih & Teece, 2016).

To study such organizational transformation, scholars have adopted strategic management concepts as a perspective (Siegel & Leih, 2018), including dynamic capabilities (Heaton et al., 2023; Leih & Teece, 2016; Stolze, 2021) and institutional perspectives (Bronstein & Reihlen, 2014; Centobelli et al., 2019; Clauss et al., 2018; Laredo, 2007). For example, specific aspects of HEIs have been explored, such as resource allocation (Heaton et al., 2023), leadership (Leih & Teece, 2016), internationalization (Minola et al., 2016), university–business cooperation (Galán-Muros et al., 2017), and impact on youth employment (Hahn et al., 2022). However, despite these advancements in the broader literature on HEIs, most previous studies on the EU have primarily concentrated on the challenges faced by HEIs in their third mission or community outreach, particularly in terms of technology transfer activities, such as patents, licenses, and start-ups (Rasmussen et al., 2014; Siegel et al., 2004). Thus, we require more insights into *how* HEIs adhere to the EU paradigm (Stolze, 2021) by behaving entrepreneurially across all their constituent missions (Audretsch, 2014; Klofsten et al., 2019; Urbano & Guerrero, 2013).

One valuable perspective for studying the entrepreneurial transformation of universities is EO (Riviezzo et al., 2019; Todorovic et al., 2011). EO is an organization-level trait that describes the consistent exhibition of EBs over time (Covin & Lumpkin, 2011), such as the willingness to take risks, pursue innovation, and engage in proactive initiatives (Covin & Slevin, 1991; Gartner, 1988; Miller, 1983). *Innovative* behavior involves active engagement in creative and experimental processes that result in the development and expansion of applied educational programs (Mallick & Chaudhury, 2000), as well as the adoption of innovative technologies, operational methods, and business model strategies (Pries & Guild, 2011). In this context, *proactiveness* entails a dynamic approach that actively seeks new opportunities to promptly address evolving stakeholder interests. This proactive behavior demands continuous vigilance from the university, involving tasks such as strategic planning and staying abreast of environmental changes (Lumpkin & Dess, 1996). It also entails the capacity to collaborate effectively with practitioners and the industry at large (Abramo et al., 2009). Furthermore, *risk-taking* refers to the willingness to allocate resources to projects with uncertain or unconventional outcomes (Miller, 1983). This behavior requires a secure

environment and an entrepreneurial culture that encourages and empowers faculty, students, and staff to take bold initiatives (Kirby, 2006). The presence of these behavioral patterns promotes the recognition of entrepreneurship as a defining organizational attribute.

As previously stated, focusing specifically on EU governance is a relevant and novel approach to better understanding how universities may behave entrepreneurially across all their constituent missions (Padilla-Meléndez & del Aguila Obra, 2022). The structure and governance of HEIs in part define their mission, vision, regulations, processes, and organizational structure (Buckland, 2004; Meoli et al., 2019; Shattock, 1999). While the role of structure and governance in the higher education system has been studied, the mechanisms through which governance enables HEIs to behave entrepreneurially have received less attention (Klofsten et al., 2019). This gap is surprising given that current trends have driven HEIs to increase the complexity of their governance, which encompasses diverse objectives (teaching, research, and third mission), participants, and functions across the entire university system (Guerrero et al., 2014).

2.2 University governance and EBs

Governance refers to the definition and implementation of strategies and structures that organizations deploy to achieve their organizational goals (Blaschke et al., 2014; Williamson, 1996), and it deals with instruments and mechanisms that coordinate decision-making by boards of directors, owners, chief executives, senior managers, and other organizational stakeholders (Meoli et al., 2019). Previous research has shed light on the critical facets of governance, including incentive alignment, compensation structures, risk-taking, and coordination challenges (Tihanyi et al., 2014). These facets involve determining ownership, asserting control, ensuring accountability, and establishing regulatory frameworks (Buckland, 2004).

To accomplish these complex tasks, the most traditional mechanisms of HEI governance are senates or boards of governors with significant faculty representation (Minor, 2004), reliance on a collegial model, and distinct organizational units (faculties and departments) that coordinate work integration (Clark, 1998; Martin, 2012). HEI governance is dynamic and multilayered (Greenwood & Miller, 2010); it requires the strategic navigation of environmental instabilities, orchestrating collaborative efforts within and between organizational structures, and shaping internal stakeholders' behaviors to achieve the organization's objectives (Frost et al., 2016). These activities potentially imply a close connection between EBs and governance in HEIs (Cleverley-Thompson, 2016). For instance, HEI governance, characterized by institutional autonomy, facilitates the emergence of entrepreneurial approaches in the search for new revenue streams (Heaton et al., 2023), and universities that appoint entrepreneurs as lay members in governing bodies are more actively involved in fostering the creation of technology-based academic spin-offs (Meoli et al., 2019).

Overall, while conducive governance can facilitate and enhance EBs, reduced democratic participation and representation, along with limited autonomy for organizational units, may constrain innovativeness owing to the loss of responsibility and accountability at the individual level (Erickson et al., 2021). Overall, previous research has paid relatively little attention to examining the mechanisms through which governance can be an asset or a liability for EBs (da Cruz et al., 2021; Klofsten et al., 2019). Considering that current governance in HEIs has become more complex due to the incorporation of various objectives

(teaching, research, and third mission), participants, and functions throughout the entire university system (Guerrero et al., 2014), it is urgent to explore whether adopting the EU framework requires a conducive form of governance rather than a rigid, top-down approach. Given cooperative governance's particular attributes in terms of social mission, property rights, and decision-making structure, it is emerging as a potential form worth exploring (Jamaluddin et al., 2023).

Cooperative governance is a system that manages structures, processes, and responsibilities among key stakeholders, outlines procedures, and rules for decision-making, while simultaneously promoting and being compatible with cooperative principles (e.g., participatory management, payment solidarity, and intercooperation; Chaves et al., 2008; Cheney et al., 2014; Jamaluddin et al., 2023; Mathuva et al., 2017). Cooperative governance is based on collegial and democratic decisions, with high participation in decision-making and policymaking motivated by shared equity, including individual accounts and dividends (Cheney et al., 2014). Thus, cooperative governance has the intrinsic capacity to foster engagement and collaboration among diverse stakeholders (Jamaluddin et al., 2023; Webb & Cheney, 2014; Wright et al., 2011). By exploring how cooperative governance and its elements affect EBs across all university missions, this study elucidates how governance can be an asset rather than a liability. To achieve this goal, we developed an exploratory study of a unique case: MGEP, the engineering faculty of the University of Mondragon, which is driven by a distinctive management rooted in cooperative governance.

3 Methodology

Adopting a qualitative research approach supports a deeper understanding of how phenomena manifest and unfold in a particular case. A single-case study approach was chosen to explore the effect of cooperative governance on universities' EBs because case studies specifically emphasize contextual understanding (Saunders et al., 2015). Furthermore, unique case studies are used when a single case demonstrates high revelatory potential and richness of data (Langley & Abdallah, 2015). Therefore, the worker cooperative engineering faculty (MGEP) serves as an exemplary case through which to explore how a particular form of governance, such as a cooperative, can foster EBs within a university.

MGEP has a unique internal organizational structure and has exhibited an entrepreneurial strategy throughout its history (Winn, 2015; Wright et al., 2011). Regarding its ownership and governance, the functioning of the university relies on the participation and contributions of three groups of members: *working members*, which include teaching and nonteaching staff; *beneficiary members*, the students; *collaborating members*, which are composed primarily of companies, institutions, and local administrations (e.g., municipalities and intermunicipal entities), with equal representation in the Governing Boards and General Assemblies of the University and its faculties (Oliveri, 2012).

3.1 Case study overview

In February 1941, José María Arizmendiarieta, newly consecrated as a priest, arrived in Arrasate to carry out the duties of the curate of the parish of San Juan Bautista. After unsuccessful attempts to open the Apprentices' School of Unión Cerrajera, a local company, to

young people without family ties to the company, Arizmendiarieta's ambition to create a vocational training center for the children of Unión Cerrajera workers emerged. Thus, in 1943, Arizmendiarieta established MGEP (first established as a polytechnic school) and opened it to young people in the region. In his classrooms, he met the five young people who, in 1956 founded Ulgor, the first industrial cooperative.

Currently, MGEP is a cooperative faculty with a strong commitment to social transformation specified in its participatory model. MGEP is part of Mondragon Corporation, a business group (Arregui, 2006). Mondragon Corporation operates in the following areas: finance, industry, retail, and knowledge. At present, it occupies first place in the Basque business ranking (tenth in Spain) and comprises ninety-five separate self-governing cooperatives, around 80,000 employees, and fourteen research and development (R&D) centers.¹ Mondragon University is an important pillar in the area of knowledge of Mondragon Corporation. It was established in 1997 and officially recognized on May 30th of that year by Law 4/1997. Mondragon University was created by the association of three educational cooperatives: (1) the Faculty of Engineering (MGEP), (2) the Faculty of Business Studies, and (3) the Faculty of Humanities and Education Sciences. In 2011, another faculty, the Faculty of Gastronomic Sciences (Basque Culinary Center), although not a cooperative, was added to Mondragon University.²

3.2 Participants and data collection

This study was designed as an in-depth single-case study (Yin, 2009), with MGEP as the unit of analysis (Babbie, 2020). Data were collected via individual face-to-face semistructured interviews and document analysis, with the former serving as the primary source for case study data (Yin, 2009) and the latter supporting the case description and comparison of findings (Russell & Gregory, 2003). The analyzed documents include various written materials, including annual reports, guidelines, and policy documents (see Appendix 1). Notably, two of the researchers are affiliated with the university and are members of MGEP; hence, significant immersion in the investigated phenomena was ensured during the data collection process.

Concerning the primary data source, twelve semistructured interviews were conducted with key participants. A maximum variation sampling technique was employed to enlist participants, including working, beneficiary, and collaborating members (Hernández-Sampieri & Mendoza-Torres, 2018; Patton, 2002). The aim was to identify the different perspectives and common central themes that intersected among lecturers and researchers. To ensure interviewee heterogeneity, the following criteria were considered: role, gender, discipline, seniority, cooperative member or hired personnel status, and whether or not they were in a leadership position (see Table 1).

The participants received an email invitation and were subsequently contacted via telephone. Face-to-face interviews with an average duration of forty minutes were conducted between July 14, 2023, and September 11, 2023. To improve validity, interviews were recorded to capture participant accounts verbatim and were subsequently analyzed

¹ Mondragon Corporation. *About Us*. Retrieved July 30, 2023, from <https://www.mondragon-corporation.com/en/about-us/>.

² Mondragon Unibertsitatea. Retrieved August 12, 2023, from <https://www.mondragon.edu/documents/20182/1562845/memoria-21-22-gaztelera.pdf/b0cd8f29-86a7-469d-bae3-108bf70adf1f>.

Table 1 List of key participants and their attributes

ID	Cooperative Member	Gender	Discipline	Role	Leadership Position	>5 Years at MGEP
P1	Yes	F	Mechanics	Teaching and research staff	Yes	Yes
P2	Yes	F	Electronics	General coordination team	Yes	Yes
P3	Yes	M	Mechanics	Saiolan (business innovation center)	Yes	Yes
P4	No	M	Electronics	Teaching and research staff	No	No
P5	No	M	Mechanics	Teaching and research staff	No	No
P6	No	F	Mechanics	Teaching and research staff	No	No
P7	Yes	M	Mechanics	General coordination team	Yes	Yes
P8	No	M	Electronics	Teaching and research staff	No	No
P9	Yes	F	Mechanics	General coordination team	Yes	Yes
P10	Yes	F	Mechanics	Teaching and research staff	Yes	Yes
P11	Yes	M	Electronics	General coordination team	No	Yes
P12	No	F	Mechanics	Teaching and research staff	No	No

and reviewed by two researchers. Informed consent was obtained before each interview to ensure confidentiality, anonymity, privacy, and free choice of participation.

3.3 Data processing and analysis

After asking the interviewee to provide some demographic information, the interview protocol proceeded according to three steps. The first section was composed of questions related to EBs within the university. The second section focused on the origins of these behaviors. The third section asked about cooperative governance elements at MGEP. The interview recordings were subsequently transcribed using Pinpoint software to obtain accurate verbatim transcriptions. NVIVO qualitative analysis software was used to code participant responses according to an interpretation-focused coding strategy (Adu, 2019). The data structure was built through progressive abstraction by starting with informant first-order codes, building second-order themes, and assembling them into aggregate dimensions (Gioia et al., 2013).

4 Findings

The findings are divided into two sections. Section 4.1 thoroughly describes the current governance elements in MGEP and is mainly based on secondary data. Section 4.2 contains the findings obtained from the interviews and their analyses aimed at responding to the research question.

4.1 MGEP governance elements: case study description

Section 4.1.1 explains the mission, vision, and values of MGEP to support an understanding of the case. Section 4.1.2 explores specific aspects of MGEP and compares them with Spanish private and public universities.

4.1.1 MGEP mission, vision, and values

MGEP's mission statement reflects its core purpose and reason for existence, which is to transform society through education, knowledge generation, and transferring that knowledge to various scientific and technological fields (MGEP, 2018). The vision statement provides a futuristic perspective that outlines the desired future state and aspirations of the organization with two complementary components: (1) alignment to European HE for the training of young individuals and professionals, research, knowledge transfer, and entrepreneurship in the technological field and (2) a solid cooperative project integrated with skilled, committed, and motivated individuals, which serves as a model for cooperation, inclusion, and societal transformation. Similarly, MGEP's values serve as guiding principles that shape MGEP's organizational culture, drive decision-making processes, and foster a positive and ethical work environment:

Cooperation. We are the co-owners and coprotagonists of the MGEP project, which requires self-demand, co-responsibility, and commitment to the mission. We are always open to cooperation with each other.

Vocation. We feel passion and enthusiasm for our work, and we are involved in providing the best responses to students, companies, and colleagues.

Proactivity. We are critical of our ways of doing things in order to innovate our activities. We are bold and take on new challenges.

Responsibility toward the environment. We are a lever in the advancement of society, promote inclusiveness in education, and are actively involved in the sustainable progress of our environment.

Trust. We are transparent, provide the necessary and truthful information, and trust that we all act in accordance with our values.

4.1.2 MGEP and the regulatory landscape of public and private universities in Spain

The regulatory landscape of universities in Spain differs according to whether the institution is private or public (Ley Orgánica Del Sistema Universitario 2/2023, 2023). According to the Organic Law (2023), public universities have strict guidelines under Title IX. Chapter 2 explains governance, key figures, collegiate bodies, and roles. Details of the internal structure are specified in Articles 2 and 6. For instance, public universities have a level of autonomy that empowers them to define their strategic direction (Article 3). Incentive programs are tied to staff merits and contributions for enhancing their performance, must have a transparent allocation that follows the principles of objectivity, impartiality, and remuneration transparency, and can be jointly established by the government (national), autonomous communities (regional government), and universities (Article 93).

According to Article 95, private universities have the autonomy to establish rules governing their organizations and operations. These rules must align with constitutional principles and uphold the essential tenets of academic freedom (Article 3.3). Approval from the autonomous communities (regional government) is required for legal oversight.

As a private university, MGEP leverages the freedom granted to private universities by this legislation and is influenced by the management style of Mondragon Corporation

cooperatives. Regarding governance, several “channels” provide cooperative members with the opportunity for individual participation (either directly or through their representatives; Arregi et al., 2022). Appendix 2 describes the governing boards in detail, as well as how the members of each committee are selected. In terms of organization, MGEP uses a matrix structure: the three vertical functions are teaching, research and transfer, and lifelong learning; the two horizontal disciplines are mechanics and electronics. In this manner, people in different disciplines respond to the needs of these three functions. Internally, MGEP develops a strategic plan every four years to guide its objectives, complemented by annual management plans. Faculty members contribute by developing personal development plans and fostering a continuous culture of improvement. In terms of incentives, MGEP has instituted an individual performance assessment and retribution system. This system evaluates competencies such as attitude, responsibility, commitment, knowledge, personal development, technical-technological mastery, and coordination skills. Moreover, it recognizes a strategic vision and contributions to the development of the team or substantial modifications to lines of business or services.

4.2 EBs and cooperative governance

Section 4.2 is divided into five subsections to facilitate a logical presentation and explanation of our findings on how cooperative governance affects EBs across all MGEP missions. Section 4.2.1 identifies MGEP’s existing EBs, and Sect. 4.2.2 explores the antecedents that influence EBs. The remaining three subsections are related to each of the different elements of MGEP corporate governance. Section 4.2.3 discusses governance bodies and individual participation and elucidates how these elements shape EBs. Section 4.2.4 offers an explanation of how mission, vision, and values significantly shape and guide EBs. Finally, Sect. 4.2.5 concentrates on internal management and unveils the organizational structure, management tools, incentives, and obligations that promote and sustain EBs.

4.2.1 MGEP’s EBs

Based on the definition of EO provided in Sect. 2.1, we identified several first-order codes when exploring EBs at MGEP. Following Gioia et al.’s (2013) approach, these codes were grouped into second-order themes and then into four aggregate dimensions: (1) MGEP’s EO, (2) EBs in teaching, (3) EBs in research, and (4) EBs in the third mission. The second-order themes and aggregate dimensions are presented in Table 2, which is followed by an explanation of the findings illustrated by first-order codes enclosed in quotation marks.

MGEP’s EO. Regarding *risk-taking*, most participants, with the exception of P1, agreed that risk-taking is an integral part of MGEP’s entrepreneurial approach. P1 justified this by saying, “We must be sustainable.” The remaining participants expressed a variety of nuanced opinions. Some, such as P2, referred to managing “controlled risks,” while P3 highlighted “shared risk.” For P7, risk-taking was related to responsibility and developing the collective project: “If you give more importance to the development of the collective project than to the consequences of a hypothetical failure [. . .] you say well. . . if I fail then tough luck.” These viewpoints reflect the shared understanding that willingness to take controlled risks plays a key role in the entrepreneurial approach.

Table 2 MGEP entrepreneurial behaviors (EBs)

Second-Order Themes	Aggregate Dimensions
Where and how are <i>EBs</i> displayed in MGEP?	
<ul style="list-style-type: none"> • Risk-taking • Proactiveness • Innovativeness 	Entrepreneurial orientation (EO)
<ul style="list-style-type: none"> • Implementing new methodologies and project-based learning • Pioneering work–study alternation • Offering new and improved programs • Facilitating student–business interactions 	EBs in teaching
<ul style="list-style-type: none"> • Conducting applied research and knowledge transfer • Conducting high-quality research • Building spaces (HIREKIN) • Building international relationships 	EBs in research
<ul style="list-style-type: none"> • Fostering a strong relationship with businesses • Promoting continuous learning in the workplace (tailor-made programs) • Fostering academic entrepreneurship 	EBs in the third mission

In terms of *proactiveness* and *innovativeness*, the interview participants described MGEP as an extremely proactive university. Although one interviewee suggested that proactivity could be increased (P2), others expressed confidence in the institution, describing this quality as being “100%” (P6), and having it in abundance, “I think we have a lot of proactivity” (P1), and “proactivity lots and lots” (P9). The term “proactivity” was closely related to other terms, including “dynamism and involvement” (P10) and “initiative” (P7). One participant added that proactivity is intrinsically linked to responsibility and a sense of belonging within an institution (P7). Although there are few codes for *innovativeness* in general, this dimension is no less important, and the innovative behaviors reported by the participants were related to concrete actions. For example, P3 stated that “we are continually looking for better ways of doing things,” and P9 made the following comment: “Innovation is a consequence of the proactivity, risk-taking capacity, and flexibility that we have. I see innovation more as a result of other characteristics and the things we are doing.”

EBs in Teaching. Participant responses revealed the types of EBs that allow MGEP to cultivate innovativeness in teaching. Regarding the implementation of new methodologies and project-based learning, several participants highlighted the project-based learning methodology in which students must perform a multidisciplinary project that encompasses all the subjects studied in each semester. As P6 explained, “The student’s study, the exams are evaluated, and the evaluation is done, but then they must implement it in a group project.” According to P11, “MGEP is an educational reference model” that, in P1’s opinion, plays a central role in students’ learning paths. P1, P5, and P6 highlighted continuous evaluation, and P1, P6, and P8 emphasized the practical orientation of the educational process. According to P6, “The university focuses not only on narrating theory to the students and making them memorize it and such, but on putting it into practice.”

Pioneering work–study alternation was described as “facilitating the integration of students into their professional life while they are studying” (P12). It is both an opportunity to work while studying (P1) and a way to help students cope with tuition costs (P7). Additionally, some students start working in companies in the second year of their degree and continue to alternate their studies with work, even while completing their bachelor’s and master’s theses (P8).

When discussing *offering new and improved programs*, participants used a variety of descriptors, including proactivity (P6), involvement, and dynamism (P3 and P10). Participants referred to a pedagogical innovation group created (P10) to adapt the programs to a changing world (P11). Efforts are also being made to keep developing diplomas based on current educational and industry trends (P3). Participants also mentioned that students were able to customize their academic paths based on their interests (P6). *Facilitating student–business interactions* was reflected in statements such as “we take the students to the company and bring the company to the students” (P1). According to P4, P5, and P12, industry, which understands real-world needs, plays a role in defining the academic curriculum.

EBs in Research. The interviews emphasized different manifestations of EBs in the research taking place at MGEP. The participants primarily mentioned *applied research and knowledge transfer* aimed at solving practical stakeholder challenges, stating that the type of research carried out “is always oriented to an application” (P12). P1 and P9, made similar statements. P7 stated that “we try to turn all the research into transfer”, and P1 highlighted this applied research as the reason that “we are at the top in Spain and Europe” (P1).

Conducting high-quality and internationally connected research is a manifestation of innovation in the HEI context. MGEP “has several areas of strong international recognition” (P3) thanks to “being at the forefront of knowledge in the areas that correspond to us” (P11). According to P10, research activity is closely related to innovation. Several participants mentioned continuous *space building* (e.g., HIREKIN, which is currently being built as a center for promoting industrial sustainable entrepreneurship; P10). The built-up spaces serve as a “complementary element to the current actors that constitute the entrepreneurial ecosystem of Guipuzcoa” (P5). Concerning *building international relationships*, participants reported that little by little, more and more relationships are being created that may be of interest for international stays, student exchanges, and other projects (P4, P6, and P8).

EBs in the Third Mission. According to the participants, MGEP engages in several EBs in the pursuit of third-mission activities. *Fostering a strong relationship with businesses* was a key transversal theme: “We focus a lot on having an impact on the region” (P5). As P8 stated, “We like to go hand in hand with the companies,” which generates support through proximity (P10 and P12). P1 suggested that both universities and companies benefit from these relationships.

Accordingly, *offering new tailor-made programs* is important to be able to respond to current and future business needs. According to P5, continuous learning is “a training very oriented to what the companies need.” Although it is necessary, “a continuous effort. . . to offer new courses. . . is not an easy business” (P10), and as P7 explains, “the training needs of a person do not end when they finish their studies; they must be trained throughout their lives.” The use of new methodologies was also highlighted, and according to P2, in addition to “helping companies, for example, to implement the techniques or methods in which we have trained them [. . .] new ways of training for different profiles and different needs are investigated.”

In terms of *fostering academic entrepreneurship*, “this is something that is more likely to occur in a university like MGEP, compared to other types of universities” (P1). The reason is that there are professors and students aspiring to become entrepreneurs (P3, P8, and P12), and a group of experts to support them (P12). Additionally, entrepreneurship is fostered through awards, which include cash prizes as well as intangible benefits like mentoring, guidance, and recognition within the entrepreneurship ecosystem (P5). Finally, as explained

by P3, the historical MGEP was also a pioneer in setting up the Saiolan business innovation center in the early 1970s. The idea for what is now an independent technology center was “to separate the research part from the training part, and then MGEP in turn developed further and generated its own lines of research” (P3).

To summarize, the interviews unveiled a range of EBs across teaching, research, and the third mission, which transcend conventional practices. Consequently, the origins of these behaviors are intriguing and are therefore explored in the following section.

4.2.2 Antecedents of MGEP’s EBs

In addition to the codes and dimensions outlined above, several first-order codes shed light on the antecedents of MGEP’s EBs. We followed the same data analysis and presentation process as in Sect. 4.2.1, and identified five aggregate dimensions: (1) MGEP’s historical origins, which address the basis of the cooperative movement, the sociodemographic context of its foundation, and the mission of the University; (2) the institutional importance of human resources, which highlights the responsibility, commitment, and proactivity of the employees, as well as their entrepreneurial attitude; (3) MGEP’s close relationship with the business environment, including companies and other agents; (4) current needs, which are related to obtaining external funding and attracting students; and (5) the challenges arising from the global pandemic. Table 3 shows the second-order themes and aggregate dimensions.

MGEP’s origins. *Arizmendiarrieta*, the founder of the cooperative movement, came up frequently during discussions of MGEP’s origins, as did the *beginning of the Mondragon cooperative movement*. According to one participant:

“Those of us who are cooperativists, I think we have Don José María in mind, and I think we must keep him very much in mind. What was this person looking for when he started to move? What made him start thinking that he had to do something, and that he had to contribute to do something? I think that this has stayed with us in some way” (P9).

Table 3 Antecedents of EBs at MGEP

Second-Order Themes	Aggregate Dimensions
What are the <i>antecedents</i> of the mentioned EBs? What originated these phenomena?	
<ul style="list-style-type: none"> • Arizmendiarrieta and the beginning of the Mondragon cooperative movement • Socioeconomic situation • Mission 	MGEP’s origins
<ul style="list-style-type: none"> • Commitment, responsibility and proactivity • Recruitment and selection process 	Human resources in the institution
<ul style="list-style-type: none"> • Close relationship with companies • Close relationship with other agents 	Close relationship with the environment
<ul style="list-style-type: none"> • Obtaining external financing • Attracting students 	Current needs
<ul style="list-style-type: none"> • Hybrid benefits • Adapting academic offerings • Showing innovation and flexibility 	Global pandemic

In relation to the cooperative movement, P10 explained that “it arose with the intention of addressing the needs of society.” When this movement emerged, the *socioeconomic situation* was very peculiar: society was totally fractured (P7) and undergoing industrial reconversion (P3, P4, and P7), during which unemployment (P3) and hunger (P1) were significant problems. Such situation is closely related to *MGEP’s mission*, which is socially based (P3) and seeks to address social needs (P11): “The philosophy is to transform wherever we are, to contribute, to leave a legacy for the next generations, and that is why we are cooperatives, and why we are partners” (P9). Thus, the founder, the historical socioeconomic context of MGEP’s foundation, and its mission emphasize acting in the interest of social needs and establishing the foundations for current EBs.

Human Resources. The participants provided valuable insights into the importance of individual commitment, responsibility and proactivity in terms of promoting EBs in the working environment. For example, one stated the following: “No company is what it is without the people it has, right? Without their attitude, without their desire, without their experiences and capabilities” (P12). This statement is reinforced by P3’s emphasis on commitment: “If the workers had left MGEP at the end of their working day (e.g., without dedicating extra time), everything that had been achieved would not have been possible”. P7 emphasized responsibility as a key element of working at MGEP, where responsibility and vocation are fundamental, and those who join the institution do so because they believe in their work and are willing to undertake the responsibility it entails. Additionally, “people are at MGEP by vocation because if not, they would not be here, given that the conditions are tougher than anywhere else” (P7). Descriptors that emerged repeatedly during the interviews included proactivity (P7 and P8), initiative (P8), friendliness, and collaboration in the work environment (P5). The recruitment and selection process is key to maintaining this unique working environment and promoting EBs. According to P5, “the criteria for selecting people are fantastic,” which suggests that the profiles of the hired staff align with MGEP’s cooperative principles and shared vision. P8 echoed this statement by saying, “We really believe in the model.”

Close Relationship with the Environment. Close relationships with companies and other agents emerged as another source of EBs, such as seizing opportunities and adapting to change. P4 emphasized practical orientation when mentioning that “[MGEP] was developed within an industrial context and nowadays is inseparable from the companies at the Mondragon Corporation.” Participants also highlighted the institution’s ability to keep up with the demands of the ever-changing environment: for example, “we owe ourselves to the companies” (P3) and “the entities at Mondragon Corporation demand that we understand and adapt to changes” (P6). Regarding other agents, P11 reported that “it is in our DNA to respond to our clients (student, company, and society); we know that these clients have changing needs, and we make an effort to adapt.”

Current Needs. The participants also expressed that constant pressure and the need to seek external financing are relevant to EBs. Supporting excerpts include the following statements: “We do not have a secure income to feed us and therefore we cannot be waiting” (P9), “We must fight for management plans and for the activity to go ahead, since nothing is guaranteed” (P1), and “We are aware that we must earn our own living” (P2). Environmental needs that promote EBs include, for example, that in the teaching domain, “the pie is going to be smaller and smaller and that there are fewer and fewer students and more and

more competition” (P1). The need to self-finance and continuously improve competitiveness, drives staff and MGEP as a whole to proactively innovate and take risks.

The COVID-19 Global Pandemic. Above all, the pandemic played a significant role in stimulating EBs, as it disrupted the working environment and forced compulsory adaptation. While teaching and working virtually was once unusual, the pandemic “has made us much more familiar with and much more natural at doing everything remotely” (P10), to the point that “staff are almost demanding it” (P5). COVID-19 has also facilitated adaptations to academic offerings, which increases regional and global competitiveness. As P2 explained, “[the pandemic] has meant a shift, for example, toward asynchronous models, hybrid models. .” The pandemic has also fostered innovation and flexibility because “it has put on the agenda needs that we didn’t have before [. .]; It was a hard lesson, but I think we came out learning a lot” (P11). Another participant reinforced this view and stated, “We have learned that suddenly you might have to change everything [. .]. It has been like a step forward to see the potential that people and the organization have” (P6).

In conclusion, MGEP’s EBs stem from its origins, the active participation and commitment of its staff, close relationships with the environment, the institution’s ongoing need for external financing, and responses to the global pandemic. The following section explores the governance mechanisms and individual participation that influence MGEPs EBs.

4.2.3 Governance mechanisms and individual participation shaping MGEP’s EBs

To understand the effect of MGEP cooperative governance on EBs, we explored two primary topics: *governance mechanisms* and *individual participation*. The latter is a fundamental element of governance dynamics and functioning. As discussed above, we followed Gioia et al.’s (2013) approach and identified three aggregate dimensions (see Table 4). The table is followed by explanatory text that uses first-order codes enclosed in quotation marks to exemplify the findings.

Governance Mechanisms. The function, integration, and operational dynamics of governance mechanisms influence MGEP’s EBs by facilitating active attention to external and internal stakeholders’ needs. Certain functions associated with governance mechanisms encompass the act of actively listening to the collective’s interests to provide tailored solu-

Table 4 MGEP’s governance mechanisms and individual participation

Second-Order Themes	Aggregate Dimensions
Why and how do the <i>governance mechanisms</i> play a role in MGEP EBs?	
<ul style="list-style-type: none"> • Function of governance mechanisms • Configuration of governance mechanisms • Operation of governance mechanisms • Negative implications of cooperative governance 	Configuring and operating governance mechanisms with inclusive stakeholder engagement
Why and how does <i>individual participation</i> play a role in MGEP EBs?	
<ul style="list-style-type: none"> • Openness to communication and interaction • Enhancing a sense of belonging and self-confidence 	Fostering open communication, which builds a sense of belonging and self-confidence
<ul style="list-style-type: none"> • Learning through feedback • Gaining a deeper understanding of MGEP and current developments • Embracing diverse opinions 	Facilitating continuous learning about the context from multiple perspectives

tions, facilitating information flow to keep the collective well informed, and serving as an open forum wherein the collective may propose ideas that may evolve into new projects. This is exemplified by the following comments: “These governance bodies that we have help to systematize the process, to be aware of where we are, to identify gaps, and it motivates us to say, ‘We need to do more’” (P1) and “If the organization requires these bodies, it is for two reasons: to identify external and internal needs, and then provide a tailored and timely response” (P11).

Regarding the *configuration* of governance mechanisms, the presence of key MGEP stakeholders (i.e., students, faculty, staff, and Mondragon Corporation company members) influences MGEP’s decision-making process. Consequently, their needs are systematically considered and inform the execution of actions within a shared vision, which drives the institution to continuously generate relevant solutions: “First, at our highest level of management, we have both students and companies involved. Therefore, just with that, our proximity to our customers and listening to their interests is ensured” (P11). Another participant stated the following:

“There is involvement on the part of the companies when it comes to making relevant decisions for MGEP. That always gives you a different, more comprehensive view of what is necessary and what may or may not work” (P12).

Furthermore, diverse age, expertise, background, and role profiles create potential for innovative ideas and proposals: “In the end, decisions are made in mixed groups with different people. There are indeed different profiles, and decisions are made with a shared vision, which I also find very positive for MGEP” (P6).

Concerning the *operation* of governance mechanisms, rotation deliberately encourages fresh perspectives and ideas: “These governing bodies rotate every four years; it is not monotonous; therefore, having new people, new minds, is positive because it helps us be more innovative” (P4). Additionally, based on democratic principles, established protocols respect a commitment to transparent and open conduct, which provides everyone with the opportunity to submit ideas and be heard. Evidence of these practices is reflected by the following excerpts: “Each one of us, among the 500, when we want to initiate something, we must convince the others” (P4); “Having many governing bodies may seem to lead to rigidity, but it is the opposite. Having various avenues for proposing new ideas and alternatives is valuable” (P3).

Despite these advantages, some *negative implications of cooperative governance* for EBs emerged. For instance, due to MGEP’s functional, organizational, and operational expansion, members of governance bodies have grown. The focus on democratic principles results in some participants perceiving their vote as unimportant: “The general assembly, even though you have a vote, does not matter that much, among so many” (P4). Moreover, the decision-making process can be time-consuming: “So, we are going to spend four months now discussing these headlines, we are going to agree on them” (P7). Nevertheless, the interviews suggest that the proactive involvement of a significant majority of board participants contributes to the effective resolution of challenges, with positive outcomes outweighing negative ones.

Individual Participation. Open communication across various forums fosters a sense of belonging, proximity, commitment, and closeness among MGEP and its members, due in

part to the opportunity to participate in decision-making processes. Individual participation also cultivates a feeling of self-confidence by signaling to individuals that their opinions and proposals are being heard, thereby enhancing their commitment and motivation to keep suggesting ideas:

“The fact that you can participate in management, to a greater or lesser extent, and at least someone listens to you, I believe, helps. I mean, otherwise, any employee of any publicly traded company. What voice do they have?” (P4).

Another participant echoed this sentiment, stating that “Individual participation gives us the opportunity to be highly proactive when it comes to promoting new initiatives, whether it’s content or research directions, and that makes us entrepreneurs, innovators” (P5). Such individual participation facilitates continuous learning and timely comprehension of internal and external contexts:

“I believe that what it can provide you with is a foundation for better understanding MGEP and grasping why, where, and what things you can propose, and so on. I think it gives you a more holistic view, not just of the tasks you and your team perform, but a comprehensive perspective of the entire cooperative” (P5).

To sum up, the findings highlight the importance of configuring and operating governance mechanisms that promote inclusive stakeholder engagement, fostering open communication to cultivate a sense of belonging and enhance self-confidence, and facilitating ongoing learning from diverse perspectives. These insights shed light on why and how governance mechanisms and individual participation contribute to shaping MGEPs EBs.

4.2.4 The role of mission, vision, and values in shaping MGEP’s EBs

In this section, we explored MGEP’s *mission, vision, and values*, and identified four aggregate dimensions, as shown in Table 5, using the same data analysis and presentation process as in the previous sections.

Transforming society through a contribution to businesses. MGEP’s *mission and raison d’être* revolve around *contributing to society in various ways*, especially through *impacting businesses* achieved by cultivating human capital, knowledge transfer (R&D), and collaborative projects that address industry needs with innovative solutions. This mission, in turn, enhances the competitiveness of local enterprises, ensuring continued wealth generation and job creation: “The industry must be alive so it can pay salaries for society to continue living at specific levels; our mission gives us the ability to impact society more directly” (P5). Another participant stated, “The mission encapsulates [raison d’être] as such, transforming society through the transfer of knowledge, whether through individuals, R&D, or continuous education” (P9).

Integrating the mission into decision-making. Notably, most staff members incorporated the university’s *robust, clear, and contemporary mission* into their decision-making processes and perceived it as integral to their *day-to-day activities*, thereby fostering EBs: “That is right, to keep growing, but with a purpose and a focus, which would be the mission”

Table 5 Mission, Vision, and values

Second-Order Themes	Aggregate Dimensions
Why and how do the <i>mission, vision, and values</i> play a role in MGEP's EBs?	
<ul style="list-style-type: none"> • MGEP's essence (raison d'être) • Contributing to society in various ways • Impacting businesses (wealth generation, new ventures, and employment in the community) 	Transforming society through a contribution to businesses
<ul style="list-style-type: none"> • Perceiving the mission as robust, clear, and contemporary • Integrating the mission into daily activities 	Integrating the mission into decision-making
<ul style="list-style-type: none"> • Philosophy of mutual support (growing and facing challenges together) • Sense of commitment, responsibility, and ownership among all members 	Grounding decision-making in cooperative values
<ul style="list-style-type: none"> • Transmission of cooperative values to students and society • Individual contributions to instilling values in the institution's environment 	Individual contribution to the embodiment of values in daily life

(P6); “Yes, it is crucial. If you do not know why you are in this institution, forget it. So, I believe the mission is perfectly present” (P9).

Grounding decision-making in cooperative values. The influence of cooperative values such as solidarity, transparency and collaboration on MGEP's EBs is evident in *mutual support* during diverse situations, which creates trust and certainty: “In the challenges, we support each other, and I believe that helps us progress and innovate because it instills confidence” (P10). Cooperative values also foster a *sense of commitment, responsibility and ownership* that motivates everyone to move forward: “We have assumed that I, you, this person, that person, and all those in the school are the ones who are going to make this work for better or worse. We are completely committed to that, and the result is for everyone, of course” (P3). Another participant made a similar statement: “Yes, in the end, being part of a cooperative means we are all on the same level; we all push together because if only a few people put their efforts, it ceases to be a cooperative” (P11).

Individual contribution to the embodiment of values in daily life. Finally, the themes *transmitting MGEP's cooperative values* and *individuals contributing to embedding these values in the institution* emerged. In these interviews, participants highlighted the trust, vocation, cooperation, proactivity, and responsibility central to the institution's atmosphere. These values are passed among individuals within the university and promote entrepreneurship: “In the first year, when I started working with the group, I thought, ‘This atmosphere is great, it is a different feeling; you can perceive it in people's values’” (P5); “In the last edition of the strategic plan, when the values were reviewed, there was a particular emphasis on promoting entrepreneurship. In fact, the values are aligned with it” (P9).

In summary, the findings of why and how the mission, vision, and values influence MGEP's EBs underscore themes such as: transforming society through business contributions, integrating the mission into decision-making, grounding decisions in cooperative values, and individuals embodying these values in their daily life.

4.2.5 The role of internal management in shaping MGEP's EBs

This section considers the role of internal management in shaping MGEP's EBs in three areas: *structure*, *management tools*, and *incentives and obligations*. Table 6 presents the seven aggregate dimensions that emerged from the analysis.

Structure. A flat, decentralized, self-managed structure based on trust and responsibility positively impacted MGEP's EBs. Specifically, *a flat, decentralized structure* promotes innovation and entrepreneurship by providing plentiful avenues for anyone to propose an idea or project: "Anyone who wants to propose something has more than enough avenues to execute and present their ideas" (P3); "We are not a hierarchical organization, and that is great because hierarchy stifles innovation" (P7); "The structure of the Cooperative, being decentralized and decisions made through large working groups, I believe, is crucial for innovation" (P4). *The self-management model*, in which groups and individuals make decisions and define their objectives autonomously, creates a collective feeling of being protagonists with the freedom and independence to pursue new projects:

"I believe that being a cooperative with all the degrees of freedom we mentioned earlier, where each person can choose their path, but not only their path, even set their objectives, that already implies that we are more innovative in some way" (P11).

Table 6 Internal Management (structure, management tools, incentives, and obligations)

Second-Order Themes	Aggregate Dimensions
Why and how does <i>structure</i> play a role in MGEP EBs?	
<ul style="list-style-type: none"> • Flat and decentralized structure • Self-management model • Trust related to a strong sense of responsibility 	Adopting a flat structure based on trust and self-management
Why and how do <i>management tools</i> play a role in MGEP EBs (strategic, management and personal plans)?	
<ul style="list-style-type: none"> • Plans built from the bottom up • Extensive participation in the generation process • Focus on collective needs 	Collectively defining strategic plans
<ul style="list-style-type: none"> • Strategic plans internalized by most staff • Guidance for various collectives • Reference point for new project definitions 	Using strategic plans to guide decision-making (group and individual level)
Why and how do <i>incentives and obligations</i> play a role in MGEP EBs?	
<ul style="list-style-type: none"> • Noneconomic incentives • Diverse impacts 	Valuing noneconomic incentives and their diverse impacts
<ul style="list-style-type: none"> • Performance evaluations that highlight proactivity • Clear definition of compensation 	Aligning incentives and individual performance evaluation
<ul style="list-style-type: none"> • Commitment and engagement due to ownership (i.e., being a partner) • Negative effects of partnership obligations 	Having commitment and engagement
<ul style="list-style-type: none"> • Experience with crises during which partner capital is diminished • Staff acknowledgment of the obligations of being a cooperative university • Certainty about receiving support from Mondragon Corporation in case of financial difficulties 	Navigating crises while fulfilling obligations

Another participant expressed that “[self-management] is the key, from my point of view. More than being a cooperative, companies that are not cooperatives but have a level of trust and self-management, I believe, could be as innovative as us” (P2). A structure based on trust and a high sense of responsibility allows individuals to respond more effectively to institutional needs, experience greater commitment, and relieve pressure: “If we can self-manage, it is because we trust others. We trust that they will take responsibility for fulfilling their tasks” (P11); “For now, I believe that the majority of us are responsible and I think that helps people feel more freedom to propose things and do new things, to be proactive, always seeking something new” (P3).

Management Tools. This theme positively impacts MGEP’s EBs through the unique process by which management tools are defined and utilized to guide group and individual decision-making. In particular, plans are built collaboratively, from the bottom up, with extensive participation and broad deployment through working groups that represent the interests of various collectives. Consequently, the vast majority of MGEP internalizes the plan: “The advantage of this strategic plan, from which the four management plans are derived, is that it is shared; it is not a top-down strategic plan but rather a strategic plan that is built from the bottom up” (P11); “To start, the design of these plans, where there is a phase of active listening to the different ideas that different people working at MGEP may have” (P12). By establishing, monitoring, and evaluating strategic directions, strategic plans guide various collectives within MGEP, shaping and defining group and individual goals. Participants suggested that shared plans serve as reference points when staff propose new projects: “You can feel more aligned and see your tasks more clearly, how you can contribute to that strategic plan. It is like breaking it down in a way that’s more useful, personal, and direct for you” (P6) and “The plans serve as reminders. We said we were going to do this, we are committed to it, and I think that really helps when making decisions” (P9). The collective process of defining shared strategic plans encourages bottom-up and proactive engagement in initiatives, thereby making the organization more entrepreneurial.

Incentives and Obligations. Workers at MGEP are recognized, receive noneconomic incentives, and value the freedom to act, to do what motivates them on a daily basis, above all, gain satisfaction from contributing to something greater. Noneconomic motivations stimulate individuals’ sense of initiative: “In the university, we encounter profiles that are very vocational, people who do what they do because it is truly what they love, what calls to them, what motivates them” (P12). Another participant explained:

To be honest, I have never paid much attention to that, and it might be because the reason I am here is not for the paycheck or the incentives. It is more about the development of individual contributions to the students, to the companies, to the university” (P5).

Participants reported that incentives affect individuals in various ways, depending on the stage of their professional careers. For example, one participant suggested that younger individuals may desire economic incentives: “I understand that younger people who are building their lives, well, it affects them much more, as it affected me when I was in my twenties” (P5).

Incentives also influence MGEP EBs because they align with *individual performance evaluations*, and *compensation is clearly defined*. According to one participant, “A section

in the compensation manual highlights that proactivity or the initiative for new activities are part of the evaluation” (P1). According to another,

“In our compensation manual, one of the points assessed is the generation of new activities, promoting leadership in groups, projects, and so on. It is clear; I mean, it is right there. Of the four or, in some cases, five competencies that are evaluated, one is the generation of new activities, leadership, and all of this” (P10).

Commitment and engagement due to ownership may also affect EBs. Partners (i.e., shareholders) are characterized by a higher level of engagement and greater awareness of the university’s performance than their colleagues (i.e., nonshareholders). They exhibit stronger motivation to achieve organizational outcomes because success directly influences their personal capital:

“As a partner, you feel the desire to improve MGEP, which we all form collectively. However, precisely because you own a bit, and your decisions may be taken into greater account, it adds extra value to the work you do, providing additional motivation” (P8).

As another participant explained, “When you already have capital invested, when your money is at stake, your level of involvement increases” (P4). Nevertheless, partnership can have negative aspects, such as becoming comfortable once achieving a secure position and financial stability: “Once you enter civil service, it is like you relax because you have a secure position, and once you become partner, if you do not see the risk, you might say, ‘Well, I am at ease’” (P4); “I also see that sometimes certain people can stagnate and think, ‘I already have my salary, my stability, and this gives me peace of mind, so I will not worry much because I am already secured’” (P18). An additional negative implication is related to attracting and retaining talent. Specifically, once they have worked at MGEP for three years, individuals must invest a significant amount of money to become partners, which may discourage young talents without financial means despite the ability to pay in installments. As P5 explained, these members may seek alternative job opportunities: “I think it might even be an obstacle to retaining good young talent. There may be a problem with losing them.”

Finally, the interviews revealed themes related to navigating crises. *Not everyone at MGEP experienced a crisis situation* during which their partner capital diminished: “We have not experienced that yet, so we do not know” (P1). Those who had experienced crises recalled only minimal impacts, such as freezing salaries: “On another occasion, it was necessary save a Mondragon Corporation company by reallocating MGEP funds. At MGEP, that has also happened, but it barely affected the benefits, although it did affect the freezing of salaries during the financial crisis” (P3); “Some company, had gone bankrupt, and we had to pitch in financially, but well, we are very conscious of our obligations” (P4). Finally, *obligations are something the staff is aware of and accepts well*, given that obligations are part of cooperative values and accompanied by *the certainty that MGEP can always count on the support of Mondragon Corporation in case of serious financial difficulties*. As one participant noted, such certainty motivates staff to continue proposing new initiatives:

“I think that if something bad were to happen to us in MGEP in the end, knowing that we have the protection of others provides certainty, and I think that for entrepreneurship you need to know or have the certainty that you are somewhat protected” (P6). In conclusion, the analysis highlights the pivotal role of internal management in shaping MGEP’s EBs. Key mechanisms include the adoption of a flat structure based on trust and self-management, the collective definition of strategic plans to guide decision-making at both group and individual levels, and the alignment of incentives with individual performance evaluations. Additionally, fostering commitment and engagement and demonstrating the ability to navigate crises while fulfilling obligations further emphasize internal management’s influence on MGEPs EBs.

5 Discussion

Within the growing and vibrant debate on EUs, scholars and practitioners have increasingly recognized that EBs in HEIs engage not only in technology transfer and third-mission activities but also in the integration of entrepreneurship with traditional teaching and research missions (Guerrero et al., 2016; Siegel & Leih, 2018). Simultaneously, research emphasizes the barriers to entrepreneurship that inherently characterize the organizational structure and governance of large institutions, which may undermine the adoption of EBs, such as hierarchical organizational structures, multiple layers of decision-making, and scarce diffusion of entrepreneurial values and culture among staff (Kirby, 2006). Therefore, as emphasized in recent calls (Klofsten et al., 2019), there is an urgent need to understand how university organizational structures and governance models can follow the imperative for HEIs to become more entrepreneurial in their constituent missions. We contribute to this debate by exploring the case of MGEP. Our choice was motivated by the fact that MGEP offers an exemplary case of a faculty that, throughout its history, has displayed entrepreneurial abilities by proactively offering innovative educational offerings and establishing robust connections to local industries that inform its research efforts and knowledge transfer activities (Wright et al., 2011). MGEP is a particularly interesting example because it presents a peculiar organizational structure based on cooperatives, which stands out compared to the hierarchical and rigid decision-making structures typically identified as barriers to the adoption of intrapreneurial and entrepreneurial initiatives by large organizations (Kirby, 2006; Klofsten et al., 2019).

Our findings reveal a set of key mechanisms through which the cooperative governance of MGEP enables the organization to be entrepreneurial in its teaching, research, and relationships with local businesses. MGEP’s entrepreneurialism is captured not only by concrete actions that align with its mission but also in its overall EO, which promotes proactiveness, innovativeness, risk-taking, and flexibility when identifying and exploiting opportunities. Accordingly, MGEP has been able to respond promptly to external and internal triggers that require the organization to challenge and innovate how teaching, research, and business relationships are conducted. Our interviews underline the key role MGEP’s organizational structure and governance model play in accomplishing these results. Specifically, we identified three main enabling mechanisms that, taken together, explain *how* MGEP’s cooperative governance approach promotes EBs: (1) governance bodies that promote individual

participation and stakeholder involvement, (2) commitment to a long-term vision animated by a strong concern for regional development, and (3) internal management that empowers and motivates staff to actively identify and act upon opportunities. While the first of these mechanisms conflicts with MGEP's cooperative governance model, it works in synergy with the other two mechanisms, thereby finding fertile ground in cooperative governance, despite not being tied to it directly.

First, MGEP governance bodies were designed to enable individual participation. MGEP's cooperative governance is reflected by mechanisms—unusual for this type of governance—that formally tie decisions to collective stakeholder participation and involvement. In this way, the sense of mutual cooperation, shared vision, and cohesion that characterizes MGEP's cooperative values manifests concretely in the codified building blocks of organizations, such as governance bodies and committees.

Second, in line with corporate entrepreneurship and intrapreneurship theories (Kirby, 2006; Kreiser et al., 2021), entrepreneurial organizations should commit to a long-term vision that places entrepreneurship at the center of their role in society and decision-making processes. Such a vision has been built into MGEP's cooperative governance since its establishment; thus, its governance is animated by a strong sense of solidarity with and commitment to the development of the region (Wright et al., 2011). Notably, noncooperative universities may articulate and adhere to an entrepreneurial-oriented long-term vision, but the distinctive feature of cooperative universities lies in their deeply ingrained sense of collective participation and an ownership structure that fosters organization members' internalization of and proactive contribution to a long-term vision.

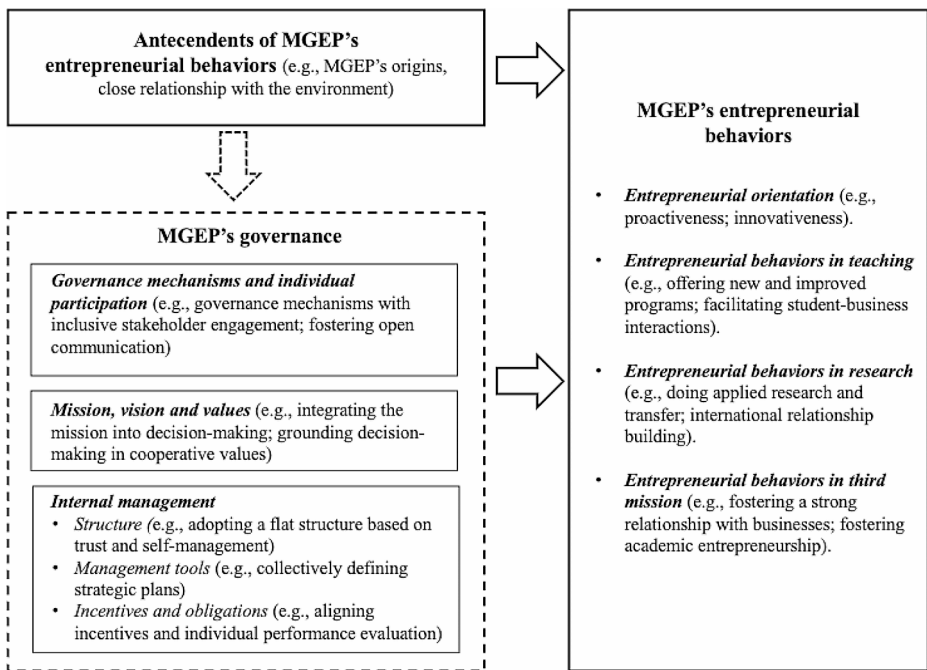
Third, for such a vision to produce actual EBs, it must be shared and internalized by members of the organization. As Clark et al. (2023) suggested, in the context of corporate entrepreneurship, individuals in each organizational layer should be guardians and promoters of the EBs and values pursued by the organization. In MGEP, *internal management tools* facilitate staff involvement in entrepreneurial thinking and acting by actively involving and assigning staff responsibility in organizational decision-making. In this way, university members are not passive executors of strategic plans imposed through a top-down approach but are instead encouraged to actively identify and act upon opportunities to improve MGEP's performance. Such an active role is further strengthened by a system of incentives that aligns personal plans with organizational plans. These incentives are linked only partially to extrinsic motivation prompted by financial rewards, such as equity participation and compensation tied to organizational performance. In particular, equity-based participation fosters faculty members' discretionary contributions to the organization's EO in the form of concrete financial remuneration, an organizational culture built upon collective participation, and shared responsibility. Equity participation further reinforces the intrinsic motivations ignited by university culture. Indeed, the interviewees underlined the strong sense of trust and participation that intrinsically motivates workers to actively contribute to realizing MGEP's vision and long-term strategy planning. Thus, the equity participation in place at Mondragon University works in synergy with other mechanisms that foster collective participation. While internal management elements, such as incentives, are also in place in noncooperative universities, MGEP has designed these to align consistently with the values of collective participation and mutual solidarity that uniquely characterize cooperatives.

While the peculiar cooperative governance of MGEP enables EBs through several mechanisms, it introduces the unique challenges stressed by some interviewees. Although

MGEP's participative and democratic management processes ignite organizational members' contributions to identifying and exploiting new opportunities, this process is time-consuming and, in some cases, might undermine or delay the implementation of new initiatives. Additionally, equity participation, as a tool for aligning individuals' efforts with an organization's entrepreneurial vision, can have unintended consequences. For instance, external members who have not yet internalized the cooperative's culture might consider equity too risky a reward; therefore, equity compensation may create barriers to hiring faculty members. Moreover, equity-based compensation is an output-based reward (Hayton, 2005) and, as such, it might deter faculty from experimenting with taking risks to avoid being penalized should their actions have unintended consequences. Some partners might also exploit their stable positions as partners to passively perform their duties instead of proactively contributing to the organization's development. For this reason, while equity ties compensation to organizational output, MGEP's individual assessment and retribution system bases compensation on individual efforts. The complementarity of these two compensation systems enhances the alignment between individual efforts and organizational cultures. In this sense, the presence of intrinsic motivation is an important means by which MGEP ensures that its members remain committed to its long-term vision. Finally, another rule that regulates MGEP's cooperative governance is that partnerships require financial investment. As one interviewee emphasized, this condition might prevent some talents from contributing to the institution's vision. Despite some possible pitfalls of MGEP's peculiar organizational structure due to internal management and governance elements that favor participation and intrinsic motivation, the mechanisms put in place by the organization ensure that academic staff internalize the entrepreneurial. Figure 1 illustrates the antecedents of EBs, delineates the key mechanisms through which cooperative governance enables EBs, and lists present-day EBs. The dashed arrow suggests that MGEP antecedents potentially influence the establishment of governance mechanisms, while the solid arrows indicate how both antecedents and governance mechanisms influence current MGEP EBs.

5.1 Research contributions

Our study makes three main contributions to the literature on EUs and HEIs. First, we expand the research on governance and organizational structures within EUs (Cunningham et al., 2022; Klofsten et al., 2019). By highlighting MGEP's peculiarities (Wright et al., 2011), we unpack various mechanisms through which governance enables an academic institution to fully embrace an entrepreneurial vision and act accordingly in all its missions, including traditional ones (i.e., research, and teaching). Prior research on EUs has underlined the role that entrepreneurial climates and cultures play in supporting university members' pursuit of entrepreneurial thinking and acting (Bergmann et al., 2018; Klingbeil et al., 2019). Our study augments the literature by showing how the sharing and internalizing of entrepreneurial values among university members is enabled by governance that promotes individual participation in long-term university strategies and performance. Our case also illustrates how governance might mitigate dilemmas faced by academic staff regarding trade-offs between traditional academic duties, such as teaching and research, and third-mission activities (Ambos et al., 2008). Such tensions, which can become particularly acute at the individual level, may be alleviated by offering economic incentives and promoting diffuse cohesion and trust among university members. Both aspects allow MGEP academ-



The dashed arrow suggests MGEP antecedents may influence governance mechanisms, while the solid arrows show how both antecedents and governance mechanisms impact current MGEP EBs

Fig. 1 Antecedents, governance mechanisms, and current EBs

ics to align their individual careers with an organizational vision inspired by entrepreneurial values. Thus, EBs become integral to academic work, which is rewarded not only for technology transfer activities but also for promptly responding to university stakeholders and displaying entrepreneurial attitudes within research and teaching activities.

Second, we contribute to the growing body of research on HEI leadership (Civera et al., 2020; Siegel & Leih, 2018; Seeber et al., 2016). Our work complements studies that demonstrate the role that university leaders play in enabling members to seize and act upon opportunities. Specifically, our findings underscore the importance of appropriate governance mechanisms through which members can share and act upon an academic institution's entrepreneurial vision. Furthermore, we highlighted peculiar modes of interpreting leadership within the educational sector. Our case shows that forms of leadership based on participative decision-making, despite presenting some possible limits, may yield noticeable results in terms of engagement in EBs.

Finally, our study enhances our understanding of how to alleviate some of the barriers to entrepreneurship that inherently characterize large organizations and dissuade universities from being entrepreneurial (Kirby, 2006). MGEP's cooperative governance includes valid alternatives to some problems that typically limit the EBs of universities and their members: flat rather than hierarchical decision-making processes, focusing on long-term organizational success rather than immediate results, and implementing a reward system that encourages active rather than passive participation in university strategies. When combined, these elements suggest that one option for universities to behave more entrepreneurially

is to promote a system of rewards that aligns with the stewardship perspective outlined in corporate entrepreneurship research (Hayton, 2005). From this perspective, compensation serves not as a mere extrinsic reward but as a reinforcement of member identification with the organization and intrinsic motivation. Indeed, as suggested by self-determination theory (Lam, 2011), “extrinsically motivated behavior can be transformed into intrinsically motivated one as individuals internalize the values and behavioral regulation that underlies it” (p. 1356). In our case, the adoption of equity participation and individual assessment aligned Mondragon University’s reward system with such a purpose.

5.2 Limitations and future research directions

Before discussing the practical implications of our study, it is important to describe its limitations and directions for future research. First, our single-case study provides an original and fresh perspective on how university governance elements might better fit the EU paradigm. However, an inherent limitation of single-case studies is their limited generalizability, and we caution against passively applying insights into the Mondragon University case to other contexts. If these insights are extended to different institutions, caution should be taken to consider the idiosyncratic elements of each university and the surrounding ecosystem. Future research might extend our understanding of cooperative governance by carrying out comparative case studies at universities of similar size and EO but with different or more traditional governance mechanisms, such as those adopted by public and private HEIs.

Second, cross-sectional data collection limits insights into the evolution of staff perceptions of governance over time. Future research might explore whether cooperative governance loses effectiveness over time or whether its elements can be exposed to flexible adaptation and change, thus leaving room for EBs related to governance itself. For example, some interviewees highlighted areas of improvement that raised concerns about the effectiveness and speed of democratic decision-making processes that involve too many people.

Third, we focused on governance in the engineering faculty because they are most exposed to local pressure to behave entrepreneurially. It would be valuable to consider other faculties in which technology transfer plays a less significant role to see how cooperative governance fosters EBs in faculties traditionally depicted as nonentrepreneurial, such as the arts and humanities (Pilegaard et al., 2010). Finally, future studies might interrogate contingencies, such as internal culture, regional richness or vibrancy, and other exogenous factors that might affect the adoption of the EU framework.

5.3 Practical implications

While we acknowledge that the organizational structure and surrounding context of MGEP are unique and cannot be passively replicated elsewhere, we believe that the Mondragon University case can teach us several lessons to make universities’ governance elements more suited to EBs. As a start, other HEIs might begin enacting formal and informal measures that are compatible with their specific organizations to promote the collective contribution of university staff to university EO. Informally, universities might adopt and signal an entrepreneurial culture that encourages proactiveness, discretionary participation, and contributions to the organization by emphasizing openness to external stakeholders and “being entrepreneurial” in university strategic plans and by offering staff training that encourages

an entrepreneurial mindset and intrapreneurship. While creating an entrepreneurial culture might take a long time, it helps internalize the values and behaviors rewarded through concrete forms of compensation. Formally, incentives and valuation systems can be adjusted to reward faculty and staff EBs. For example, different faculties might be evaluated using not only traditional metrics, such as scientific output, numbers of students, or technology transfer, but also metrics that consider the extent to which a school has experimented with new initiatives. At the individual level, university staff can be incentivized to proactively propose and participate in organizational initiatives by, for example, obtaining greater flexibility in time allocation or receiving symbolic financial compensation.

Decision-making structures might also be adapted to provide concrete ways to make staff voices count. For example, events during which faculty members meet to formally approve decisions should not be limited to formality and carrying out bureaucratic tasks. Rather, such events should provide opportunities for staff to share and discuss ideas that might improve the organization without fear of negative judgment. Ultimately, the cooperative governance of MGEP and its underlying philosophy might inspire other institutions to adopt a set of best practices compatible with more traditional governance models, such as flat decision-making structures, involving staff in decision-making, promoting a culture of entrepreneurship ignited by a top vision, listening to external stakeholders and society, rewarding extra-role behaviors of staff, and fostering long-term staff commitment to the institution.

6 Conclusion

In HEIs, EBs extend beyond technology transfers and third-mission activities to embrace entrepreneurship through teaching and research. Ongoing debates highlight the tensions between centralized, bureaucratic forms of HEI governance and the adoption of EBs, and we contribute to this debate by exploring MGEP, a unique case of cooperative governance. Our findings reveal that MGEP exhibits entrepreneurship across all three of its missions and is influenced by various governance elements, including governance bodies, structures, management tools, incentives, obligations, and its mission, vision, and values. This study makes three significant contributions to the literature by addressing the need for more research on governance and organizational structures within EUs, providing new insights into the role university leadership plays in facilitating EBs, and offering potential solutions to entrepreneurship barriers in large organizations, potentially benefiting universities in their pursuit of behaving entrepreneurially. Despite its unique context, lessons from MGEP may inform university governance practices that are more conducive to EBs, such as involving staff in decision-making and fostering long-term commitment. Hopefully, further research will expand our understanding of cooperative governance through comparative studies involving universities of similar size and traditional governance structures, by examining the evolution of cooperative governance effectiveness, and by exploring its impact on less entrepreneurial faculties, such as those in the arts and humanities.

Appendix A: List of consulted documents

1. Organizational structure: <https://www.mondragon.edu/en/faculty-of-engineering/organigram>.
2. Project-based learning: <http://ebiltegia.mondragon.edu/xmlui/handle/20.500.11984/1647>.
3. Mendiberri. *The educational model of Mondragon University*: <https://www.mondragon.edu/en/-/mendiberri-2025-modelo-educativo-de-mondragon-unibertsitatea>.
4. Work–study alternation: <https://eu4dual.education/>.
5. Mondragon University. *Teaching performance assessment manual*: <https://www.mondragon.edu/documents/20182/538155/manual-evaluacion-docentia-abril-2021.pdf/5fc785be-6f8f-4a0f-9313-0e0e9ef03494>.

Appendix B: MGEP's governing boards

Table B1 MGEP governance body names, functions, composition, and selection methods

Board	Function	Composition	Selection method
General Assembly	The main governing body of the cooperative.	1/3 working members 1/3 beneficiary members 1/3 collaborating members (the president corresponds to this group)	Integrated by all the members. The number of working members defines what constitutes 1/3.
Governing Board (Rector)	The representative, governing and management body of the cooperative.	4 working members 4 beneficiary members 4 collaborating members (the president corresponds to this group)	Each group selects their representatives.
Executive Committee	The main executive body of the cooperative.	President of the previous boards 4 working members from the governing board General coordinator	Appointed and empowered by the Governing Board.
General Coordinator	Carry out general coordination.	A working member	Chosen by the governing board after a selection and comparison process carried out by the president.
Functional Directions	Coordinate each of the vertical functions: teaching, research and transfer, lifelong learning.	Working members	Chosen by the general coordinator.
Supervisory Committee	The accounting control body.	1 working member 1 beneficiary member 1 collaborating member	Chosen by the General Assembly.
Workers Social Council	The direct participation body of the workers. It has a consultative and communicative character. Analyses working conditions.	All workers are part of a worker social council (there are 12), either by discipline or by geographical location.	Each Workers Social Council selects their representative.
Student Council	The direct participation body of the students. It has a consultative and communicative character.	All students are part of the student council	Each classroom elects its delegate, and all delegates are part of the student council. The delegates decide on their representative.

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