Strategic planning in higher education institutions: what are the stakeholders' roles in the process?

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Abstract

This article classifies and assigns degrees of influence to the stakeholders involved in the implementation of strategic planning at a Brazilian higher education institution. In order to test the stakeholder influence theory, we carried out a case study of a Brazilian university based on qualitative methods. The models of Frooman (*Academy of Management Review*, *24*(2), 191–205, 1999) and Mitchell et al. (*Academy of Management Review*, *22*(4), 853–886, 1997) served as the theoretical basis for assessing the stakeholders' identification and management. Findings indicate that higher education institutions focus on the internal and external stakeholders that have the power to control them. In practice, this study provides insight into the stakeholder influences that have an effect on the implementation of strategic planning in a university. Based on the findings, university managers will be able to think more strategically about the institution's objectives, taking into account the degree of influence that stakeholders have on the institution's objectives.

Keywords Stakeholders · Strategic planning · Stakeholder theory · University-stakeholder relationships

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Introduction

The strategic planning of any organization is an ongoing effort because of the large number of variables involved in the process. Higher education organizations have to satisfy different and sometimes, conflictive stakeholders (Ian and Hjortsø 2019), in order to obtain needed resources and legitimacy (Pinheiro 2015). We carried out a case study of a large public university in Brazil—namely, the University of Brasilia—to test the theories of stakeholder influences as a means to improve the strategic management process of this type of organization. Stakeholder influence theories are likely to help identify and assess the external and internal demands a given higher education organization deals with in developing its strategic plan.

Although 35 years have passed since the seminal paper by Freeman and Reed (1983), the researches about stakeholders are still relevant in the strategic management literature. Stakeholders in the public sector can include managers, employees, suppliers, government officials, service users, the local community, partners, or any other agent interested in the goals of the organization (Bryson 1995). Stakeholders both influence and are influenced by the decisions of a given organization. Accordingly, organizations have to try to develop strategies to satisfy their stakeholders, as suggested by Savage et al. (1991).

Having an understanding of who the stakeholders are and what type of influence they have is important for public organizations to minimize conflict in their projects (Balbachevsky 2015). Each stakeholder has different levels of power and chooses distinct strategies to influence decisions, either by influencing the availability of resources or the outcome produced by using such resources (Frooman 1999).

A university has a varied group of stakeholders—ranging from a single employee to a financial institution—but the ties are different. In universities, especially in the public ones, the funding stakeholders and their ties are easier to determine (Morphew et al. 2018), but other kind of stakeholders is more difficult to identify and to understand the relationships that exist among them (Benneworth and Jongbloed 2010). In this sense, Oliva (2009) concluded that higher education institutions are very sensitive to the social networks of external contacts, and there is a large number of players involved in their systems (Ian and Hjortsø 2019). All these factors make the university-stakeholder relationship important (Cappiello and Pedrini 2017), but more difficult to manage.

In some cases, this relationship can have specific objectives and cause conflicts of interest. Additionally, a typical university's bureaucratic but decentralized structure generates major challenges to strategy development and implementation. Thus, managing and aligning the interests of all those involved with higher education institutions' objectives is complex (Oliva 2009). Regarding the organization's targets, collegiate decision-making, which is typical of universities, creates room for conflict among stakeholders (Sampaio and Laniado 2009). This is particularly true in developing countries, such as those in Latin America, where factors like the following are present: resistance, poor or isolated implementation strategies, ineffective communication, weak leadership, and inattention to stakeholders' interests. Although in recent years Latin American universities have invested in modernization programs—such as technological innovations, educational renewal, and networking—not all the changes have been as successful as desired (Sucozhanay et al. 2016).

According to Burrows (1999), Jongbloed et al. (2008) and Oliva (2009), and more recently by Balbachevsky (2015), Kettunen (2015), and Sam and Dahles (2017), the literature contains relatively few empirical studies for identifying and analyzing the stakeholders of public and

private higher education institutions, whose influence relates to institutional participation in strategic planning. In this sense, the following research question has emerged: What are stakeholders' roles in the implementation of higher education institutions' strategic planning?

To investigate this theoretical gap, we use a case study as our research strategy. Our aim is to develop theories for how public higher education organizations react to stakeholders' involvement in its strategic planning. We collected data from a public university in Brazil, namely the University of Brasilia, ranked among the top ten in the country.

Regarding the justification for this study, the findings go beyond contributing to the institution analyzed, as they also contribute to the structuring of other public institutions and universities in other settings. The results allow a public university—financed by society and with a social responsibility mandate—to identify the most influential stakeholders in the implementation of its strategies. This information is relevant to managers to prioritize their goals and to make corresponding decisions. Additionally, we conducted data collection after 10 years that the University of Brasilia had begun the strategic planning process at the institution for the first time. Therefore, opportunities exist to improve the process. Our results shed light on the strategic planning of higher education organizations in general. Furthermore, this paper builds on previous studies that call for more studies of strategic actions in HEIs (Childress 2009; Jarzabkowski and Wolf 2015).

This article is divided into five sections including this introduction. The "Literature review" section contains a literature review, which discusses the relationship between organizational structure and the influence of stakeholders, with special attention given to how universities' strategies can be affected. In this part, we provide a review of the models developed by Frooman (1999) and Mitchell et al. (1997), as well as all the parameters for the categorization of stakeholders. Then, in the "Methods" section, we describe the development of the investigation, followed by the "Findings and discussion" section analyzing the data obtained. In the "Conclusion" section, we present our conclusions and the limits of our research.

Literature review

Are stakeholders important for higher education organizations' strategic planning?

According to McCune (1986), a plan implementation is like a game among players in which their roles are negotiated, levels of adhesion to strategies vary, and resources are allocated through bargaining. Since Mintzberg's seminal work (Mintzberg 1987), strategy design is understood as being either a deliberate or an emergent process. If deliberate, it is called rational planning (Idenburg 1993). Here, the design of a strategy encompasses a prior diagnosis during which the strengths and weaknesses of the organization are assessed as well as the threats and opportunities in the market. Both internal and external diagnoses make it possible to identify players that can influence the organizational strategy, either positively or negatively.

In order to implement strategic planning, managers must be aware of the players present in both the external and internal environments of the organization (Najan 2010). The execution of such planning must be coordinated with a network of agents (Sampaio and Laniado 2009), since the achievement of organizational objectives is influenced by the interests of the stakeholders involved in the process. The mutual influences in the organization-stakeholder relationship will directly or indirectly affect the choice of strategies to be implemented (Vos 2003).

In this line of thinking, stakeholder management should be seen as a continuous task of analyzing and integrating multiple stakeholders and multiple objectives (Freeman and McVea 2001). Furthermore, the criteria used to assess stakeholders are dynamic rather than static. Levels of power, priorities, coalitions, and interests may change over time, and the organization needs to pay attention to these changes (Freeman 1984).

So, to ensure its survival, an organization must develop targets that satisfy its current and potential stakeholders, as part of an ongoing strategic management process (Jongbloed et al. 2008; Kettunen 2015; Pavičić, Alfirević and Mihanović 2009; Savage et al. 1991). These targets must take into account the potential impact of stakeholders on strategic business units. Considering the potential stakeholders can either threaten or cooperate, managers must avoid plans that are contrary to the most important stakeholder' interests. And whenever necessary, managers can also adjust organization plans in order to satisfy the stakeholders' needs (Andrade 2002; Savage et al. 1991). Also, public organizations should analyze their performance and consider whether stakeholders' expectations have been met (Bryson 1995). Freeman and Reed (1983) examined the need to involve stakeholders in organizations' decision-making process, including in public utilities.

Freeman and Reed (1983) wrote that stakeholders' interests could be conflictive in general. More specifically, in education planning, we also notice this conflict as Ian and Hjortsø (2019) showed. This means that in order to obtain a satisfactory performance, managers must know who their stakeholders are and what results they expect (Cappiello and Pedrini, 2017). This managerial approach is called stakeholder board model according to Donina and Paleari (2019).

Yet, it is not always easy to identify stakeholders. According to Atkinson et al. (1997), the relevance of stakeholders is based on the degree of their contribution to the organization's competitiveness. Contrary to this argument, authors such as Donaldson and Preston (1995) and Freeman (1984) argue that an organization must try to meet the interests of all its stakeholders, taking into account their level of influence. It may not be enough to deal with funders alone, but it may not be cost-effective to deal with all stakeholders, at least without setting priorities.

There are several stakeholder classification models in the literature. We used the categorization of Mitchell et al. (1997)—as it was used before by Benneworth and Jongbloed (2010) and more recently by Ian and Hjortsø (2019)—which addresses three attributes: power, legitimacy, and urgency. Power is seen as coercive (based on strength or threat), normative (legislation or forms of communication), or utilitarian (possession of resources or information). Legitimacy may either be individual, organizational, or social in nature. Urgency is the stakeholder's need for immediate action from the organization. The higher the number of combinations of these three attributes, the greater relevance the stakeholder has for the organization. The idea of ranking different stakeholders based on these three attributes in a way that allows an organization to set priorities leads to the concept of salience—which according to Mitchell et al. (1997, p. 869) represents "the degree to which managers give priority to competing stakeholder claims." By combining these three attributes, Mitchell et al. (1997) suggest the existence of seven different types of stakeholders:

i. Dormant: They hold the power to impose their will on the organization but do not have legitimacy or urgency, so their power remains unused, and they have little interaction with the organization. The organization must acknowledge these stakeholders in order to monitor their potential to obtain a second attribute.

ii.   Discretionary: They have legitimacy but do not have power to influence the organization. The attention that must be given to these stakeholders is related to corporate social responsibility.

iii.   Demanding: If the most important attribute in managing stakeholders is urgency, they will be demanding. Without either power or legitimacy, they cannot exert major influence on the organization but should be monitored regarding their potential for obtaining a second attribute.

iv.   Dominant: Their influence in the company is based on power and legitimacy. The organization should give a lot of attention to these stakeholders.

v.   Dangerous: They have power and urgency but do not have legitimacy. They are coercive and possibly violent with respect to the organization.

vi.   Dependent: They have urgency and legitimacy but depend on the power of one or more other stakeholders in order for their claims to be taken into account.

vii.   Definitive: They hold power and legitimacy, so they almost become definitive. But when they have urgency as well, immediate attention must be given to such stakeholders.

The model of Mitchell et al. (1997) has some limitations. As pointed out by Mainardes et al. (2010), several factors must be taken into account when testing the model empirically. The attributes of power, legitimacy, and urgency are considered binary (one has power, legitimacy, or urgency or one does not). Moreover, in the way the model was developed, stakeholders having a minimum level of power, legitimacy, or urgency will be classified as definitive. After all, no matter how small the attribute, it does exist. As well, there is no ranking among the several stakeholders classified as belonging to the same category. For example, if several stakeholders are classified as definitive, there are no criteria to differentiate or prioritize them. In that sense, Mainardes et al. (2010) stated that these limitations are due to the lack of a scale to determine which stakeholders effectively have power and/or legitimacy and/or urgency.

Therefore, another important model used to analyze stakeholders was developed by Frooman (1999) and pays attention to the strategies stakeholders can adopt in order to influence decision-making. In this model, there are four types of stakeholder influence strategies, based on the assumption that the need for resources provides opportunities for others to obtain control. They are as follows: (i) direct withholding, (ii) direct usage, (iii) indirect withholding, and (iv) indirect usage.

Resource withholding strategies are those in which there is discontinuity of the resource transfers by a stakeholder to the organization with the intention of promoting organizational change. In usage strategies, a stakeholder continues to provide the resource but with some restrictions. Direct strategies are those in which a stakeholder manipulates the flow of resources to the organization, either by withholding or by usage. Indirect strategies allow the stakeholder to exert influence by means of an ally, manipulating the flow of resources from the ally to the organization. Thus, indirect withholding strategies determine whether the organization obtains a resource, whereas indirect usage strategies try to provide conditions for the continuity of resource provision.

Studies addressing stakeholder influences provide different perspectives via analysis by country. The environment (economic, social, or political) in which public universities operate has in recent years introduced new players, demanding more effective and efficient management strategies (Mainardes et al. 2014). Kettunen (2015) used the balanced scorecard technique to map the principal stakeholders of Finnish universities in terms of external impacts or desired results; contributions to finance university activities, processes, and collaboration of

internal and external stakeholders; and the organizational learning process, which involves the training of internal stakeholders. On the other hand, Sam and Dahles (2017) classify stakeholders under the influence of Etzokowitz's (2003) triple helix, in terms of government, university, and industry. Additionally, the authors evaluate international donors, since their actions have as much impact on financial contributions as on the improvement of techniques within the educational system.

Burrows (1999), Duke (2002), Mainardes et al. (2010), and Reavill (1998) consider the student body to be a dominant stakeholder, given that its existence represents the very *raison d'être* of a university, and the students are the principal beneficiaries of university activities, as noted by Kettunen (2015) and Yang (2015). In contrast, there are authors who question the power of students. According to Neave (2000), students are passive players and merely accept decisions issued by the strategic leadership of universities. Chapman et al. (2010) agree that students do not influence the universities in a significant way, even when university is discussing important theme like employability (Sin and Neave 2016). According to Chapman et al. (2010), students' demands are mostly addressed from the perspective of university managers and not from the perspective of the students themselves.

Society is another important stakeholder, especially for public organizations. As recipients of public funding, universities must account for their activities and achievements to government and society at large (Benneworth and Jongbloed 2010). According to Kettunen (2015, 60), society can be understood as an external stakeholder "on which the outcomes of the processes are focused." For the author, this stakeholder consists of the target groups and customers of a higher education institution. According to Reavill (1998), society must be considered as one of the most important stakeholders of public universities, as their main supporter, since they are funded by taxes and tuition fees. Miller et al. (2014) highlight that the survival of universities as research and knowledge-producing institutions depends on their integration with what society perceives to be innovative in order to enhance regional innovation systems. Otherwise, other institutions—such as advanced institutes or centers of excellence—will be created to produce the latest knowledge society needs. In multi-campus universities, geographic distance creates another kind of challenge, because society can be different from a region to other, and so do their interests (Pinheiro et al. 2017).

Regarding the government, it is a player who is the facilitator and regulator of the higher education institution sector (Sam and Dahles 2017). Beyond this, it is part of the financial perspective of organizations of higher education, and it is fundamental to strategic management (SM), quality assurance, and management of operations. Its entities are defined as central stakeholders, along with external sources of financing. In other words, government officials are at the top of the hierarchy (Balbachevsky 2015; Burrows 1999; Jongbloed et al. 2008). Mainardes et al. (2010) affirm that this stakeholder can be classified as definitive according to the model of Mitchell et al. (1997). However, in countries such as Cambodia and China, there has been a decline in the role of government in supplying financial resources, accompanied by an increase in the participation of external funders in this role (Sam and Dahles 2017; Yang 2015).

In the specific case of Latin America, the management of stakeholders is fundamental for successful implementation of changes. Sucozhanay et al. (2016) identified a set of critical stakeholder management strategies for the implementation of change in Latin American universities. These strategies include developing open and direct communication, involving and collaborating with stakeholders, empowering brokers and building networks, and negotiating agreements (Sucozhanay et al. 2016). These results also are compatible with the studies

of Casablancas-Segura and Llonch (2016), who found that universities that are more oriented towards stakeholders will obtain better organizational performance regarding beneficiary satisfaction, acquisition of resources, and reputation. Besides that, Mainardes et al. (2014) studied the importance of stakeholders as funding sources for public universities.

Despite the formal body of knowledge presented here and in other studies, there is no final word on stakeholders' role in the strategic planning of higher education institutions. Here, we present more evidence to shed light on this subject.

Methods

Research setting

The present case study is both exploratory and descriptive; it is involves the University of Brasilia (UnB), regarded as one of the largest and most important higher education institutions in Brazil. It has more than 40,000 registered students and an academic community in excess of 50,000 people, according to official data published in a 2015 census of Brazil's higher education system (Brasil 2015). Therefore, we analyzed the strategic plan carried out by the UnB in order to depict stakeholders' roles in the process.

Data collection

According to Yin (2017), a case study is an investigation of a contemporary phenomenon within its real-life context in a manner that allows gaining ample and detailed knowledge. The first step of this study was collecting documentary research to comprehend the specificities of the strategic planning in the institution. For this, several UnB documents were analyzed, such as management reports, strategic plans, evaluation reports, and meeting minutes related to the development of strategies. Then, we conducted exploratory research with the objective of mapping the principal stakeholders in the process of strategic planning.

During this stage, 24 interviews were conducted with planning managers, from both administrative and academic areas. During each interview, we presented Freeman's (1984) definition of a stakeholder, followed by the question of who the respondent regarded as stakeholders in the strategic management implementation process. Stakeholders mentioned by at least two interviewees were considered, generating a list of 16 stakeholders, as presented in Table 1.

The next descriptive step was the application of a semi-structured questionnaire, designed by us and based on Frooman (1999) and Mitchell et al. (1997) to (i) confirm the stakeholders' role during the exploratory research, (ii) categorize them according to the influence they exert, and (iii) assess their relevance to the implementation of the organization's strategies. The tool developed to process information (see Appendix 1) allowed us to distinguish the stakeholders that most affect the implementation of organizational strategies from those that affect it with less intensity, since the degree of influence (low, medium, or high) and the level of attributes power, legitimacy, and urgency were also investigated.

The studies by Frooman (1999) and Mitchell et al. (1997) were chosen as guides for our methodological approach because of the innovative character and the scope they have, both among academics and management professionals. Frooman (1999) assumed the perspective of stakeholders instead of the perspective of the organization. He investigated how a stakeholder

Table 1 Stakeholder influence and dependence

Stakeholder	Do they influence the implementation of SM at the UnB?		How intense is their influence on the implementation of SM?			Stakeholder influences SM	SM influences the stakeholder	SM influences and is influenced by the stakeholder	Classification of stakeholder according to Frooman (1999)
	Yes	No	Low	Medium	High				
Top management (chancellor, vice-chancellor, and deans)	16	0	0	2	14	4	0	12	High interdependence
UnB councils	14	2	2	8	4	6	1	7	High interdependence
Planning and Budgeting Department (PBD)	15	1	0	2	13	2	0	13	High interdependence
University managers (directors of colleges and institutes/heads of departments)	14	2	1	7	6	1	0	13	High interdependence
Administrative managers (directors and coordinators of administrative units)	11	5	1	5	5	0	1	10	High interdependence
Faculty	13	3	4	7	2	2	4	7	High interdependence
Student body	9	7	7	0	2	2	4	3	Power of the organization
Technical and administrative staff	10	6	5	4	1	2	1	7	High interdependence
Companies/bodies that establish partnerships with the UnB	8	8	5	0	3	2	1	5	High interdependence
Government in general	14	2	0	5	9	4	0	10	High interdependence
Ministry of Education (MED)	15	1	0	6	9	6	0	9	High interdependence
Ministry of Planning (MPB)	15	1	0	6	9	9	0	6	Stakeholder power
External audit bodies (FAT/OCG)	14	2	1	6	7	11	0	3	Stakeholder power
Other universities	7	9	4	2	1	2	0	5	Low interdependence
Unions	7	9	2	3	2	2	0	5	Low interdependence
Society	9	7	6	2	1	2	0	7	High interdependence

The biggest frequencies are in italic numbers.

Source: Data analysis

would influence a company to change its behavior, using a determined type of strategy. Mitchell et al. (1997), on the part of organizations, introduced the concept of "salience," which focuses on the degree of priority to be given to the competing interests of stakeholders.

We selected 16 respondents based on the position they held, their practical knowledge and competence to engage in the strategic planning of the unit they were part of, and their availability to participate in the study. In order to avoid giving greater weight to a specific area in the results, they were separated into administrative and academic areas. A drawing was carried out, which generated two lists: one for the administrative area and the other for the academic one. Interviews using the tool were conducted, alternating between academic and administrative units, according to the sequence established by the drawing. In case of impediment on the part of any selected participant—for example, unavailability—we immediately moved to the next. Out of the 16 respondents, nine were teachers holding management positions and seven were technical–administrative staff members. Managers from nine administrative and seven academic units participated.

Data analysis

We analyzed documents provided by the organization and calculated descriptive statistics from the data obtained from the survey. According to Neuendorf (2016), content analysis is a combination of systemic procedures with the objective of determining the content in qualitative and/or quantitative terms. In the categories proposed by Frooman (1999), we considered the sum of the answers in order to measure the intensity of the influence of each stakeholder and the degree of dependence between him/her and the university. Following the categories developed by Mitchell et al. (1997), we added the answers and categorized the results according to the positive or negative position (1 = totally disagree; 5 = totally agree). The following indicators were identified for analysis:

a) More than eight answers of 1 and 2, we considered that a majority of the participants disagreed with the presented statement.
b) More than eight answers of 4 and 5, we considered that a majority of the participants agreed with the presented statement.
c) Eight or more answers of 1 or 5, we considered at least half of the participants took a stand at the extremes of the scale (i.e., at least half the interviewees totally agreed or totally disagreed with the statement).
d) More than eight answers of 3, we could not make inferences, since the majority of the participants neither agreed nor disagreed with the statement.

Findings and discussion

Strategic planning at the UnB

The UnB is a public university funded by the federal government (Ministry of Education). The analysis of the UnB's documents revealed the planning process, including strategic, tactical, and operational levels. The institution has a planning system containing proposals for activities and goals from the academic and administrative units. This system covers the plans established for a 5-year planning cycle. The planning is managed with a specific software. For every single

year, it is necessary to show if specific objectives have been reached totally, partially, or not reached. There is a specific sector on the University Direction which controls all the process.

The UnB has three main areas: teaching, scientific research, and university extension. According to the strategic planning report for 2014–2017 (Universidade de Brasília 2018), undergraduate student enrollments were stable.

Some new graduate programs were created connected to scientific research, and scientific publishing was increased. It was not possible to determine the quantity variation regarding university extension because data provided are consolidated and not year by year. Thus, we can say that although the UnB's objectives are connected to its three areas in its strategic planning, its most evaluated area during 2014–2017 was scientific research.

Stakeholder classification

Our results (Table 1) show that only two groups were not confirmed as stakeholders by the majority of respondents: unions and other universities. No consensus was reached regarding the companies/entities the institution partners with. To avoid losing data that could be relevant to our objective, we decided to include the latter as stakeholders. Among the 14 stakeholders that were validated, the ones indicated as being the most influential were as follows: top management, followed by the school's Planning and Budgeting Department (PBD), the federal government in general, Ministry of Education (MED), Ministry of Planning and Budget (MPB), and external audit bodies (Federal Audit Tribunal-FAT and Office of the Comptroller General- OCG). Studies by Burrows (1999), Jongbloed et al. (2008), and Mainardes et al. (2010) already have pointed to the top managers and the organizations that either govern or regulate higher education as being a university's most influential stakeholders. These results were also found by Balbachevsky (2015), for the government, and by Lopes and Bernardes (2005), Kettunen (2015), Alarcón-del-Amo et al. (2016), and Morphew et al. (2018), for upper management.

Our results, to a certain extent, confirmed the power of influence of these stakeholders, also regarding the implementation process of strategic management at these institutions.

Among the stakeholders considered, less influential are society and the student body. In the literature, society is considered one of the main stakeholders of higher education institutions, according to Benneworth and Jongbloed (2010), Kettunen (2015), and Reavill (1998). Nevertheless, our results indicate that the degree of influence of society over the implementation of strategic planning at the university studied is low (Table 1). This could mean that society does not demand that the UnB plays a transformative role or that the UnB does not properly acknowledge the importance of society for its survival, as identified in the literature. This finding also does not match the mission of the institution, which makes reference to the organization's commitment to Brazilian society.

Regarding the student body, our results confirm those of Chapman et al. (2010), Neave (2000), and Sin and Neave (2016). For these authors, students do not hold any power to influence the strategic decisions taken by universities. Thus, it can be inferred that the UnB's plans take into account its internal stakeholders, except for its students, who are influenced by the planning but do not influence it. In this sense, the stakeholder can be characterized as a beneficiary of the university's activities (Kettunen 2015; Yang 2015), or payer, when universities failed in their planned actions (Sin and Neave 2016).

Regarding the external stakeholders, on the other hand, the university focuses more on auditing entities, whereas companies seem not to exert a significant influence on the

institution's strategies. Whether this lack of influence generates a clear loss for the strategic planning of the UnB is not easy to ascertain, as very few recent studies have evaluated public universities in a similar way.

Our results (Table 2) also show that the majority of stakeholders' influence and are influenced by the implementation of strategic planning (upper level management, the UnB councils, the PBD, academic managers, administrative managers, faculty, technical and administrative staff, companies/bodies that establish partnerships with the UnB, and society), which demonstrates the mutual dependence between these stakeholders and the organization's strategies.

The findings indicate that both stakeholders—society and top management—influence and are influenced by the strategic planning implementation process. Nevertheless, society has weak influence, whereas upper-level management has strong influence. The same is true for other stakeholders, such as the PBD and the faculty. It should not be assumed, for example, that the PBD has power similar to the faculty to influence the strategy implementation process at the university studied, even though both are categorized by Frooman (1999) as being high-interdependence stakeholders.

The MPB and external audit bodies (FAT and OCG), on the other hand, are classified as stakeholders that only influence the implementation of planning. They represent a stakeholder power scenario in which they exert influence over a process but do not depend on or suffer influence from it, in accordance with Frooman's classifications (1999). That is a particularly important aspect when considering that the preparation of planning at Brazilian public universities, in addition to being a management initiative, is a legal imposition. Students were the only group classified as stakeholders that are influenced only. That is, they depend on the process of strategic planning implementation but have little or no influence over it, according to the classification of Frooman (1999).

The difference in influence intensity changes the way stakeholders should be analyzed. Those with strong influence should not be dealt with in the same way as those with less power, even though both exert influence over the process (Mainardes et al. 2010). That being said, we suggest a new way to categorize the stakeholders found in this study, as shown in Table 2.

Table 2 Analysis of the level of influence of stakeholders on the implementation of strategies

| Stakeholder influence vs. SM implementation	Influence intensity		
	Low	Medium	High
Stakeholder influences SM implementation	–	–	MPB, external audit bodies (OCG and FAT)
SM implementation influences the stakeholder	Student body	–	–
SM implementation influences and is influenced by the stakeholder	Faculty, technical and administrative staff, companies/bodies that establish partnerships with UnB, society	UnB councils, academic managers	Top management, PBD, administrative managers, government, MED

Source: Data analysis

SM strategic management

The analysis of results, based on the model developed by Mitchell et al. (1997), is presented in Fig. 1. Unions and other universities were not considered in the analysis, as they were not validated as being stakeholders of the university's strategic planning implementation process. The results indicated that the stakeholders of the strategic planning implementation at the UnB match three of the seven types identified by those authors, as shown in Fig. 1.

Based on the information presented in Fig. 1, we identified the stakeholders with the attribute of power over the implementation of strategies: top management, UnB councils, PBD, government, MED and external audit bodies (FAT/OCG) (i.e., the stakeholders that manage, control, or evaluate the university's strategies and those providing financial resources to the institution). In the case of the UnB, the stakeholders considered the most powerful were the top management as well as the Planning and Budgeting Department. This makes it evident that the vision of the managers engaged in university planning and budgeting remains inside the organization. Our result is in accordance whit James and Derrick (2019). For these authors, the strategic plan is a key part of the responsibilities for university leaders and has to be a focus for their work.

Among the stakeholders with less power, the ones that stood out were the faculty and the companies/entities that establish partnerships with the university, contradicting other studies (Burrows 1999; Duke 2002; Mainardes et al. 2010; Reavill 1998; Kettunen 2015; Pinheiro 2015; Sam and Dahles 2017; Yang 2015). Regarding companies and partner entities, in addition to being part of society, they also provide resources for investment in projects that provide infrastructure and mobility for researchers. Consequently, by holding less power, they may not guide research, which, on the one hand, gives autonomy to the university but, on the other, results in a blind eye to social issues that can be addressed through research.

Stakeholders that have legitimacy are the top management, UnB councils, administrative managers, academic managers, faculty, the PBD, the government, the MED, the MPB, and the external audit bodies. The greatest number of responses identified the top management and
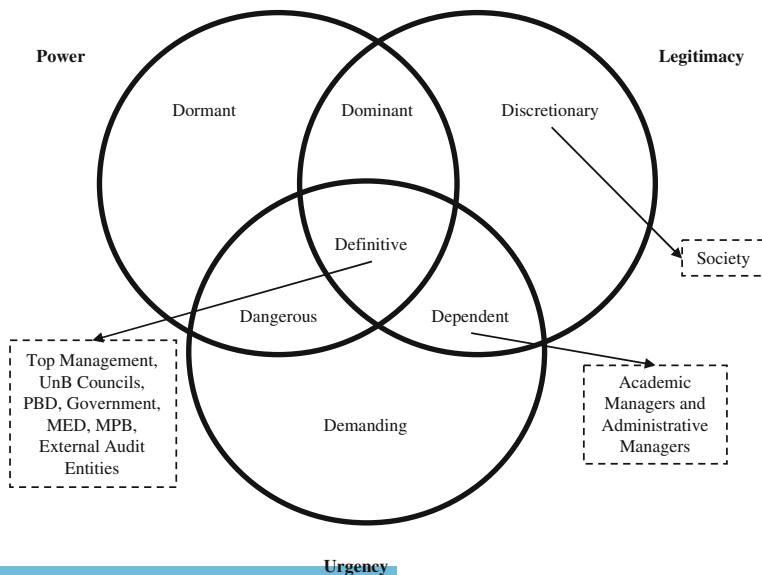
Fig. 1 Stakeholder classification. Source: our research applied into Mitchell et al. (1997) models. PBD Planning and Budgeting Department, MED Ministry of Education, MPB Ministry of Planning and Budget

administrative councils, both with 15 answers, including four "agree" and five "totally agree." The ones considered most legitimate were the UnB councils, academic managers, and external audit entities, with eight answers.

Despite being considered the most legitimate stakeholders, the university councils are not among the most powerful. According to Sampaio and Laniado (2009), the collegial model used by universities places emphasis on consensus in the decision-making process. Nevertheless, no matter how appropriate or desirable the decisions made by the UnB councils may be, there seems to be a gap between the legitimacy and the power of these stakeholders. Although being considered the UnB's highest bodies in terms of decision making, as legally established, our results ascribe greater power to other players, such as upper-level management and the PBD. Based on Sampaio and Laniado (2009), this can be explained by the fact that no matter how much universities rely on collegial forums, this model does not guarantee that the dynamics of consensus among groups will be efficient. The stakeholders that do not have legitimacy are the same ones that do not hold power: faculty members and companies/entities that establish partnerships with the university.

The respondents considered that the claims of the following groups are given priority and, thus, have the urgency attribute: top management, the UnB councils, the PBD, academic managers, administrative managers, the companies/entities that establish partnerships with the UnB, the government, the MED, the MPB, and the external audit bodies. Among these, the most urgent ones were the top management, the external audit bodies, the UnB councils, and the PBD—in that order.

When analyzing the urgency attribute, legal aspects should be taken into consideration as well, especially regarding external stakeholders. The MED requires Brazilian universities to prepare an institutional development plan (IDP), which formalizes the strategic planning of Brazilian universities while also acting as an institutional evaluation tool. In addition to the IDP, another legal requirement is the management report, to be submitted to the Federal Audit Tribunal (FAT) on an annual basis. This report must contain the university's annual rendering of accounts and information on the performance of projects and activities by the several units included in the planning (established in the Annual Activity Plan), so as to enable the FAT and UnB managers to follow up and evaluate the actions included in the institution's budget and planning. At the UnB, the PBD is the managing unit that coordinates the preparation and the follow-up of the IDP and of the management report, and is also responsible for meeting all legal deadlines.

We have omitted, due to space limitations, some less important stakeholders. But we note that those ranked as having less power and less legitimacy also are considered to have lower priority: the student body and companies/entities that establish partnerships with the institution. Matching the results of this study with those found by Lyra et al. (2009) allows us to identify the characteristics of the influence power of each type of stakeholder, as presented in Table 3.

Comparison of the results from Table 1 and Fig. 1 shows that all stakeholders classified as definitive (top management, UnB councils, PBD, government, MED, MPB, and external audit entities) have strong influence, whatever the relationship between a particular stakeholder's influence and the process of implementing strategic planning (interdependence, stakeholder influences the process, or the process influences the stakeholder). This indicates coherence between the two analytical frameworks. It suggests that at least with regard to the most relevant stakeholders for decision making, the two models are consonant.

Table 3 Categorization and description of the power to influence of each stakeholder

	Stakeholder types		
	Definitive	Dependent	Discretionary
Stakeholder	Top management, UnB councils, PBD, government, MED, MPB, external audit bodies	Academic managers and administrative managers	Society
Power of influence	These are the most important stakeholders, those with the greatest power of influence. When they have power and legitimacy, they practically are definitive stakeholders. When they additionally claim urgency, immediate attention must be given to these stakeholders.	Claim urgency and legitimacy but depend on another stakeholder's power for their claims to be taken into account.	Has legitimacy but does not have great power of influence over social responsibility.

Source: Research data since the original table from Lyra et al. (2009), Mitchell et al. (1997)

Considering the discretionary stakeholder (society), it can both influence and be influenced by the implementation of strategies. Nevertheless, its power of influence is very low, as previously pointed out by Lyra et al. (2009).

As regards the dependent stakeholders (academic and administrative managers), we identified a difference in influence intensity: while academic managers have a high degree of influence, administrative managers have a low one. Such differences may be due to the distinctive nature of the work that academic managers perform in the university's core activities (teaching and research), whereas administrative managers are responsible for the support activities. But the data collected for this study do not allow such an inference.

The results regarding technical and administrative managers showed the greatest divergence in opinion. These stakeholders did not receive the majority of answers confirming either the existence or absence of any of the three attributes. There was no consensus among the respondents about the action of this group regarding the implementation of strategic planning at the university. Therefore, it was not possible to include it in the model of Mitchell et al. (1997), since no inference regarding attributes of power, legitimacy, and urgency could be made. Moreover, by comparing the results of this survey with the papers we studied, we noticed that it is closer to those of Mainardes et al. (2010), and the technical and administrative managers have a low level of influence on the university's strategies, especially during their implementation stage. This may be because that among internal stakeholders, the most important one is faculty members, not technical staff.

Conclusion

The aim of this paper was to classify and assign degrees of influence to stakeholders regarding the implementation of strategic planning of higher education institutions. These institutions need to identify their stakeholders and differentiate them in order to better work out their strategies, according to the relevance of each interested party. This is not a simple task, since there is no consensus on a method to carry out stakeholder analysis and categorization of a

given organization, despite several existing typologies. Frooman (1999) and Mitchell et al. (1997) were chosen as theoretical tools for the aims of the study presented here. According to the results, these two studies are complementary, as together they can pinpoint the stakeholders involved in the implementation of the academic organizations' strategic planning.

By classifying stakeholders according to Frooman's (1999) matrix, we found that the majority of stakeholders both receive and exert influences, which is characteristic of high interdependence scenarios. Only the MPB, the external audit entities (which only influence the implementation of strategic planning) and students (who only feel the influence of the implementation of strategic planning) do not fit into this diagnosis. Besides this, our findings are also associated with the stakeholders' capacity to inspect the institution's action. Strictly speaking, this interdependence derives from the typically coercive power held by this kind of entity, which is contrary to what is usually observed in companies, where competitors are strong stakeholders due to their capacity to take the market share. In universities, control entities' have strong influence by the power to withhold resources on which the university depends.

By comparing the results of the analyses made from the models of Frooman (1999) and Mitchell et al. (1997), we found that all the stakeholders categorized as definitive also had a high degree of influence, no matter the relationship between the stakeholder's influence and the implementation of strategic planning (interdependence, stakeholders influence the process, or the process influences the stakeholders). This allows us to confirm that the most influential stakeholders are also the most important ones in terms of power, legitimacy, and urgency, which reflects the coherence between the two analyses. Another possible perspective relates to the fact that stakeholders' influence originates from the power they exert, the legitimacy they have and the urgency of their demands. Thus, the results of one model confirm the results of the other.

Therefore, the research results show that the upper level management, the PBD, the government, the Ministry of Education, the Ministry of Planning, and the external audit bodies (FAT and OCG) are the most influential stakeholders, which corroborates the studies of Burrows (1999), Jongbloed et al. (2008), Mainardes et al. (2010), Balbachevsky (2015), Kettunen (2015), and Pinheiro (2015). In turn, students and society are regarded as the least influential stakeholders, which are especially relevant, since this goes against the very mission of a university and contradicts the conclusions of Burrows (1999), Duke (2002), Mainardes et al. (2010), and Reavill (1998). One inference we can provide is connected to the main area developed in the strategic planning between the years 2014 and 2017. The most successful area was scientific research. Scientific research is supported by external entities, like the federal government, and it is conducted by professors, which could explain their urgency and legitimacy (Fig. 1), and also the marginal role of students and society.

We also can infer that at University of Brasilia, the board is not oriented by stakeholders model (Donina and Paleari 2019), because the balance of different interests is not so clear. There is more than one possible explanation for that. First, it has to do with budget. UnB as public university in Brazil has funding from the Federal Government. In this sense, "money talks." Another point is the matter of location. As a multi-campus university, UnB has more than one kind of local society, with different demands and expectations, which is common in this university model (Pinheiro et al. 2017). It makes dealing with society a complex task. Besides that disaggregates local community to fight for their demands.

In our study, the teachers' union was not considered in the analysis, since it was not verified as a stakeholder in the university's strategic planning process. This finding contradicts the

conclusions of Balbachevsky (2015) in terms of generalizing the results presented in this investigation to private universities, for instance. Therefore, applying this study to more institutions would be relevant to enhance the generalizability of the findings.

The study contributes to the field by presenting a classification that distinguishes stakeholders according to the degree of influence they exert on implementing strategic planning. Following Mitchell et al. (1997), our results indicate that the stakeholders associated with strategic planning at the UnB are distributed in only three categories: definitive, discretionary, and dependent. Depending on the organization, not all types of stakeholders described by the model will be found, which does not represent a restriction itself but requires establishment of a fit between the model and reality.

As a practical contribution, we believe this work provides greater knowledge about the influences that occur in the implementation of strategic planning in a public university. Managers, when accessing the results of this study, can use them to tailor their strategies according to the importance and the degree of influence of the stakeholders. In addition, they can also be more attentive to the demands of the stakeholders classified as definitive and that have a high degree of influence. We suggest that university administrators take a proactive approach to the needs of this group because otherwise there may be a risk of failure in implementing policies and guidelines.

This study has some limitations. The first is that we studied only one public higher education institution, which restricts the possibilities to extrapolate or compare the results between different universities, since they can be the same type (federal) or different types (private, community, or religious), or they can be located in the same region or in different regions, with the same size or different sizes.

Those interested in investigating stakeholders in other types of organizations can apply the tool used in this research, which differentiates stakeholders on the basis of the degree of influence, since this tool was not developed exclusively for universities. Hence, more information on the operationalization of the tool could be obtained.

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