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Assessing stakeholders' perception influence on companies' profitability: evidence from Italian companies

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ABSTRACT

The stakeholders' view represents one of the key dimensions that affect companies' performance, directly impacting the managerial decision-making process. However, despite many theoretical studies that suppose the relevant role covered by the stakeholders' perception in the value creation process of organizations, no empirical evidence on whether and how it affects companies' profitability has been produced. In this context, by focussing on a sample of 141 firm-year observations over the period 2017–2019, this paper uses a linear regression model to investigate and fill this gap. Findings significantly show that a high stakeholders' perception score (SPS) increases firms' profitability, providing insights that implementing a strategy oriented to stakeholders' engagement affects a company's economic performance. It is suggested that practitioners integrate stakeholders' perception into performance management system (PMS) processes to achieve economically and environmentally-oriented performance.

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Stakeholders' perception; profitability; performance management; business strategy

1. Introduction

The increased competitive pressures that are evident in many sectors – especially in these dramatic times affected by the COVID-19 pandemic – have pushed companies to reconsider their Performance Management System (PMS), so as to achieve projected gains in productivity, quality, and market responsiveness (Bourne 2005; Mettänen 2005; Bititci et al. 2018). A well-implemented PMS is indeed fundamental to manage the performance measurement information in the planning, production, and control of companies by: (a) helping to set agreed-upon performance goals, (b) allocating and prioritising resources, (c) informing managers to either confirm or change correct policy or programming direction to meet those goals, and (d) reporting on the success in meeting those goals (Amaratunga and Baldry 2002). Due to that, the overall purpose of the PMS is to contribute to the achievement of sustainable high performance by the organization and its people (Armstrong and Baron 2005), such that 'the performing organization can be regarded as an organization which acts efficiently and effectively, aiming at creating value' (Lebas and Euske 2002, 128) for all its stakeholders (Garcia-Castro and Aguilera 2015; Pinto 2019).

In fact, according to stakeholder theory, 'the capacity of a firm to generate sustainable wealth over time, and hence its long-term value, is determined by its relationship with critical stakeholders' (i.e. shareholders, employees, customers, suppliers, governments, local communities, and environmental interest groups; Post, Preston, and Sachs 2002, 89), as also evidenced by articles published in *Production, Planning and Control* (e.g. Ojiako et al. 2015; Bellisario and Pavlov 2018; Robert, Giuliani, and Gurau 2022). Among them, for example, Bourne (2005) demonstrated, by interviewing 25 directors and managers who were directly involved in performance measurement projects, a dynamic interaction between projects and their perceived benefits from managers, creating, *de facto*, conflicting demands on management time and commitment, which directly impacts whether projects progress or stop. In other words, value creation, according to the stakeholder theory, is embedded in the relational contributions among a central organization and its stakeholders (Freeman 1984; Donaldson and Preston 1995). More generally, businesses' performance is influenced more by a series of stakeholders than just its customers, as Porter's (1985) five environmental forces model and Kaplan and Norton (1996) balanced scorecard show. From that, taking into consideration stakeholders' perception (or *concern*) – defined as the perceived degree of concern for a company's corporate strategy (Lisi 2018) – helps to avoid decisions that may prompt stakeholders to undercut or thwart either their objectives; this happens because 'stakeholders who control resources can facilitate or enhance the implementation of corporate decisions' (Berman et al. 1999, 489). In this regard, it has been advanced that the higher the stakeholders' perception – that does not necessarily meet reality (Peloza et al. 2012) – the greater it presages stakeholders' higher involvement with companies and, therefore, the greater the influence on their operational outcomes (Murphy et al. 2005; Ravi 2013). This happens because research stakeholders exposed to information about the company (e.g. a sustainability initiative) are

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unconsciously victims of the 'halo effect,' through which they usually adopt that information to make inferences about other firms' characteristics, such as a firm's performance (Ellen, Webb, and Mohr 2006). For example, prospective employees who perceive a company as more sustainable may favour them as an employer of choice, while suppliers, at the same time, may perceive a lower risk profile for that firm that can lower delivery costs (Turban and Greening 1997; Barnett 2007; Bhattacharya, Korschun, and Sen 2009; Peloza et al. 2012). Stakeholders' perception, in practice, strengthens or lowers the intensity of business relationships and, due to that, it influences the flow of resources towards the company, which is needed for planning goals and sustaining operations (Oztemel and Polat 2007).

However, despite that stakeholder theory literature has initially found stakeholders' perception influences the internal processes of the company (Bagire et al. 2011), its organizational effectiveness (Fraser and Zarkada-Fraser 2003; Fraser and Zhu 2008), digital transition (Lewis et al. 2007), cultural change (Poza, Alfred, and Maheshwari 1997; Arnold 2010), top management's social commitment (Lisi 2018), environmental performance (Lisi 2015), and a company's irresponsible behaviour (Costa and Menichini 2013), an empirical investigation of the relationship between the stakeholders' perception and the company's profitability is still lacking. On these premises, this research answers the following research question: *How does stakeholders' perception affect companies' profitability?*

According to the research hypothesis of this paper, profitability is expected to be higher in firms with high stakeholders' perception than in firms with low stakeholders' perception. To test the research hypothesis, data reported by a sample of 141 firm-year observations (FYO) over the period 2017–2019 have been collected and analysed. To this end, we adopted a recently advanced stakeholder perception score (SPS) (Hristov et al. 2021) – not empirically tested yet – as a measure of stakeholders' perception.

According to the research findings, a high SPS positively affects a company's profitability, which is higher in firms with a high SPS. As to the contribution to existing knowledge, this paper complements findings of scholars who have suggested, but not empirically proved, the relevance of stakeholders' perception on the firms' financial performance (Orlitzky, Schmidt, and Rynes 2003; Ramanathan, Poomkaew, and Nath 2014; Hristov et al. 2021). To the best of the authors' knowledge, this is the first contribution proving the link between stakeholders' perception and companies' profitability. In addition, the findings of this paper add to the debate regarding the ability of the main corporate stakeholder groups (Freeman 1984; Donaldson and Preston 1995) to affect the decision-making process. In fact, scholars have theoretically argued that stakeholders' engagement is associated with performance variables (Chaudhry et al. 2013), but they have provided few, and not exhaustive, findings regarding its ability to affect firms' profitability (Kassinis and Vafeas 2006; Lourenço et al. 2014). Accordingly, we provide an additional step in the research field by extending existing literature, presenting a clear view of how stakeholders' perception affects the company's profitability, which is useful to open future paths of research.

As to the practical implications, the research findings are oriented to support the managers' decision-making process in implementing an integrated model and strategic tools, oriented to increase stakeholders' perception and, consequently, the economic performance. This means that an efficient plan of corporate strategy, aimed to increase the SPS, could generate relevant return in terms of profitability.

2. Literature review and hypothesis formulation

2.1. Stakeholders' perception on planning, production, and control

Over recent decades, management scholars have extensively explored the role of the stakeholders' perception factors behind planning, production, and control of companies (Cornell and Shapiro 1987; Mitchell, Agle, and Wood 1997; Koh et al. 2007; Unterhitzenberger et al. 2021; Hristov et al. 2021). In this regard, by focussing on the stakeholder theory, literature has advanced the hypothesis that, to maximize a company's wealth and value creation in the long term, managers should develop and implement a structured system for managing stakeholders' expectations (Donaldson and Preston 1995; Guerci, Longoni, and Luzzini 2016). This is because stakeholders' perception forms a company's reputation and allows executives to capitalize on the brand-building potential by enhancing business relationships (Fombrun 1996; Peloza et al. 2012). From that, the greater the stakeholders' perception, the higher their willingness would be to interact with the company and exchange needed resources for carrying out reciprocal operations, thus influencing, in turn, planning and control (Cervelló-Royo et al. 2020; Martínez Hernández, Sánchez-Medina, and Díaz-Pichardo 2021). Therefore, the satisfaction of various companies' stakeholder groups is strictly instrumental for developing operational activities and related performance (Freeman and Evan 1990; Jones 1995).

Within the planning, production, and control literature, studies adopting stakeholders' theory suggests that the integration of the key dimensions of the stakeholders' perception during the planning phase generates a positive effect on the economic and financial performance (Freeman 1984; Clarkson 1995; Donaldson and Preston 1995; Jones 2016). For example, the recent review by Bellisario and Pavlov (2018) on performance management practices in lean manufacturing organizations reported that involving employees, customers, and suppliers in the implementation of lean initiatives is an important practice for managing performance. Indeed, they advance that broad stakeholder involvement leads to engagement that, in turn, helps to create an organization-wide lean mindset, with positive repercussions on performance. Yet, Ojiako et al. (2015) analysed the heterogeneity and perception congruence of 1413 project management practitioners about project outcomes and found that relationships or agreements between different stakeholders may be impacted by age and role heterogeneity of project managers and practitioners, with a negative effect on project outcomes.

Table 1. The role of the stakeholders on companies' performance.

Main literature	Key emerging findings
(A) Determinants of stakeholders' perception	
Martínez Hernández, Sánchez-Medina, and Díaz-Pichardo (2021)	Innovation approach based on digital technologies and software solutions adopted by organizations is able to create business processes to meet the changing environment and competitive context, positively affecting stakeholders' perception.
Hristov et al. (2021)	The stakeholders' perception directly impacts on the company's financial performance through the level of sustainable development implemented, organizational process, innovation, and cultural change.
Liu and Kong (2021)	The SD process addressed by the companies is the main driver of the stakeholders' perception, which indirectly impacts on the profitability based on the corporate image and reputation perceived.
Guy (2019)	The author explored the role of the digital culture as a key factor to increase stakeholders' perception.
Gupta and Kumar (2013)	According to the authors, cultural change needs to be incorporated into the company's behaviour. This dimension measures the cultural context where an organization operates, in terms of co-working, learning and growth, staff satisfaction, dialogue and participation of individuals and communities, and strategic alignment with the corporate mission and vision.
Min and Mentzer (2004)	The organizational integration is positively perceived outside the companies in terms of high efficiency and productivity, as a system aims to support the production process of a company, from the acquisition of raw materials to their transformation to finished products.
(B) The relationship between stakeholders' perception and companies' performance	
Nicoletti Jr. et al. (2021)	Companies obtain several advantages when stakeholders' engagement is addressed at a strategic level, indirectly impacting on the financial performance.
Cervelló-Royo et al. (2020)	A high stakeholders' perception, achieved through the integration of the key strategic dimensions in the PMS, plays a relevant role on the firms' performance, increasing corporate image and reputation, efficiency and productivity, and consequently profitability.
Yoo and Managi (2020)	Considering the clients, thanks to their good image and reputation, managers forecast on future orders and general information on the future strategy. This can be translated into more efficiency and productivity, cost reduction and growth revenues, and consequently into financial terms.
Guerci, Longoni, and Luzzini (2016)	The findings of the authors support a positive relationship between green training and involvement, as well as green performance management and compensation, and environmental performance. This indirectly influences profitability.
Lourenço et al. (2014)	A company that has a good reputation creates new opportunities in terms of collaboration, partnership, and resources' access.
Ramanathan, Poomkaew, and Nath (2014)	The authors conducted an empirical study in UK manufacturing organizations, demonstrating a positive relationship between stakeholders' pressures and environmental performance.
Chaudhry et al. (2013)	Understanding the stakeholders' perceptions has potential to enhance the effectiveness of emerging energy policies at the state-level and national levels, revealing a diversity of perspectives on the potential benefits.
Koh et al. (2007)	Process oriented to implement the Triple Bottom Line approach in the organization, in order to achieve economically, socially and environmentally sound performance, affecting stakeholders' perception, and generating financial benefits connected to the sales revenue and cost reduction.
Perrini and Tencati (2006)	Authors highlighted the importance of stakeholders' relationship at a strategic level and arrived at the conclusion that firms need to measure and take care of the satisfaction level of their stakeholders. The stakeholders' involvement process is strongly correlated to the efficiency and fluency of future operations.
Kassinis and Vafeas (2006)	This study empirically explored the role of the stakeholder pressures on the environmental corporate performance, suggesting that varying stakeholders' characteristics and the dependencies associated with them are related to varying levels of environmental performance.
Li et al. (2005)	Authors discussed the key strategic dimensions that lead a company to improve its performance, from an organizational point of view, which impact on a variety of stakeholders, from suppliers to customers, by improving the quality and sharing of the information system in the organization and by increasing strategic supplier partnerships.
Orlitzky, Schmidt, and Rynes (2003)	The authors found a positive relationship between the CSR perceived by the stakeholders and the financial performance.
Tan (2001)	The strategic alignment, meaning an integrated system adopted to support the production process of a company, plays a relevant role in stakeholders' perception, generating loyalty and increasing sales.

Accordingly, by analysing existing literature, there are several determinants aimed to increase stakeholders' perception and influence on companies' performance. These determinants – in line with literature (see Lisi 2015, 2018) – are reported in Table 1, which make a synthesis of the main elements of the theoretical background, namely: (a) sustainable development, (b) organizational process, (c) cultural context, and (d) digital transition.

As regards the first determinant, the *sustainable development* concern, it is defined here as the stakeholders' degree of investment in the Corporate Social Responsibility (CSR) and environmental thematic addressed by organizations (Sharma and Henriques 2005; Lee and Saen 2012; Liu and Kong 2021). In this regard, many authors (Jones 1995; Buysse and Verbeke 2003; Harrington et al. 2016; Liu and Kong 2021; Nicoletti Jr. et al. 2021) suggest that this sustainable integration adopted by firms influences the planning phase of companies because it increases a company's image and reputation. This, in turn, positively affects the perception of the main stakeholders, with several benefits in terms of loyalty, networking, and partnership. Indeed, a company that has a good reputation – and this is recognized through stakeholders' perception – creates new opportunities in terms of collaboration, partnership, and resources' access that are needed for carrying out operational activities (Lourenço et al. 2014; Guerci, Longoni, and Luzzini 2016). In line with this position, Perrini and Tencati (2006) highlighted the importance of the stakeholders' relationship with operations management and found that stakeholders' concerns are strongly correlated to the efficiency and fluency of future operational activities.

With regard to the second determinant, *organizational process* – i.e. 'activities that establish the business goals of the organization and develop its process, product and resource assets which, when used, will help to achieve business goals' (Wang and Sun 2009, 453) – several theoretical studies argue that the operational efficiency of the company strongly affects the primary stakeholders' perception (Freeman 1984) and related decision-making process (Tan 2001; Min and Mentzer 2004). For example, the efficiency of the organizational process mainly influences customers' and suppliers' perceptions, which are highly connected to the efficiency and efficacy of the production process with regard to starting a business relationship with the focal company (Schaltegger and Burritt 2010).

In fact, *digital transition,* i.e. the digital transformation of production and organizational processes of companies through the implementation of new technologies (e.g. industrial internet of things, industrial analytics, cloud manufacturing, advanced automation, advanced human machine interface, and additive manufacturing), is now mainly related to Industry 4.0. Thus, organizations that address an operational transition, such as moving to an additive manufacturing model, are positively perceived inside and outside company (Trimi 2020; Yoo and Managi 2020), helping to develop new collaborations, making information and communication more efficient and transparent, and attracting new investments and resources for operational activities (Gond et al. 2012; Matthews et al. 2019).

However, the digital transition does not only relate to operations, but involves the entire organization and its culture, i.e. the cultural context should be opened to embrace new technological models and ways to operate (Nadkarni and Prügl 2021). In this regard, the *cultural context* is another important determinant of stakeholders' perception. Indeed, as demonstrated by literature (Gupta and Kumar 2013; Hristov et al. 2021), the cultural context is a key driver aimed to generate an internal strategic alignment between the different business levels and oriented to support the employees on their strategic goals' achievement through the improvement of individual skills, training programs, co-working, learning and growth, dialogue, and participation. Indeed, as found by Brickson (2005) through studying a sample of 1,126 participants from 88 organizations in the legal services and non-alcoholic beverage industries, specific organizational variables bearing on organizations' stakeholder perception appear to be stronger predictors of cultural orientation of the company than general organizational-level or individual-level variables.

Recent scholars tried reinforcing the above arguments on determinants while including measurements of performance and concluded that firms able to increase corporate stakeholder' perception are more likely to increase their overall performance (King and Lenox 2002; Ramanathan, Poomkaew, and Nath 2014; Yu and Ramanathan 2015). In this research context, Orlitzky, Schmidt, and Rynes (2003) argue that organizations able to satisfy stakeholders' perception have superior financial performance. In addition, by analysing UK manufacturing organizations, the research conducted by Ramanathan, Poomkaew, and Nath (2014) showed that stakeholder pressures on the environmental dimension have a significant and positive impact on the company's performance (see also Kassinis and Vafeas 2006).

However, these reported studies specifically focussed only on the relationship between sustainable development determinants of stakeholders' perception and financial performance and did not consider all the other factors previously examined – i.e. organizational processes, digital transition, and culture – which are an integral part of the stakeholders' view and significantly influence companies' planning, production, and control. According to these premises and given the relevant interest in the stakeholders' engagement (especially at the planning level; Majumdar and Marcus 2001; Hristov et al. 2021), we searched for empirical evidence shedding light on the impact of stakeholders' perception on company's profitability. Indeed, despite studies interested in linking stakeholders' perception with companies' features (e.g. internal processes of the company, organizational effectiveness, etc.; Poza, Alfred, and Maheshwari 1997; Fraser and Zarkada-Fraser 2003; Lewis et al. 2007; Fraser and Zhu 2008; Arnold 2010; Bagire et al. 2011; Lisi 2015, 2018; Costa and Menichini 2013), the relationship between stakeholders' perception and companies' profitability has not been investigated. This has happened with several aspects: *firstly*, difficulty related to the development of a stakeholders' perception measure (Bartkus, Glassman, and McAfee 2006; Lisi 2018); *second*, lack of a clear view on the main value drivers of the stakeholders' perception that influence the management decision-making process (Hristov, Chirico, and Ranalli 2022); and *third*, an absence of a statistical justification on the connection between stakeholders' perception and a company's financial performance (Chaudhry et al. 2013; Bellucci et al. 2019). Thanks to the proposed study, which addresses the following supported research hypothesis, we tried to shed light on the relationship between stakeholders' perception and company profitability as well as to overcome the above difficulties related to its investigation.

2.2. Hypothesis formulation

A major but recent research stream in existing management accounting literature argues that firms' planning is oriented to integrate primary stakeholders' engagement at a business level, mainly because it is economically beneficial (Bellucci et al. 2019). A company that benefits from a positive perception by its stakeholders is potentially able to increase the overall performance. This is because stakeholders that positively perceive a company are more oriented to: (a) creating/strengthening business relationships with it, (b) providing/exchanging resources needed for accomplishing activities and, more in general, (c) supporting the value creation process of the company (Hristov et al. 2021). The potential economic and financial advantages associated to stakeholders' perception are a main influential motivation for corporate adoption of strategies oriented to improve stakeholders' perception, as recognized by a well-established stream of research in the stakeholder management literature (Clarkson

Table 2. Search strategy for sample selection.

Strategy	No. of firms	No. of firm-year observations (2017–2019)
Listed entities from AIDA database	524	
Questionnaires returned	173	
Sample after questionnaires discarded	136	
Final sample after filters adopted	**47**	**141**

1995; Jones 1995; Buysse and Verbeke 2003; Sharma and Henriques 2005). Possible explanations are connected with the introduced stakeholder determinants.

Indeed, a high stakeholders' perception of a company's performance may be due to its implementation of *sustainable development* practices and *cultural context*. For example, if a company includes CSR and environmental issues in the decision-making process at the strategic level, it can be perceived as more aligned with the needs and expectations of its stakeholders that are sensitive to these issues (Porter and Kramer 2006). This has the obvious consequence of increasing stakeholders' willingness to interact with the focal company as well as directing influences on operational performance, as demonstrated by Kumar et al. (2019) in their investigation of green supply chain practices on operational performance. In this context, Henriques and Sadorsky (1999), by analysing a sample of Canadian organizations, argued that stakeholders' pressures on sustainable issues can positively influence a more proactive stance of managers towards this topic. Managers who consequently acted to meet this demand evidenced a more stable and informal communication with a company's main customers, guaranteeing loyalty and allowing efficient planning of orders and job activities – thus directly impacting sales' revenues (Buysse and Verbeke 2003; Sharma and Henriques 2005) and corporate profitability (Van Beurden and Gössling 2008; Lai et al. 2010; Ziegler, Busch, and Hoffmann 2011).

With regard to a company's organizational processes, clients who positively perceive a company as reliable, efficient, and effective, allow managers to punctually receive deferred payments and make reliable forecasts on future orders (Freeman 1984). This has a positive influence on cost reduction and revenue growth with obvious beneficial consequences for profits. From the side of employees, perceived companies' reliability in terms of related processes, such as punctual salary payments, career progressions protocols, workplace safety rules, flexibility, and internal interaction, contributes to generate alignment and integration inside the company. These processes impact the motivation of employees, their productivity (Basu and Palazzo 2008) and, in turn, their profitability indexes (Agle, Mitchell, and Sonnenfeld 1999). The same happens with regard to suppliers who perceive the focal company as efficient; indeed, these stakeholders would tend to support efficient firms – such as through applying for any required certifications to maintain the business relationship – because this guarantees a certain level of productivity (Porter and Kramer 2006). Consequently, this can be translated into economic terms through cost reduction and higher profits. This has been evidenced by Yumurtacı Hüseyinoğlu, Kotzab, and Teller (2020) who empirically demonstrated how supply chain management processes are mediators between supply chain relationship quality and supply chain performance. The above authors expressed operational reasoning is often intertwined with digital transition practices. In fact, the implementation of a new technological model, such as Industry 4.0, is usually positively perceived by financial institutions as a sign of an increase in efficiency and high potential for the achievement of sustainable organizational goals (Kamble and Gunasekaran 2021), allowing companies to easily access credit lines, enhancing their debit position, and receiving regular payments (Hristov et al. 2021).

According to the whole theoretical background, the following hypothesis is proposed:

H_1 *Stakeholders' perception positively influences companies' profitability.*

3. Research methodology

3.1. Research design

Survey research using simple questionnaires with a concise format was selected as the appropriate data collection method because a large number of data points needed to be collected from the participants, who were all busy and unlikely to comply with lengthy or complicated procedures. Therefore, extensive, loosely structured, open-ended questions or personal interviews would be impractical (Dane 1990). Hence, to test the hypothesis, this paper focuses on a sample of Italian companies for which two variables have been investigated: (1) company's profitability, and (2) stakeholders' perception (SPS hereafter). Data for measuring stakeholders' perception are based on a questionnaire, while companies' profitability is measured by companies' Return on Assets (ROA; more details are given later), both collected for 2017, 2018, and 2019. Responses to the questionnaire have been collected through a web-based survey, administered to a target sample of Italian firms from a wide variety of industries; the data collection procedure is shown in Table 2.

We used AIDA's (Analisi Informatizzata delle Aziende Italiane) Bureau Van Dijk database to select the sample of companies and collect the companies' profitability data (Hristov, Chirico, and Ranalli 2022). More specifically, we filtered for firms with: (1) more than 100 employees because they were expected to have a more sophisticated and structured PMS (Lisi 2018) and, therefore, also a more developed corporate strategy oriented to stakeholders' engagement at a business level, and (2) the availability of a web page or an email address in order to contact potential participants to verify they were active as well as to have contact details.

In 2017, we emailed a survey questionnaire to 524 firms. A total of 173 questionnaires were completed with a 33% response rate; this rate is positively considered by management accounting survey-based studies (Chapman and Kihn 2009; Hair et al. 2014; Hristov, Chirico, and Ranalli 2022). Of these returned questionnaires, 37 had multiple missing values on dependent variables or inaccuracies in the data

provided and were discarded (Hair et al. 2014). From the remaining 136 responses, we adopted additional filters, in order to increase the quality of data provided. Accordingly, it was decided to take into consideration only managers with a good level of experience related to management control and a PMS (more than five years) and with a high organizational profile (senior and middle manager). As a result of this approach, we focussed on the final sample of 47 firms. Additionally, in order to reduce individual biases in addressing and ensuring representation of managerial cross functions, we asked managers to provide the contact details of two colleagues – all three were also contacted in 2018 and 2019. Accordingly, to build our model, we used the average results of the three respondents per company (Adler and Bartholomew 1992; Hristov, Chirico, and Ranalli 2022). Therefore, having collected 141 respondents for each year, we averaged their answers resulting in 47 firm observations per year – i.e. 141 firm-year observations in total when considering the entire timespan of three years.

By following the approach suggested by Dillman (2011), each year we alerted the participants about the study 2 days before the first mailing, providing some general information on the study being conducted and the instructions to access the web platform in order to complete the questionnaire. To encourage participants to complete the questionnaire, we assured them of the anonymity of the information provided. Some respondents asked for more specific information on the context and the aim of the research, which was provided by email or phone.

In order to test hypothesis 1 – that stakeholders' perception positively influences companies' profitability - a linear regression model has been adopted to predict how the SPS may influence the firms' profitability (Cimini 2022).

3.2. Variables Measurement

Stakeholders' perception has been measured through a questionnaire administered to senior and middle manager managers with a good level of experience related to management control and a PMS. In developing the structure of the questionnaire, we were guided by our research question (Ferreira and Otley 2009). In this context, the questionnaire was composed of two different sections covering 15 questions (see Appendix A). The first section focussed on the demographic information, which is useful to filter the results (industry, job position, work experience, gender, and education level). In the second section, the questionnaire collected respondents' evaluations regarding the following: sustainable development, organizational effectiveness, digital transition, and cultural change adopted. This section aimed to gather the qualitative data that is useful to develop the independent variable of the model, connected to the stakeholders' perception, as explained below. The independent variables' SPS is obtained by building a specific score, as suggested by the research recently conducted by Hristov et al. (2021) (see also Lisi 2015, 2018), as an average of the score attributed by the respondents to the four performance dimensions generated by the literature analysis and aimed at developing a strategic alignment between stakeholders' engagement and the strategy implementation. To this end, the SPS was measured on a 7-point Likert-type scale by asking managers about their agreement (ranging from 1 = completely disagree to 7 = completely agree) on four statements concerning their perceptions of importance assigned by the company's stakeholders with regard to the: (1) sustainable development process addressed by the company, (2) organisational effectiveness, (3) digital transition, and 4) cultural change adopted (Appendix A). The SPS was generated for each of the years 2017–2019 for each of the firms in the sample. In addition, as previously discussed, to ensure representation of managerial cross function, we considered an average SPS provided by the three managers surveyed for each company.

Return on Assets (ROA) is a standard accounting measure that has retained being the most reliable variable in the management accounting literature to analyse companies' profitability (Lovallo et al. 2020), and is used in many empirical studies in this research field (Kim and Henderson 2015). This variable represents the most important index used in financial statement analysis and is currently adopted as a profitability measure in a wide range of studies (Zajac, Kraatz, and Bresser 2000; Lovallo et al. 2020) due to its power of measuring how efficiently management is using firms' total assets (as reported on the balance sheet) to generate profits (as measured by net income on the income statement). So, it is not highly influenced by financial leverage.

For the control variables, we have considered the potential influence of other factors on the relationships under investigation. For size, we collected the total assets and standardized them to control for the dimension of the entities analysed (Dang, Li, and Yang 2018). To attempt to avoid that loss firms might bias the research findings, a dummy has been included between the explicative variables (Mitra and Hossain 2009). Fixed effects avoid the fact that time invariant omitted factors might bias the research results.

3.3. Descriptive Statistics

Table 3 provides the distribution of firms, by industry, whose managers answered the questionnaire.

In particular, the following distribution emerges: manufacturing ($N = 10$; 21%), transportation ($N = 6$; 13%), pharmaceuticals ($N = 5$; 10%), service ($N = 13$; 28%), and other ($N = 13$; 28%).

Table 4 offers descriptive statistics related to the variables used to test the research hypothesis of this study, including those used to test the robustness of the findings. Table 4 reports the number of observations (FYO), the mean, the median, the standard deviation and the minimum and the maximum of variables, which provide interesting insights that justify the specific methodological choices we made to test our research hypothesis (Cimini 2022).

Table 5 shows the correlation coefficients of the variables downloaded from the AIDA database, with the evidence of coefficients that are different from zero at 1% level of significance. Because some of the coefficients tabulated in the

Table 3. Distribution of firms in the panel.

Panel (industry) classification	No. of firms	FYO	%	Cumulative frequency
Manufacturing	10	30	21	21
Transportation	6	18	13	34
Pharmaceuticals	5	15	10	45
Service	13	39	28	72
Other	13	39	28	100
Total	**47**	**141**	**100**	

Note. Panel (a) describes the sample selection strategy. Moving from an initial sample of 524 entities, we received 173 questionnaires. After identifying the questionnaires with multiple missing values, and after the adoption of filters in terms of job and years of experience, we netted the sample of 47 firms for a total of 141 firm-year observations in the period considered (2017–2019). Panel (b) discloses the industries of the entities belonging to the final sample. Panel (b) also reports the number of observations, the firm-year observations (FYO), for each industry, the percentage compared to the total number of FYO, and the cumulative frequency.

Table 4. Descriptive statistics of investigated variables.

	Number of FYO	Mean	Standard deviation	Minimum	Maximum
ROS	141	5.26	7.99	−29.36	47.19
ROA	141	5.73	6.79	−17.28	29.88
SPS	141	5.18	.89	3	6.5
TA	141	2.35e + 09	4.08e + 09	4.70e + 07	2.17e + 10
L	141	.89	.31	0	1
NI	141	8.15e + 07	2.57e + 08	−6.73e + 08	9.68e + 08
stdTA	141	6.34e−10	1.00	−.5759058	4.731893

Note. The table shows the number of firm-year observations (FYO), the mean, the standard deviation, and the minimum and the maximum values of variables used in this research to test the research hypothesis. Variables' definitions: ROS is the return on sales (in %); ROA is the return on assets (in %); SPS is the stakeholders' perception score (theoretical range from 1 to 7); TA is the total assets (in Thousands of Euros); L is the total revenues (in Thousands of Euros); and NI is the net income (in Thousands of Euros); stdTA is the standardization of the total assets (in Thousands of Euros).

Table 5. Correlation coefficients (obs = 141).

	ROS	ROA	SPS	TA	L	NI	stdTA
ROS	1.0000						
ROA	0.6830	1.0000					
SPS	0.1000	0.1535	1.0000				
TA	0.2540	−0.1102	−0.1239	1.0000			
L	0.4503	0.4997	0.0675	−0.4514	1.0000		
NI	0.6644	0.6085	0.1587	−0.0167	0.5055	1.0000	
stdTA	0.2540	−0.1102	−0.1239	1.0000	−0.4514	−0.0167	1.0000

Note. The table shows the linear correlation coefficients of variables.

table are high and statistically significant, in the tables dedicated to the presentation of research results, the value of the variance inflation factors (VIF) for each variable is disclosed. The econometric literature (Greene 2008; Wooldridge 2015) considers values under 10 are acceptable to avoid bias in the regression estimates due to multicollinearity.

3.4. Data analysis procedure

In line with studies testing similar hypothesis (Cimini 2022), we adopted linear regression modelling to test study the hypothesis. A linear regression data analysis is implemented for modelling the relationship between a scalar response and one or more dependent variables (DVs) and independent variables (IVs); when more than one DV or IV are present, the process is called multiple linear regression. In this regard, many real-world phenomena include elements of causality that are impossible to be estimated in a reliable way. Thus, in order to capture the effect of all those 'undeterminable' effects, it is necessary for our model to include other control variables as well as an error term (i.e. ε) in linear regression.

The synthetic formulation of a multiple linear regression model is showed in (1):

$$Y = \beta_i X_i + \varepsilon \quad (1)$$

where:

Y is the dependent variable of the model;
X is vector of *i* explicative variables associated with y;
ε is the error term.

Behind the regression model used to test our hypotheses, we assume:

1. A linear relation between dependent and independent variables;
2. An error term with a normal statistical distribution ($\varepsilon_i \sim N(0, \sigma_2)$) with mean $E(\varepsilon_i) = 0$ and constant variance $(\varepsilon_i) = \sigma^2$;
3. Independence of residuals, that is, uncorrelated error terms (i.e. $Cov(\varepsilon_i; \varepsilon_j) = 0$);
4. Deterministic nature of predictors, that is, the predictors are under the control of the researcher performing the analysis.

To avoid any biases in the research results, multicollinearity is tested using the variance inflation factor (VIF). Multicollinearity occurs when two or more predictors are correlated. Its presence impedes identifying the individual effect each independent variable exercises on the response variable. The VIF test suggests contained multicollinearity among predictors, as each VIF value is lower than five. Finally, standard errors used to obtain the regression results are corrected for heteroskedasticity (i.e. robust standard errors).

The regression model may also be expressed extensively, releasing the components (1), as follows in (2):

$$\pi_{it} = \beta_0 + \beta_1\ SPS_{it} + \beta_2\ TA_{it} + \beta_2 L_{it} + \beta_{t-1}\ \text{fixed effects}\ + \varepsilon \quad (2)$$

where:

π_{it} is a measure of the firm's profitability;
SPS_{it} is our measure of the stakeholders' perception;
TA_{it} is the standardised total assets that control for the size of the entities included in the sample;
L_{it} is a dummy variable that controls for the presence of loss firms in the sample analysed;
Fixed effects are dummy variables that control for the time effect.
Subscript i and t refer to firms and years.
The model comprises a dependent variable (π_{it}), an independent variable (SPS_{it}) and several independent control variables (TA_{it}; L_{it}; fixed effects).
The dependent variable π_{it} has been collected by using the AIDA database.

To test the robustness of our findings, we have developed different robustness tests in order to verify whether methodological choices have biased research findings.

In the first test, we have shown that the absence in Equation (1) of variables that control for the industries does not significantly modify research findings. Taking into consideration our sample size, to do this first sensitivity, we have introduced two new additional equations without too many dummies, but with single variables that control for the year and the sector analysed. This is because a research study requires adequate statistical power and sufficient sample size to detect scientifically credible effects (Jan and Shieh 2019). Therefore, our choice to introduce these two new equations is to avoid biases to regression estimates produced by the limited observations-per-variable that a fixed effect model should have to control both for the time and the industry effects.

In detail, the specifications used are as follows:

$$\pi_{it} = \beta_0 + \beta_1 SPS_{it} + \beta_2\ TA_{it} + \beta_2 L_{it} + \beta_3\ year + \varepsilon \quad (3)$$

$$\pi_{it} = \beta_0 + \beta_1\ SPS_{it} + \beta_2\ TA_{it} + \beta_2 L_{it} + \beta_3\ year\ + \beta_4\ sector + \varepsilon \quad (4)$$

where, *year* and *sector* are two variables that control respectively for the years and the industries analysed. The variable *year* has values equal to 2017, 2018 and 2019; the variable sector has values equal to 1 if the company belong to the manufacturing sector, 2 for transportation, 3 for the pharmaceutical one, 4 for services and 5 for the other industries.

While Equation (2) controls if findings achieved in the main analysis by using a fixed effect model to control for the time effect cohere with those achieved using a single variable, Equation (3) test whether the addition of a variable that control also for the sector confirms the research hypothesis of this paper. Our expectation is to find the regression coefficient β_1 of Equations (2) and (3) statistically significant. If so, the methodological choice to use the dummies to control for the time and the industry effects does not bias research results. In this case, neither intertemporal differences between entities nor the instersectorial ones should bias research findings.

In the last sensitivity, we have used return on sale (ROS) as dependent variables. These metrics of profitability have been collected for those firms included in the sample analysed. Survey questionnaires are a common method that field researchers use to interact with and collect data from organizational participants in the research field (Evans III et al. 2015; Dai, Free, and Gendron 2019; Hristov, Chirico, and Ranalli 2022).

4. Research findings

By using ROA as measure of firm profitability, Table 6 shows that the regression coefficient of the SPS is positive and statistically significant (p-value $\leq$ 5%).

The findings suggest that the perceived stakeholder concern positively influences companies' profitability; indeed, the regression coefficient β_1 is positive and statistically significant at 5%. The low values of the VIF should suggest that the regression estimates are not biased by multicollinearity (Greene 2008).

Table 6. Multiple linear regression analysis.

Variables	Coefficients	*t*-statistics	VIF
ROA/SPS	1.05	2.25**	1.02
ROA/L	12.32	6.67***	1.26
ROA/ stdTA	1.09	2.21**	1.27
ROA/ dy1	.55	0.45	1.34
ROA/ dy2	.40	0.32	1.35
Intercept	−11.03	−3.83***	
No. of obs.	141		
R^2	28.56%		

Note. The year is measured as a dummy variable distinguishing between 2017 (dy1) and 2018 (dy2). dy3 is omitted because of collinearity. (***) denotes regression coefficient statistically significant at 1% level; (**) denotes correlation coefficient statistically significant at 5% level.

Table 7. Robustness analysis (influence of sectors on research results).

Variables	Coefficients	*t*-statistics	VIF
Panel (a)			
ROA/SPS	1.04	2.28**	1.02
ROA/L	−12.33	−6.75***	1.26
ROA/stdTA	1.09	2.22**	1.27
ROA/year	−0.27	−0.45	1.00
Intercept	555.37	0.45	
No. of obs.	141		
R^2	28.55%		
Panel (b)			
ROA/SPS	0.91	1.98**	1.05
ROA/L	−12.50	−6.53***	1.26
ROA/stdTA	1.01	2.03**	1.29
ROA/year	−0.26	−0.44	1.00
ROS/sector	−0.43	−1.58	1.06
Intercept	539.36	0.44	
No. of obs.	141		
R^2	29.42%		

Note: Both in panel (a) and in panel (b), the time effect is measured by a single variable (year) whose values are 2017, 2018, 2019. In panel (b), the industry is measured by a single variable (sector) whose value are 1 (manufacturing), 2 (transportation), 3 (pharmaceutical), 4 (services) and 5 (other).
***Denotes regression coefficient statistically significant at 1% level; **Denotes regression coefficient statistically significant at 5% level.

In order to develop a reliable statistical model, a test of robustness is required. According to authoritative doctrine (Berger, Frame, and Miller 2005), a robustness analysis should be implemented by regressing the same independent variables on the same (or similar) dependent variable, but calculated in a different way.

The test aims to confirm/confute the statistical results obtained with the previous model. In particular, if the robustness test generates results similar to those obtained before, the independent variables exercise a concrete explanatory power on the response variable; otherwise, they have not.

In the first test, we have run Equation (2) and (3) in order to test whether the temporal and the industry effects really matter in the relation between the profitability of the firm and the stakeholders' perception (Table 7).

Findings tabulated in panel (a) suggest that using a single variable to control for the time effect does not bias research results achieved in the main analysis. Actually, the regression coefficient of SPS continues to be statistically significant at 5% (p-value $<$ 5%). Results tabulated in panel (b) show that the addition a variable that control for the different sectors

Table 8. Robustness analysis (a different metric for firms' profitability).

Variables	Coefficients	*t*-statistics	VIF
ROS/SPS	1.16	2.43**	1.02
ROS/L	18.20	5.67***	1.26
ROS/stdTA	4.71	4.29***	1.27
ROS/dy1	1.49	1.21	1.34
ROS/dy2	.86	0.72	1.35
Intercept	−17.78	−4.39***	
No. of obs.	141		
R^2	48.66%		

Note. The year is measured as a dummy variable distinguishing between 2017 (dy1) and 2018 (dy2). dy3 is omitted because of collinearity. ***Denotes regression coefficient statistically significant at 1% level; **Denotes correlation coefficient statistically significant at 5% level.

to which entities belong to does not bias research results taking into consideration that the regression coefficient of the variable SPS continue to be statistically significant at the traditional level of 5%. Therefore, the hypothesis that stakeholders' perception positively influences companies' profitability continue to be validated.

In the second test, we have used a different metric for firm's profitability to test our hypothesis. To do so, we have followed Naser, Karbhari, and Mokhtar (2004) using an alternate measure of companies' profitability, obtained by taking the ROS instead of ROA. Results showed in Table 8 confirm those obtained in the previous regression model.

The findings validate the hypothesis that the perceived stakeholder concern positively influences companies' profitability.

5. Discussion

Results suggest that a positive correlation between the stakeholders' perception and company's performance exists, confirming the hypothesis at the basis of this study and positively answer to the related research question.

In general terms, the emerging significant result confirms expectations of stakeholders' theory according to which company's wealth and value creation is mainly dependent on stakeholders' willingness to interact with the company, that in turn drives the exchange needed resources (Cervelló-Royo et al. 2020; Martínez Hernández, Sánchez-Medina, and Díaz-Pichardo 2021). Tracking the perception towards the company is, therefore, essential for planning its evolution and operational activities (Cornell and Shapiro 1987; Mitchell, Agle, and Wood 1997 1997; Koh et al. 2007; Unterhitzenberger et al. 2021; Hristov et al. 2021). As a consequence, it is confirmed that the satisfaction of companies' stakeholders is strictly instrumental for improving related performance (Freeman and Evan 1990; Jones 1995). In brief, results of this work greatly confirm the positive influence of stakeholders' perception on companies' activities, planning, production, and control (Perrini and Tencati 2006; Lourenço et al. 2014; Guerci, Longoni, and Luzzini 2016; Cervelló-Royo et al. 2020; Martínez Hernández, Sánchez-Medina, and Díaz-Pichardo 2021).

In order to understand the connection between stakeholders' perception and company's profitability, operations, and planning, the former should be investigated according to the psychological literature and its implementation in management and organization research. In particular, according to Weick (1979, 2005), perception can be considered as the output of the sensemaking, the process through which people assign meaning to issues or events. In this regard, also according to recent reviews and theoretical developments (Cristofaro 2020, 2022; Sandberg and Tsoukas 2015, 2020), being sensemaking an act of human mind, perception is the product of agents' bounded rationality – i.e. inner computational and biological limits that reduce attention given to a problem (Simon 1947) – and biases – i.e. cognitive deviations from rationality that usually prevent from making sound reasonings (Kahneman 2011). In this regard, we assume that the connection between stakeholders' perception and company's profitability – with great consequences on planning, production, and control – can be reconducted to the so-called *halo effect*, a cognitive bias for which the perception of a trait own by an object/person is influenced by the perception of one or more other traits of the individual or object (Thorndike 1920). The influence of this bias can be better understood if thinking that some corporate brands have inherent positive or negative perceptions by stakeholders; this is the case of the Walt Disney brand, perceived as highly oriented to sustainability practices due to their clean and caring image (Peloza et al. 2012). In this exemplary case, stakeholders extend the positive features associated with the image of Walt Disney to other unrelated features, such as sustainability practices. According to that, we assume that the positive or negative perceptions of stakeholders towards company's four-identified features (i.e. sustainable development, organizational process, cultural context, and digital transition), is then translated to the company as a whole, and this increases/decreases the willingness to interact with the company and building or not stable ties with it. From that, managing stakeholders' perception is influenced and influences companies' reputation and allows executives to capitalize on the brand-building potential by enhancing business relationships (Fombrun 1996; Peloza et al. 2012).

The explained cognitive process behind stakeholders' perception should be therefore considered as the trigger of subsequent beneficial (or not) influences towards companies. In fact, clients who positively perceive a company as well undergoing a digital transition process, would extend their evaluation towards the whole company and other features, strengthening their relationship with the organization and allowing managers to punctually receive deferred payments, and make reliable forecasts on future orders (Freeman 1984). Salary punctual delivery, motivation of employees, Cost reduction, revenues and profits' growth, are all elements inter-connected within the planning, production, and control phases and that can benefit – according to a 'cascade effect' from positive stakeholders' perception (Agle, Mitchell, and Sonnenfeld 1999; Porter and Kramer 2006; Basu and Palazzo 2008).

Stemming from the above explanations, stakeholders' theory is here supported in its intention to suggest managers implementing a structured system for managing stakeholders' expectations (Donaldson and Preston 1995; Guerci, Longoni, and Luzzini 2016). In fact, following confirmed

assumptions of stakeholders' theory (Freeman and Evan 1990), companies need to invest in order to increase the stakeholders' perception, because an integrated system structured and implemented in this way leads to obtaining benefits from the stakeholders' perceptions towards all the elements (e.g. job orders, credit line, deferred payments, and human resources management) along the PMS.

6. Conclusions and implications

In this study, we have tried to answer the question: 'How does stakeholders' perception affect companies' profitability?'. In particular, 141 firm-year observations over the period 2017–2019 have been analysed by administering a questionnaire aimed at understanding stakeholders' perception and considering firms' profitability (proxied by ROA). The implemented linear regression model significantly shows that a high stakeholders' perception score increases firms' profitability. From this result, in light of the produced literature, some relevant theoretical and practical implications clearly emerge.

In terms of theoretical implications, this is the first study – to the best of the authors' knowledge – to investigate, in empirical terms, the connection between stakeholders' perception and companies' profitability. The positive significant influence we found greatly reinforces stakeholder theory by providing evidence on the influence of stakeholders on company outcomes (Freeman 1984; Donaldson and Preston 1995; Post, Preston, and Sachs 2002). This beneficial effect is basically derived from the reinforcement of business relationships pushed by stakeholders once they positively perceive companies on the four perspectives we considered – i.e. sustainable development, organizational process, cultural context, and digital transition. These four main dimensions, therefore, should be integrated into the PMS to positively improve the stakeholders' perception. These results help to contribute to the existing literature by clearly delineating and improving what it is known about the main performance drivers considered relevant in organizations, which need to be studied mostly from a management accounting point of view. However, more work is required in order to provide practical and concrete solutions to support companies in the integration process. The main challenge in the existing literature is to achieve strategic alignment between the PMS and stakeholders' perception, translating companies' initiatives into financial terms. In this regard, future research may answer, for instance, the following research questions: *Does the positive perception on one of the four perspectives overcome the others? Can a strong negative perception on one perspective be compensated by the positive perception on the other three perspectives? How can perceptions of different stakeholders be integrated without undermining the current PMS?*

As regards the practical implications, managers in our survey are firstly provided with a clear view in terms of the drivers and critical measures linked to the stakeholder's dimension. Those who govern organizations should consider that a firm's performance is driven from the four abovementioned drivers and should commit resources to sustain them and to communicate effectively on how the company is acting towards these pillars; this is needed in order to have stronger ties with stakeholders and, in turn, influence the flow of resources needed for planning goals and sustaining operations (Oztemel and Polat 2007). In this regard, managers should remind themselves that their primary responsibility is to perform according to organizational mandates that are directed at meeting the objectives of their own organization and its shareholders. In this vein, managers should check whether they have reached, according to their understanding, the level of satisfaction of stakeholders – that act within and outside organizations – by comparing their expectations with perceptions. This can be done for consumers by using the SERVQUAL questionnaire and for mangers by adopting the questionnaire used in this study and compare these results with the expectations they had at the beginning of the employment relationship. Of course, so as to have a holistic understanding of stakeholders' perception, all data to be collected and analysed should be centralized in a unique stakeholders' management system that includes data from the standard customer relationship management system, supply chain management system, etc. Collecting, synthesising, and reporting all these perceptions should be a duty within the controlling function of the organization, which should include stakeholders' perception as a formal measure within the yearly assessment of the health status of the organization. Yet, trends in stakeholders' perception should then be compared with the trends of companies' profitability as well as other measures tracking organizational production, planning and control. According to this comparison, to be made in inferential statistical terms as proposed in this study, companies should then identify gaps between expectations and perceptions of all groups of stakeholders and then, for the identified gaps, implement solutions to recover the relationship. Performing this whole procedure would help companies in complementing their financial measures of performance with non-financials tools – for which the former is able to explain the results of the latter – so as to have a more holistic view of the entity. Being acknowledged and able to measure how stakeholders perceive the organization is the crucial step for those who govern companies to build their social and ethical accounting and auditing (see Zadek, Evans, and Pruzan 1997).

This work is not exempted from limitations and two relate to the investigated sample. *First*, despite the significant results provided, the sample of investigated companies is not large. This can be understandable as this is a first exploratory study that tries to connect variables for the first time, but the power of assertions linked to the reported results should be strengthened by the implementation of other empirical studies, and also in different sectors. *Second*, the sample is not representative of all the stakeholders that may influence a company's plans and operations. From that, future studies should try embracing different typologies of stakeholders in order to have a more comprehensive view of the SPS. In this regard, future works can extend these results by comparing the different perceptions of different categories of stakeholders (e.g. managers, employees, customers, suppliers, investors, etc.) and verifying whether they have a

different perception and if it otherwise influences companies' profitability, plans, and operations. Some questions that are still open for future research are: *Does the perception of one category of stakeholders influence companies' profitability more than others? Is the perception of one category of stakeholders unconsciously weighted more than others? Should different perceptions of stakeholders be weighted according to a firm's vision, a firm's life cycle, and a firm's industry/country? Third*, we did not investigate differences between the stakeholders' perception-companies' profitability relationship across different sectors involved in the sample. Future research should fill this gap to generalize results as well as other countries should be involved so as to consider cultural influences on the stakeholders' perception-companies' profitability relationship; indeed, as perception is a cognitive phenomenon, this is an object of country, group, and individual culture effects.

We truly believe this work can be considered as just one of the first towards a more comprehensive understanding of the influence of stakeholders' perception and that a long research program is ahead for stakeholder theory as well as for planning, production, and control scholars. Indeed, with regard to the latter, for example, numerous research avenues are open and that are underlined, for example, by the following research questions: *Could stakeholders' perception of external agents be more influential than that of internal agents for production processes and protocols? If yes, under which conditions? How can different stakeholders' perceptions be integrated within firms' PMS?* If correctly executed, a program of research on stakeholders' perception in this field can really help organizations to think about production, planning, and control in a systemic way and reach performance that is beneficial for society as a whole.

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No potential conflict of interest was reported by the author(s).

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Appendix A. Questionnaire

Section 1 – Personal details of the respondent

1. What is your current role in the company?
2. How many years' experience do you have in the current role?
3. How many years' experience do you have within the firm?
4. Educational level
   - High school
   - Degree
   - Master's degree
   - Ph.D
5. Gender
   - Male
   - Female
6. How old are you?
7. Can you specify the industry of your firm?

Section 2 – Stakeholders' perception and economic performance

8. What do you think of the role of stakeholders' engagement at a business level?
9. Do you think by integrating qualitative dimensions in the strategy that stakeholders' perception will improve?
10. Do you think by improving stakeholders' perception that profitability will improve?
11. Indicate your agreement (1 = completely disagree, 2 = mostly disagree, 3 = somewhat disagree, 4 = neither disagree nor agree, 5 = somewhat agree, 6 = mostly agree, 7 = completely agree) on the following statements:
    - Stakeholders' perception related to qualitative analysis implementation positively impacts on economic performance.
    - Organisational drivers related to qualitative analysis implementation positively impact on economic performance.
    - Innovation process related to qualitative analysis implementation positively impacts on economic performance.
    - Cultural factors related to qualitative analysis implementation positively impact on economic performance.

Sustainable development

12. Indicate the importance of each of the following practices in your firm for 2019, 2018 and 2017 (1 = not important at all, 2 = very slightly important, 3 = slightly important, 4 = somewhat important, 5 = important, 6 = highly important, 7 = exceptionally important):
    - Environment dimension of sustainability
    - Social dimension of sustainability
    - Economic dimension of sustainability

Organizational

13. Indicate the importance of each of the following practices in your firm for 2019, 2018 and 2017 (1 = not important at all, 2 = very slightly important, 3 = slightly important, 4 = somewhat important, 5 = important, 6 = highly important, 7 = exceptionally important):
    - Efficiency
    - Monitoring
    - Organisational security productivity
    - Environmental condition

Digital transition

14. Indicate the importance of each of the following practices in your firm for 2019, 2018 and 2017 (1 = not important at all, 2 = very slightly important, 3 = slightly important, 4 = somewhat important, 5 = important, 6 = highly important, 7 = exceptionally important):
    - Innovation

- Transparency and traceability
- Digital learning and growth technologies
- Software development

Culture

15. Indicate the importance of each of the following practices in your firm for 2019, 2018 and 2017 (1 = not important at all, 2 = very slightly important, 3 = slightly important, 4 = somewhat important, 5 = important, 6 = highly important, 7 = exceptionally important):
- Co-working
- Learning and growth
- Leadership and soft skills
- Satisfaction
- Strategic alignment