ELSEVIER

Contents lists available at ScienceDirect

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres



When people make the difference: A person-organization fit approach in knowledge transfer offices

Elisa Villani*, Rosa Grimaldi

University of Bologna, Department of Management, Via Capo di Lucca, 34, 40126 Bologna, Italy

ARTICLE INFO

Keywords:
KTO performance
Values and goals
Person-organization fit
Case-study research
Organizational behavior
Knowledge transfer

ABSTRACT

Knowledge transfer office (KTO) personnel play a crucial role in the success of knowledge transfer processes through their motivation and other individual-level dimensions. Individual-level dimensions have been mostly overlooked when exploring the performance of KTOs. In this paper, we use a person-organization fit (P-OF) lens to explore the supplementary and complementary fit between employees and KTOs. We conducted a comparative case study of six KTOs in Italy with different performance levels. Our findings challenge the positive relationship between P-OF and performance by showing that the existence of P-OF is a necessary condition for performance but is insufficient to make it occur. Indeed, the *nature* of goals and values (i.e., *motivational* or *hygiene*) at the basis of P-OF represents an important aspect in establishing success. Our findings contribute to the knowledge transfer literature by shedding light on the overlooked relationship between P-OF and KTO performance.

1. Introduction

As a critical driver of economic growth and social development, academic knowledge has gained importance among scholars, policy-makers, and university managers in recent decades (Geuna & Muscio, 2009; Kalar & Antoncic, 2015). Since the Bayh-Dole Act 1980, the links between universities and industry have increased dramatically, and they have become a critical strategic response to global competition and a key driver of social and economic growth (Alexander et al., 2020; Zhou & Tang, 2020). In 2000, the European Council's Lisbon Strategy formally identified the importance of academic knowledge for regional and national development (Alexander et al., 2020). More recently, the Europe 2020 agenda promoted the connection between universities and industries to address broad societal challenges, achieve smart and sustainable growth, and solve socioeconomic problems (European Commission, 2018).

In the wake of this trend, knowledge transfer has become a high priority for universities. Universities have been pushed to establish and further develop their knowledge transfer policies, along with offices to help create, capture, and diffuse academic knowledge (Alexandre et al., 2022). Knowledge transfer offices (KTOs) have been increasingly prevalent in universities due to these policies. These KTOs have mainly been analyzed in the existing literature concerning institutional and organizational characteristics to address the way they influence the

effectiveness of the commercialization process through which knowledge originated by public bodies is then transferred to the marketplace (Pohle et al., 2022; Siegel et al., 2003). For example, Curi et al. (2012) and Siegel et al. (2007) explore the role of the KTO in licensing, patenting, and spin-off creation. Similarly, Di Gregorio and Shane (2003) consider the commercialization process with a specific focus on the activities performed by the KTO.

Given the increasing importance of knowledge transfer in many respects, it is surprising that individual-level dimensions, which significantly affect organizational processes and performance (Han et al., 2015), have been largely overlooked (Balven et al., 2018; Pohle et al., 2022). The personnel of KTOs, though, can play a crucial role in the success of knowledge transfer strategies through not only their competence and skills but also their motivation, passion, and other organizational behavior dimensions. Person-organization fit (P-OF) is one such factor that has not been sufficiently explored. P-OF refers to the compatibility between people and organizations (Kristof, 1996), and it occurs when an individual perceives a correspondence between their own values and goals and those of the organization (Hamstra et al., 2019; Kristof-Brown et al., 2005; Van Vianen & De Pater, 2012). A perceived high P-OF level is positively related to beneficial attitudinal and behavioral outcomes, including job satisfaction and organizational citizenship, and it is negatively associated with staff turnover intentions (Arthur et al., 2006; Hamstra et al., 2019). P-OF has also been associated

E-mail addresses: e.villani@unibo.it (E. Villani), rosa.grimaldi@unibo.it (R. Grimaldi).

^{*} Corresponding author.

with greater organizational outcomes and higher levels of autonomous motivation among employees (Saether, 2019). Indeed, employees are more likely to satisfy their basic psychological needs in an environment with appropriate resources and opportunities. If the level of P-OF is low or absent, the employees and the organization face value incongruence, ineffective communication, lack of trust, and opportunistic behavior (Edwards & Cable, 2009; Hamstra et al., 2019). In other words, P-OF represents an important aspect of success. Anecdotal evidence suggests that people have recently been looking for better conditions in terms of P-OF. During the pandemic, organizations (regardless of their private or public dimension) faced a "great resignation" crisis (Sull et al., 2022), with people leaving their jobs to look for better work-life balance, wellbeing, and happiness. The recovery plan in Europe (and similar measures in other countries) has generated more opportunities for public entities to recruit. This has created big waves of changes, mobility, and renovation. In light of these disruptions, it becomes crucial for organizations to better understand how to retain their employees and to hire and recruit new ones, leveraging P-OF.

P-OF is a crucial factor to be explored when it comes to the performance of KTOs. Since their early establishment in the 1980 s (Siegel et al., 2003), KTOs have evolved, becoming more articulated and more responsive to organizational and environmental changes to better serve their affiliation organizations (mainly universities and public research centers). Their peculiarities, as organizational units bridging academia and the market, have been analyzed in several papers (Villani & Phillips, 2021; Villani et al., 2017), with one of the most important being their reliance on different and often contradictory logic as they try to accommodate the interests and goals of various stakeholders from the public and the private sectors. Accordingly, the need-supply perspective of P-OF, which considers the specific ability of an organization (universities in our case) to satisfy employees' goals, preferences, and desires, can be of help in explaining why it may be difficult for employees working in KTOs to reach a high level of P-OF. A gap between personal needs and organizational supply also leads to cognitive bias in employees, who may feel neglected or underappreciated (Chen & Li, 2019).

Moving from these considerations, it is important to explore P-OF concerning KTOs to better understand their effectiveness and success. In this respect, this paper aims to answer the following research questions: How do KTOs deal with person-organization fit? Under what conditions does person-organization fit affect KTO performance?

To address these questions, we conducted a comparative case study of six KTOs in Italy (Eisenhardt, 1989; Eisenhardt & Graebner, 2007). Italy is a country of interest because it has allocated increasing importance to KTOs over the last 20 years—in line with the Lisbon agenda (Bianchi & Piccaluga, 2012)—to foster the transfer of public research results into marketable outcomes to increase universities' social and environmental impact. Accordingly, the focus on knowledge transfer and exchange, instead of just technology, has gained greater attention from university governance and politicians, and the new concept of knowledge sharing (KS) is rapidly taking off (Conti & Grimaldi, 2024). As we explain later, the KTOs we selected for this study are comparable in their main characteristics and activities (Istat, 2020). Three have done very well over the last ten years; the others have exhibited weaker performances. Comparing them should offer insights into the P-OF in KTOs and, more specifically, into the relationship between P-OF and performance in KTOs. We believe this is a significant gap to fill, as it allows us to understand relevant micro-level dimensions that affect organizational outcomes and to shed light on more managerial and policy implications at the university level regarding the fundamental role of human resources management practices and hiring processes.

Our findings contribute to the technology transfer literature by adopting a micro-level perspective for exploring additional drivers of KTO performance. More generally, we shed light on micro-organizational factors that support technology transfer and successful KS processes. Our main contribution to the literature pertains to the recognition that organizational behavior dimensions such as P-OF are

crucial to sustaining performance in atypical organizational contexts, like KTOs. Our study goes beyond the research done so far on KTOs, and it represents a step forward in better understanding the impact that KTO employees have on KTO performance (Pohle et al., 2022; Soares & Torkomian, 2021).

We also shed light on to the relationship between P-OF and success. In contrast with the existing literature (Pudjiarti & Hutomo, 2020), we challenge the positive relationship between P-OF and organizational performance. Our results suggest that P-OF may not be necessary for KTOs to achieve success. Moreover, we provide evidence that KTOs characterized by the presence of P-OF show different degrees of success (from low to high). We explore the circumstances around the positive relationship between P-OF and success by looking at P-OF antecedents. Our results show that the fit between employees and organizations can build on motivational values and goals or on hygienic goals and values. A P-OF deriving from aligning hygienic factors does not lead to performance. For P-OF to lead to KTO success, an alignment of motivational values and goals needs to be in place. The managerial implications of this are discussed below.

2. Theoretical background

2.1. University KTOs

University KTOs have become one of the most common objects of study in academic entrepreneurship and the third mission of universities in general (Balven et al., 2018). KTOs are critical agents for implementing universities' strategies in support of academic entrepreneurship (Horner et al., 2019; O'Kane et al., 2015), generating outcomes in terms of licensing, patenting, spin-off creation, research funding, collaboration projects, and intellectual property rights. They may adopt various forms during their life cycle, reflecting different organizational choices for addressing growth and variation in external demand. They may be internal to universities, totally or partially owned, or external; they can be centralized in one main central unit or diffused within departments, and they can adopt different degrees of outsourcing of their core activities. For a detailed analysis of various KTO models and positioning, please see Conti and Grimaldi (2024).

The literature has widely acknowledged the prominent role that university KTOs have in knowledge transfer processes (Belitski et al., 2019; Fernández-López et al., 2018; Sellenthin, 2009) as a consequence of the changing and more active role assumed by universities, which are expected to be more entrepreneurial and publicly engaged in their ecosystems (Miller et al., 2018). Following the increasing importance of knowledge transfer activities in recent decades, research on university KTOs has proliferated. It has started to question why some universities are more effective than others in setting up and managing knowledge transfer processes (Baglieri et al., 2018). Many different aspects have been considered in addressing KTO performance, but these have mostly been from an organizational and contextual perspective of view.

On the one hand, KTOs' attributes, including experience (Chapple et al., 2005; Kolympiris & Klein, 2017), organizational structure (Battaglia et al., 2017; Conti & Grimaldi, 2024; Debackere & Veugelers, 2005), and size (Aldridge & Audretsch, 2011; Siegel et al., 2003), have been used to investigate KTOs' effectiveness. The KTOs' practices have also been included in the spectrum of their characteristics. Researchers have treated KTOs' performance in terms of intellectual property rights (Siegel et al., 2007), spin-off creation and academic entrepreneurship (Grimaldi et al., 2011), boundary-spanning activities (O'Kane et al., 2020; Villani et al., 2017), and knowledge commercialization in general (Belitski et al., 2019).

On the other hand, the impact of contextual features on KTOs' effectiveness has been addressed, both in terms of university-level factors supporting knowledge transfer (Bercovitz & Feldman, 2006; Cesaroni & Piccaluga, 2016) and in terms of the characteristics of local communities and ecosystems (Degroof & Roberts, 2004). Thus,

contextual variety in technological, human, financial capital, and environmental resources has been considered a key determinant for universities' support of KTOs and the promotion of knowledge transfer activities (Baglieri et al., 2018).

Beyond organizational and contextual features, some contributions have looked at the very inner nature of intermediates (Villani et al., 2017) to examine their role and varying functions as brokers, depending on the specific context (Massa et al., 2022).

More recently, knowledge transfer research has also started to address the importance of individual-level dimensions for the effectiveness of knowledge transfer activities and KTO performance. Thus, KTOs have begun to be viewed not only as organizational entities but also as places where multiple employees work together toward specific goals and outcomes (Soares & Torkomian, 2021). Some studies have explored the importance of their employees' skills and competencies for knowledge transfer. For example, Goble et al. (2017) examined the impact of KTO managers' educational backgrounds on knowledge transfer activities. Soares and Torkomian (2021) investigated the importance of KTO employees' different skills in the success of the early and late stages of knowledge transfer processes. Conti and Gaule (2011) found that KTO employees with industry experience positively impact licensing revenues. O'Shea et al. (2005) and Markman et al. (2005) highlighted that KTO personnel with experience in industry are highly productive in knowledge transfer. While prior literature has started to stress the importance of KTO employees' expertise and skills for performance, showing that KTOs must be endowed with the necessary set of abilities and knowledge to be successful (Balven et al., 2018; Soares & Torkomian, 2021), research has wholly overlooked organizational behavior dimensions, which are of crucial importance for understanding individuals' behavior and performance, even in KTO contexts (Balven et al., 2018; Cucino et al., 2021; Pohle et al., 2022). To capture this relationship, considerations of fit between an employee's attributes, the organization's characteristics, and its contextual features are crucial (Edwards, 2008; Semrau & Biemann, 2022).

2.2. University KTOs and P-OF

Organizational behavior dimensions—such as motivation, work-life balance, and organizational justice—have recently started to be acknowledged in the knowledge transfer literature as micro-level dimensions that profoundly affect organizational productivity and sustainability (Balven et al., 2018; Cucino et al., 2021). However, as boundary organizations, university KTOs represent peculiar environments characterized by pluralistic logic and goals (Villani et al., 2017). Most are embedded within universities and thus fully identified as public sector organizations. Still, they are increasingly forced to adopt a business-oriented approach to better deal with external stakeholders and improve their productivity and efficiency (Pohle et al., 2022). Matching university requirements with external needs often results in conflicting and divergent goals, which tend to characterize university KTOs' missions. In this organizational environment, KTO employees have to span boundaries and balance opposing interests, which may conflict with their values and goals. However, the fit between employees' values and those represented or held in the organization is significant. It has been recognized as an impactful determinant of positive employee behaviors, such as organizational commitment, job and career satisfaction, organizational citizenship, knowledge acquisition and KS, and staff turnover (Han et al., 2015; Morley, 2007). Thus, attitudes, behavior, and other individual-level outcomes result not from the person or the work environment independent of each other but rather from the relationship between the two (Westerman & Vanka, 2005). The peculiarity of KTOs as organizational contexts makes the retention of employees' competencies and skills even more important than in standard public organizations. People in KTOs do not perform routine tasks; instead, they exercise very different skills and learn complex knowledge. As a result, KTOs are heavily dependent upon that knowledge (Eckardt et al., 2014), and its loss might be a critical problem for performance (Hana & Lucie, 2011). As in many other public organizations, economic incentives are not an option for KTOs to motivate and retain people. Accordingly, P-OF becomes an intrinsic incentive for reducing staff turnover rates, increasing employees' motivation, and positively impacting KTO performance.

P-OF is "the compatibility between individuals and organizations that occurs when at least one entity provides what the other needs, or they share similar fundamental characteristics or both" (Kristof, 1996, p. 5). On the one hand, P-OF can take the form of supplementary fit, which is fulfilled whenever organizations match the values of their employees. On the other hand, P-OF may also occur in the form of complementary fit, which is fulfilled whenever the demand–supply fit occurs in an organization; that is, all the times that the organization can supply what the employee demands, and the other way round.

Organizations can increase performance and success through P-OF (Pudjiarti & Hutomo, 2020). For example, Autry and Daugherty (2003) consider the fit between employees and the organization regarding values and goals as the basis of the harmony and suitability between the organization and its employees. Wheeler et al. (2007) found that low P-OF leads to decreased job satisfaction, probably resulting in employees' greater intention to leave the organization. P-OF is an important source of new ideas, creativity, and development due to employees' extra-role behavior (Afsar et al., 2015; Pudjiarti & Hutomo, 2020). In contrast, perceptions of low P-OF have been associated with controlled forms of motivation, since this implies that the underlying reasons for work are not valued (Greguras et al., 2014; Saether, 2019).

Although recent studies have recognized the importance of employees for KTOs and effective knowledge transfer (Balven et al., 2018; Pohle et al., 2022; Soares & Torkomian, 2021), little attention has been paid to understanding the relationship between the micro and the meso levels in KTOs (Cunningham & O'Reilly, 2018). Echoing this idea, and in line with the concept of P-OF, if we want to know how employees perform in KTOs, we cannot disregard (1) what employees are equipped with, and whether this is in line with what the organization needs, and (2) what the organization provides, and whether this is in line with the employees' wants and desires (Semrau & Biemann, 2022). Indeed, the essential characteristics (i.e., values and goals) that shape an organizational context serve as crucial contingencies for how employees' attributes translate into relevant outcomes (Hoffman & Woehr, 2006). In sum, P-OF represents an interesting lens, as it helps to go beyond the more traditional, economic, quantitative approach previously used to analyze KTOs' performance. A P-OF lens can bring individual perceptions and feelings back into the organization—in complex settings where the compatibility between values and goals can be challenging, as in KTOs—as a key aspect for exploring job commitment and performance.

3. Methods

A qualitative approach is warranted when investigating overlooked phenomena in response to explorative research questions (Yin, 2003). A multiple case study is a suitable analytical approach for analyzing complex social phenomena in a real-life context (Yin, 2003). In our study, we conducted an in-depth comparative case study (Eisenhardt, 1989; Yin, 2003) of six university KTOs in Italy, with the aim of better describing P-OF in KTOs and, more specifically, the impact that P-OF has on KTO performance. This comparative case study is ideal because the KTOs were created under the same legal framework at around the same time. Whereas KTO1, KTO2, and KTO3 are considered to be among the ten most successful KTOs in Italy in terms of outcomes, KTO4 is regarded as moderately successful, and KTO5 and KTO6 are deemed to be less successful cases (Netval, 2023). We chose cases (i.e., KTOs) characterized by different levels of performance to investigate P-OF's impact on KTO results.

4. Research setting and case selection

The six university KTOs we studied were selected according to four primary characteristics: (1) university's characteristics, (2) environmental characteristics, and (3) KTO characteristics and performance. We discuss each of them more in detail in the following. First, all the KTOs share similar characteristics regarding positioning and organizational configuration. They are all centralized organizational units of public universities. They all engage in the same activities, the most important of which are patenting, licensing, spin-off establishment, implementation of ready-for-commerce services/products, and consulting activities. Table 1 summarizes the key characteristics of the six university KTOs included in our study.

Second, since our main objective is understanding how P-OF supports KTO performance, we sought to avoid contextual biases. Indeed, the nature of knowledge transfer activities may differ significantly across regions and in terms of university quality (Minguillo & Thelwall, 2015). The five regions (two KTOs are in the same region) are comparable in terms of the most relevant aspects, such as the number of people working in research and development (R&D), enterprise sizes, the sector of activities, the percentage of gross domestic product invested in research and development, and the number of innovative enterprises.

Third, all the KTOs were established between 2000 and 2004 and are at similar phases of the KTO life cycle. This is important for similar experiences and greater comparison. We focused on large and medium-sized KTOs with at least five employees (5.6 is the average number of people employed in Italian KTOs) to ensure that there would be enough variety in employees' perspectives. However, we introduced some variance in our selection criteria by including KTOs with one, two, and three subunits, public and private legal forms, and different team sizes.

Given our research interest, we selected the university KTOs based on theoretical sampling (Eisenhardt, 1989; Glaser et al., 1968). Since previous literature has demonstrated a direct positive relationship between P-OF and organizational performance (Greguras et al., 2014; Pudjiarti & Hutomo, 2020; Saether, 2019), we followed a literal replication strategy by selecting three very successful KTOs (i.e., KTO1, KTO2, and KTO3), and a theoretical replication strategy by choosing the fourth, the fifth, and the sixth KTOs (i.e., KTO4, KTO5, and KTO6), which are a mediumand two low-performance KTOs, respectively. We expected a high P-OF in the case of the three high-performance KTOs, whereas for KTO4, KTO5, and KTO6, we expected contrasting results, with low and almost absent P-OF in the last two. KTO success was measured in terms of the level of technology transfer in Italy, such as (among others) the number of inventions, number of patents and licensing contracts, number of spin-offs, collaborations with external institutions, and the magnitude of consulting activities, normalized by the number of KTO personnel (Netval, 2023). While KTO1, KTO2, and KTO3 were among the top ten university KTOs out of 65 examined (Netval, 2023), KTO4 was in the middle of the ranking, and KTO5 and KTO6 were at the bottom of the ranking due to a reduction in resources and staff, poor performance in technology transfer outcomes, and shifts in management positions. Accordingly, we believe the chosen KTOs are an excellent selection for addressing our research questions.

4.1. Data collection

For the data collection, we followed standard recommendations for case-study analysis (e.g., Eisenhardt, 1989; Yin, 2013) by combining preliminary unstructured interviews, formal semi-structured interviews, archival documents (including university reports and regulations),

Table 1 KTOs' characteristics.

KTOs' characteristics	KTO1	KTO2	КТОЗ	KTO4	KTO5	KTO6
Description of knowledge transfer in the university's mission	"[] the maintenance of dynamic relationships and exchanges with society as a whole and the world of work"	"[] to become 'a reference point for the world of innovation, in all its forms, and applied research'"	"[] dissemination of knowledge and culture as well as the transfer and exploitation of knowledge in the context of the economic and cultural development of the territories, in compliance with the principles of environmental and social sustainability"	"It seeks to generate knowledge outside academic environments to the benefit of the social, cultural, and economic development"	"It contributes to social, economic, and cultural development of the territory, promotes the enhancement of scientific research results, support for new businesses and innovative projects, lifelong learning and continuous training"	"It contributes to the dissemination of a culture of protection and valorization of intellectual property within the University, also contributing to the organization of events and courses for this purpose"
No. of internal KTO units	3+1 network	1+1 foundation	1	1	1	1
No. of active patents	140+ (2023)	300+ (2023)	130+ (2023)	100+	100	~70
No. of spin-offs	~32	~57	~27	~45	~45	25
Establishment of knowledge transfer activities	2004	Early 2000	Early 2000	Early 2000	Early 2000	Early 2000
No. of employees	~21	~28	~5	~4	~5	6
University characteristics	University 1	University 2	University 3	University 4	University 5	University 6
Institutional control	Public	Public	Public	Public	Public	Public
No. of students	90,000+	70,000+	40,000+	75,000+	30,000+	~30,000
No. of teaching and research staff	5,000+	4,500	1,500+	+3,900	2,500+	~1,500
No. of PhD students	1,400+	1,400 +	700+	n.a.	1,100+	n.a.
No. of research departments	32	32	20	27	22	15

Source: All numbers are based on the latest documents from the six KTOs and universities. This includes annual reports, strategy documents, and official websites. All data are from 2022 to 2023, except for the cases where the year is explicitly mentioned. # The university mission is not available, so we added the self-description of the unit.

strategy documents, KTO brochures, web-based resources (such as KTO websites and LinkedIn person and unit profiles), and informal talks (see Table 2). We employed a "snowball technique" to identify our informants. We had a preliminary conversation with the president of Netval, a network of professionals from almost all the Italian universities and public research centers that invest in the commercial exploitation of research results. He helped us to identify the most suitable cases concerning our research questions. He also introduced us to the selected KTO directors so that we could arrange our interviews with them. We then asked these directors to connect us with other KTO employees in a position to provide relevant information. We organized semi-structured interviews with all of them. These semi-structured interviews lasted between 46 and 97 min (69 min on average) and followed an interview protocol that evolved throughout the data collection process (Strauss & Corbin, 1998).

The interview protocol was organized into three main sections: the first one included questions about the individual's situation, such as the reasons for joining the KTO alongside their experience and (current and future) expectations; the second and third sections were about the KTO and the contextual characteristics, the relationship between them, and the specific goals and values, both at the KTO and individual levels. We recorded and transcribed all 23 interviews. In the analysis, we used codes to preserve the anonymity of the organizations and individuals.

4.2. Data analysis

Our analytic approach followed standard qualitative research practices (e.g., Gioia et al., 2013). We inductively coded interviews and documents using an iterative procedure to identify meaningful relationships between existing literature, data, and emerging themes. The data analysis comprised two different steps: (1) the first step included (a) an in-depth analysis of each case and (b) a comparative analysis of the six cases; more specifically, we contrasted the successful cases (i.e., KTO1, KTO2, and KTO3) with the less successful ones (i.e., KTO4, KTO5, and KTO6); and (2) the second step centered on an in-depth analysis of the P-OF similarities and differences between the more and the less successful KTOs. We treated all interview transcripts and archival documents separately according to their associated case (within-case analysis) then analyzed cross-case patterns (Eisenhardt, 1989; Yin, 2003). For each case, we performed an open coding, whereby we aimed to find recurrent topics using simple guiding research questions. As our analysis progressed, we became increasingly familiar with the contexts and specifically refined the codes to better distinguish P-OF conditions. This led us to a set of first-order codes for each guiding question (Gioia et al., 2013). This phase was beneficial for exploring emerging patterns in the collected data (Strauss & Corbin, 1998) and identifying in vivo codes or terms that adequately captured the meaning behind the informants'

experience. We then proceeded with axial coding (Strauss & Corbin, 1998) to assign the same codes to perceptions, acts, or occurrences that shared common characteristics. At this stage, we aimed to theorize the in vivo codes as higher-order themes by identifying their initial relationships (e.g., "doing something for society" and "stimulating job where feedback is given for personal growth"). We continued this process until additional analyses did not provide further insights regarding new categories or the relationships between the existing categories. In other words, we proceeded until we reached data saturation. Finally, we considered the data and the current literature in tandem until significant theoretical relationships among the first-order codes resulted in more abstract second-order themes (e.g., "challenging job" and "personal achievement").

In step 1, after analyzing each KTO separately, we continued to stage b, where we repeated the same process outlined above but used a comparative approach among cases. Whereas the objective in stage a was to identify the specific goals, values, and supplies at the organizational and individual level in each KTO, in stage b we aimed to find KTOs' similarities and differences in terms of goals, values, and supplies for both employees and for the organization in general. We then proceeded with step 2, where we analyzed the similarities and differences between the more and less successful KTOs in terms of P-OF. The description of our findings is centered on explaining the differences, more than the similarities, at the individual and KTO levels.

Accordingly, the data analysis steps described above were repeated in comparing our cases, with the aim of generating a theory about the conditions that do or do not support P-OF in KTOs. Fig. 1 presents the structure of our data, including the first- and second-order codes that identify the goals and values at the organizational and individual levels in KTOs.

One risk of the inductive approach is that the authors might lose their higher-level perspective because they identify too much with their subjects. For this reason, we split the tasks between the two authors so that one author analyzed the cases while the second used the outsider's (or "devil's advocate") perspective to ascertain the accuracy of the theory produced (Eisenhardt, 1989; Gioia et al., 2013). This step was crucial for assessing the internal validity of our theory.

5. Findings

To explore how KTOs deal with P-OF, we focused our analysis on two different aspects: (1) supplementary *fit*, taking into account both individual (i.e., KTO employees) and organizational (i.e., KTO) goals and values, to understand their degree of dis/similarity; (2) *complementary fit*, to understand whether the KTO supplies meet employees' demands (i.e., need-supply fit), and vice versa (i.e., demands-abilities fit). In other words, we analyzed both the match between individual and

Table 2
Data sources.

Description	KTO1	KTO2	KTO3	KTO4	KTO5	# of interviews (LinkedIn profiles)	
Interviews	# of interviews (LinkedIn profiles)	# of interviews (LinkedIn profiles)	# of interviews (LinkedIn profiles)	# of interviews (LinkedIn profiles)	# of interviews (LinkedIn profiles)		
Managers	5 (2)	2 (1)	1 (0)	1 (1)	1 (0)	0 (0)	
Employees	2(1)	3 (2)	2(0)	2(1)	2(0)	2 (2)	
Total	7 (3)	5 (3)	3 (0)	3 (2)	3 (0)	2 (2)	
Archival materials	Approx. # of pages	Approx. # of pages	Approx. # of pages	Approx. # of pages	Approx. # of pages	Approx. # of pages	
University (strategy) reports	60	283	321	39	42	72	
Patent and spin-off regulation	9	28	19	23	22	29	
Brochures and press releases	66	21	26	21	2	13	
Other (charts, databases)	1	33	1	2	89	8	
Total	136	365	367	85	155	122	

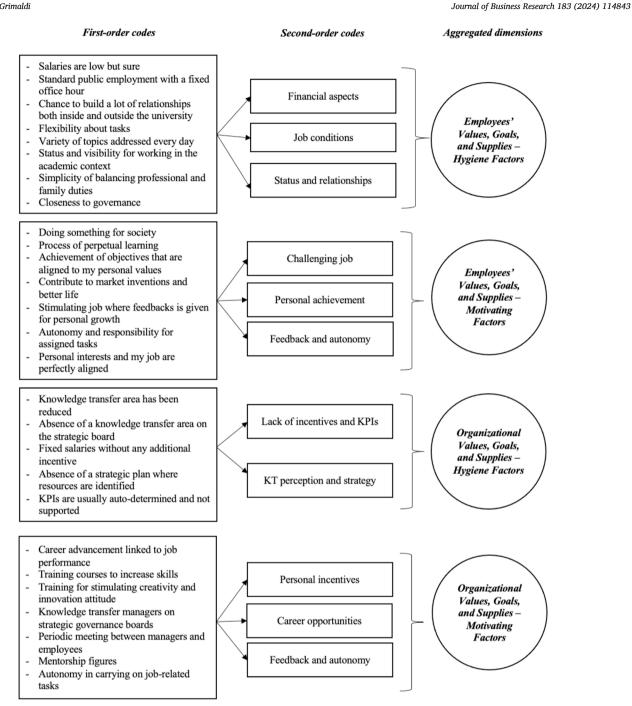


Fig. 1. Data structure.

organizational goals and values and the match between KTOs and employees' demands and supplies.

The findings are divided into two main sections. In the first section, we focus on the goals, values, needs, and supplies at the individual and organizational levels. In the second section, we consider the idea of fit by focusing on the KTOs' similarities and differences in terms of employee and KTO goals and values as well as needs and supplies. We conclude the findings section by building a model that shows the relationship between P-OF and KTO performance.

5.1. Goals, values, and supplies

Our analysis revealed two sets of factors that were very relevant in directing employee and KTO behavior: some employees were primarily

interested in hygiene (extrinsic) factors related to their job, including working conditions, job security, salary, and interpersonal relations; other employees instead looked for motivating (intrinsic) factors such as advancement, responsibility, autonomy, and interest in the job itself. This difference at the individual level was also detected at the organizational level, where profound differences in the KTOs' main goals and values were found. Indeed, some KTOs were just interested in the "doing part" of the job, providing acceptable job conditions without paying attention to any form of motivation or recognition for their employees. Other KTOs, however, had a completely different approach, investing a lot in building positive job attitudes and motivating and satisfying their employees. We report below the evidence regarding these differences.

5.1.1. Goals and values as hygiene factors

Goals and values associated with hygiene factors were identified at the individual and organizational levels. The KTO employees, for example, referred to *financial aspects*, *job conditions*, and *status and relationships* as the most important aspects to consider and value in their work. At the organizational level, we found that the main goals, values, and supplies of the less successful KTOs—those focusing more on the design of job characteristics than on employees' well-being—were instead (*lack of*) *incentives and key performance indicators* (KPIs), and *job perception and strategy*. We discuss these in more detail below.

5.1.1.1. Individual level: Financial aspects. We found pronounced differences in the way in which the KTOs' employees valued and considered salary. In the less successful KTOs, salary was generally regarded as an essential condition related to the job, whereas in the most successful KTOs, other rewards were judged more critically as recognition for effort and commitment.

An illustrative case was that of a KTO5 employee, who told us she had a great deal of work experience in different private sector contexts, both as an employee and a freelancer. On the subject of salary, she reported:

Different aspects have pushed me to choose this job, and the salary is one of them. You may think this is weird and does not reflect the common opinion that wages in the public sector in Italy are, on average, low. But we never think about the salary/number of worked hours ratio [...] we'd discover that it is not too bad here [laughs]. (Interviewee 21, KTO5)

The same employee informed us that the financial conditions related to the job can be considered as more than satisfactory. As she said:

It is not a situation where you get rich, but you feel safe from an economic point of view, and the good thing is that you have time to spend your money. (Interviewee 21, KTO5)

The same ideas were shared by KTO6 employees, who acknowledged a good balance between salary and effort. Accordingly, they admitted that KTO does not guarantee a high salary. Still, if you compare what a start-upper gets from the vast job to initiate a business, the balance is much more than satisfactory. However, employees' perceptions of salary were utterly different in high- or medium-performance KTOs. In these cases, it was evident that employees did not choose their jobs for economic reasons and were not motivated in their daily activities by salary. As the KTO1 manager explained:

You have the opportunity to contribute to something important here. It is a big university, a big community, and we have the role of bringing research, our researchers outside [...] we can make a huge impact. It is not a matter of money, for sure! (Interviewee 5, KTO1)

5.1.1.2. Individual level: Job conditions. In the case of job conditions as a key hygiene factor, we found significant differences between employees of different KTOs. More specifically, we again found that job conditions were vital for the employees working for the low-performance KTOs. A KTO5 employee explained that she resigned from her previous job and joined the KTO for a better work-life balance. Since joining the KTO, she has been able to spend more time with her family and carry out work activities from home, and she would never change this current condition. Another employee of the same KTO told us that a good reason to choose this job was standard public employment with fixed office hours and free weekends. Other reasons mentioned and related to job conditions were the variety of topics addressed in everyday activities, job security, and the flexibility to decide which activity is better to prioritize.

A different story emerged from the interviews with employees of the most successful KTOs. Job conditions were rarely mentioned, and when

this happened, it was essentially to state their insignificance compared to other factors, mostly about personal competence, knowledge, and autonomy. A KTO2 employee pointed out:

[The exciting point about this job] is that speaking about the job is not as fascinating as it is about people and my growth. I feel in a team, in a great team. (Interviewee 9, KTO2)

5.1.1.3. Individual level: Status and relationships. Moving to the final hygiene factor identified in our analysis, we again found critical differences in how it was perceived by the employees belonging to high, medium-, or low-performance KTOs. It was interesting to discover that a KTO5 employee went to great lengths to join the KTO—leaving the enrollment office within the same university—due to its greater involvement in university governance. In the employee's words, "this is a matter of status, you know; we are not all the same inside the university: I'm of course a clerk, but my job is more prestigious than the one I did before." A colleague from the same KTO added to this aspect the great opportunity of building relationships inside and outside the university that the job with the KTO provides. She explained that after her experience in the private sector, she would never have accepted a traditional office job that does not allow interaction with multiple and different people daily. She stated:

It is fascinating having the opportunity to meet different people every day here. Other colleagues from other offices think we are fortunate for that, and I'm more than confident this is the case! This is the job characteristic I value the most. (Interviewee 20, KTO5)

All the employees of less successful KTOs stressed the status and visibility aspect of working in the KTO in the academic context.

Employees from the medium- and high-performance KTOs did not stress this aspect with similar emphasis. A KTO4 employee stated:

I appreciate that we are valued more than colleagues in other administrative offices; we are considered more powerful for different reasons. However, I don't think this is our strength here. (Interviewee 17, KTO4)

Another KTO3 employee pointed out:

[...] Yes, I can speak with the rector daily, but a reward is different. Honestly, this is not my motivation, and I'm not here for that. (Interviewee 14, KTO3)

In conclusion, we observed that people driven by hygiene factors related to the job tend to pay a lot of attention to the characteristics of the job itself rather than to possible indirect consequences for themselves. Therefore, economic incentives and how the job is organized are the key elements that explain work behaviors. Private and working lives remain completely separate; private life prevails over job duties, and people tend to stay emotionally detached from their jobs.

5.1.1.4. Organizational level: KTO's strategic role. Moving on to organizational values, goals, and supplies, we found that for some KTOs, the area in charge of the third mission, technology, and KS ("third mission area" for simplicity) in the university lacked a clear strategy and was somewhat reduced in size. Thus, for example, in the less successful KTOs, the third-mission area was absent in the university's strategic governance board and received low visibility in strategic plans. The number of people dedicated to third-mission area activities had more than halved, shrinking from eight to three employees in five years. An employee explained:

We do not have a strategic plan. The governance here does not care about third mission, and we set priorities ourselves week by week. Six years ago, we were eight; now we are just three [...] this says something. You know, we do not have objectives, and we go ahead by taking care of what happens. (Interviewee 19, KTO5)

We also discovered that some KTOs did not have an ad hoc deputy rector in charge of third mission, whereas such a role exists in most of the country's universities wanting to engage in third mission and generate impact. The importance given to the third mission area in KTO6 was almost absent, and many actors from the ecosystem outside the university usually worked with the KTO of another university, as they did not know of KTO6's existence and role in its university's knowledge transfer activities. In this scenario, KTO people were neither valorized nor incentivized adequately.

In KTO4, we found, for example, that the third mission area—previously with its own identity and political legitimation with a dedicated deputy rector—was later included in the broader area of research valorization, thereby losing visibility.

5.1.1.5. Organizational level: Lack of incentives and KPIs. Consistent with what we reported above, we found that KTO5, KTO6, and KTO4 did not apply any incentive beyond small, potential budgets for specific goals, which could not be taken for granted, as the university governance decides which budget to allocate to which goal from year to year. Interviews with employees from the medium-performance KTOs showed that other incentives are uncommon and are far from being part of their job routine. In this context, they sometimes introduce some incentives within current running projects to give them a rationale and make them operative. As an example, an interviewee from KTO4 declared:

A training program could be considered a reward for us, but remember that it is not related to achieving specific goals [...] It was included in the budget of a European project so that it does not imply additional expenses for our university. (Interviewee 16, KTO4)

At KTO5, the same is true for KPIs. They are self-determined within the KTO and eventually communicated to the university governance. An employee clearly explained the situation:

We lack entirely strategic objectives and a general plan. Our activities are defined by deadlines and not by strategic priorities. Many activities that could lead to interesting and promising results are not followed.

Our political guide within the governance has been changing continuously over the last few years, so, now and then, we start from scratch with different opinions and ideas. We work with people through direct contact and cannot rely on incentives [...], but it is fine as we do not have so much pressure [laughing]. (Interviewee 20, KTO5).

In summary, we observed that low- and medium-performance KTOs neither support their employees' work through intrinsic incentives nor consider third-mission area activities as strategic at the university level.

5.2. Goals and values as motivating factors

Goals and values associated with motivating factors were identified at the individual and organizational levels. The KTO employees talked about the stimuli from a *challenging job, personal achievement*, and *feedback and autonomy* as the most important factors explaining their motivation regarding their work. At the organizational level, however, we found that the high-performance KTOs were oriented toward *personal incentives, career opportunities*, and *feedback and autonomy* recognition. These KTOs were very much focused on their human resources, opting for organizational policies that value the people more than the job. In the following section, we discuss the motivating factors at the individual and organizational levels.

5.2.1. Individual level: Challenging job

Most people working in medium- or high-performance KTOs described their jobs as important and challenging, with a relevant and positive impact on society. A KTO1 employee stated:

Well, I think what the researchers do is very useful to society, and I like the idea that I can help them and support them in accomplishing such a critical mission in society. (Interviewee 2, KTO1)

All the people working at successful KTOs perceived that sharing the knowledge developed inside the university with business and society at large represented something significant. The KTO2 manager stated:

I'm talking about also sharing our results, the fact that we are studying a disease or discovered a particular machine. Sharing this can increase the competencies and create opportunities for both sides, so it's essential. (Interviewee 8, KTO2)

Interviewees clearly explained that a strong motivational factor is the impact that they generate through their jobs. As a result, the economic aspect is not central here, as other types of incentives are in place to feed the right motivation for the job. Someone from KTO3 explained:

[Training] is an example of reward, but remember that it is not granted at achieving a specific goal; it is an ongoing activity. That is, it is part of the activities/benefits that we may have access to [not a reward for something], which is on the office's standard budget. (Interviewee 15, KTO3)

Our interviewees described the difficulties they often experience in tackling essential problems and formulating solutions. KTO employees should be able "to provide information making researchers more aware of the preciousness of their inventive contribution [...] as well as to inform external partners about those key discoveries" (Interviewee 15, KTO3). As previously highlighted, this attitude is not stimulated through money but via training. Passion has a role, too. Employees of successful KTOs explicitly mentioned both training and passion. In contrast, these were never mentioned by employees from less successful KTOs.

5.2.2. Individual level: Personal achievement

The second motivational factor identified through our analysis was personal achievement. We realized that personal achievement played a key role in one case, whereas it had no importance in another. Personal achievement refers to the alignment between individual and organizational values and objectives. As one interviewee expressed:

In my opinion, motivation, in general, is what drives you, what rewards you; that is, the fact of dealing with interesting things is very gratifying, even more than the economic reward, [...]. So, we usually do this not so much because of economic reasons but because we feel we are doing an excellent job, a very interesting one, that makes us feel central, on the frontier, constantly updated, even compared with other colleagues in other areas. (Interviewee 13, KTO3)

More specifically, employees motivated by personal achievement put their personal lives and jobs at the same level, thus devoting a lot of extra time—outside their office hours—to work in the evenings and at weekends. When we asked an employee about her life outside the office, she answered:

I'm a workaholic [laughing]. I'm always bringing work at home. I clean my teeth in the morning, thinking about what the working day will be like and what I have to do during the day, and I go to sleep with the same feeling every night. (Interviewee 6, KTO1)

This is in line with what another employee pointed out about his interests. He explained clearly that his interest in knowledge transfer topics went far beyond his job duties to include many leisure activities. For example, he subscribed to specialized web pages dedicated to science and technology and joined webinars on KS out of personal interest.

5.2.3. Individual level: Feedback and autonomy

People in the more successful KTOs valued, to a great extent, the autonomy given to them in carrying out their work activities. Autonomy is perceived as a necessary ingredient to fuel creativity, openness, and curiosity. An employee told us:

By encouraging autonomy—being able to make decisions—I perceive that I'm an important player in the decision-making process, and I do not care how much I work [...] I do not have routines or follow strict procedures, which motivates me to give my best and put in all the effort possible! (Interviewee 3, KTO1)

Another employee pointed out:

I like that my autonomy gives me the chance to learn a lot. This is a non-ending job if we're talking about the competencies. So, every day, you have to learn something more about software that can help you, or you have to know about the new law about intellectual property transfer. (Interviewee 10, KTO2)

Autonomy was described as a critical aspect to strive for. The answer given by an employee to the question, "what do you look for in a job?" was very illustrative: "From a job, I expect training, if possible, autonomy and responsibility" (Interviewee 18, KTO4).

Autonomy, as a motivating factor, was very much connected by our informants to the importance of giving and receiving feedback at work. Indeed, positive and negative feedback was recognized as providing essential stimuli for self-enhancement. Thus, autonomy fuels innovation and creative decision-making processes, and together with feedback, they stimulate effectiveness and personal growth.

Clarity of objectives is also important. It is important that my work is being seen: it does not help to receive some duties, and nobody comes to know what you've done. I've experienced this condition in my previous job [...] nobody came to say "this is great, or it is a disaster!" In the end I resigned. I need feedback; we are human beings, and we can improve ourselves by confronting others. (Interviewee 1, KTO1)

This was not the case in the less successful KTOs, where employees adopted a detached approach toward their work, avoided any responsibility, and were not very interested in receiving comments and feedback for the job done.

In conclusion, we observed that people driven by motivating factors tended to prioritize the job's consequences, in terms of personal growth and opportunities, instead of the characteristics of the job *tout court*. Therefore, economic incentives are less valued than autonomy, challenging work activities, and personal growth. Private and work lives are very much intertwined, and they often overlap.

5.2.4. Organizational level: Personal incentives

It was interesting to observe that high-performance KTOs used several rewards to motivate and praise employees for their efforts. As in any public organization, economic bonuses can be distributed, but they are usually limited in number and amount. Thus, training courses, flexible working conditions, and holidays are alternative types of rewards used by many successful KTOs. A KTO2 employee told us:

Yes, there is a bonus at the end of the year. But a reward can also be something else. In my case, using more smart working for some months to care for my little baby more could be possible. (Interviewee 11, KTO2)

In this way, employees feel supported and incentivized in their work. A KTO2 employee stated:

You feel support. It is undoubtedly an essential thing because it is a difficult, complex job that has many difficulties, even with researchers many times. Having the support of the governance helps in many respects. (Interviewee 8, KTO2)

As a KTO1 employee told us:

Yes, a reward can also be something else; in my case, it would be a training course for design thinking. Salary is important, of course [...] but it is the minimum required, nothing else. If you aim high, then you need something different! (Interviewee 4, KTO1)

During the interviews, several participants highlighted that different types of incentives can work for employees with other personal preferences and inclinations.

5.2.5. Organizational level: Career opportunities

Although the KTOs that we observed are part of public organizations, and, as such, they display a certain rigidity, bureaucracy, steady procedures, and less predictable career advancement, we found that, in this respect, the most successful KTOs did very well in addressing these shortcomings. As the KTO2 manager explained:

[The name of the knowledge transfer company external to the university] represents a strategic choice to ensure that the best people can advance faster in their careers. Of course, it is not easy at the university, and we—as managers—are not entirely free to make career advancement-related decisions. However, we have clear plans: new positions open regularly, and progress in your career is undoubtedly possible. (Interviewee 12, KTO2)

Even in this case, the difference with the less successful KTOs was surprising; there, most of our interviewees reported that they had been in the same position for years without concrete opportunities ahead.

Employees from KTO1 mentioned the opportunity to spend a period abroad in another KTO to learn different processes and practices, which could be helpful to and valued for career advancement at the university. They stressed that this is a great opportunity, as it combines different motivating factors (learning best practices from others and becoming more skilled for career advancement).

5.2.6. Organizational level: Feedback and autonomy

The final motivating factors that the most successful KTOs used to incentivize and reward their employees are autonomy and feedback. When talking about the degree of autonomy at KTO1, an employee stated:

We have good autonomy in that we are given the general direction we should follow, but it is up to us to decide daily how to implement our work. I would say that even the manager themself has autonomy from the governance in defining and revising goals. I do not know how to say [...] it is like autonomy comes with a cascade approach. In my opinion, however, our framework is given (and assimilated by us) from above. (Interviewee 5, KTO1)

Similarly, a KTO2 manager told us:

The other aspect that I work on is to give plenty of autonomy to people. In moments of abundance, I tend to throw people overboard, as I say to newcomers. On the one hand, I tend to have them trained and skilled; on the other, I also like throwing them into the sea to let them navigate and define their priorities autonomously. So, if I had to sum it up, it's like allowing a team climate to emerge, a bit of rowing on the same side, not particularly hierarchical. The hierarchy is there, but I try to give an approach that is not particularly hierarchical [...], it is much more functional and much more effective to have a more participatory approach. (Interviewee 11, KTO2)

Autonomy is recognized as a central aspect by high-performance KTOs since autonomous work allows for better office relationships and greater cooperation, thus enhancing responsibility and motivation.

Together with autonomy, KTO managers believe that providing employee feedback for the work done at all levels is essential to valorize the activities they carry out. An interviewee from KTO1 explained:

One of the things I often say to newcomers is that, probably, looking around them, they will see other colleagues with the same salary but a lighter work burden. So, I try to use a team-based approach characterized by confidentiality, sharing thoughts, and allowing criticism

and feedback. Incentives are usually absent; I have to stimulate individuals to work more or improve whatever they are doing. It is key to stay in touch and comment on what happened because only in this way are people motivated to do their best. (Interviewee 3, KTO1)

A KTO3 manager said that the "feedback tool" effectively directed and stimulated employees' efforts. He specified that people should not be overwhelmed by many tasks, but those assigned need to be followed accurately: "If they feel that you do not take care of them, then for sure they progressively will give up" (Interviewee 7, KTO1).

In summary, we observed that the most successful KTOs made better and more intense use of motivating factors, believing that people make the success of organizations and that people are intrinsically stimulated by something other than money. Accordingly, different incentives (e.g., autonomy and training) are considered as a reward to push individual motivation as much as possible. We show in Table 3 the similarities and differences between KTOs and their employees in terms of the nature of the values and goals they represent most.

5.3. P-OF and KTO performance

This section reports on the results of step 1, which focused on an indepth analysis of the similarities and differences between the more and the less successful KTOs in terms of P-OF. We aim to show to what extent P-OF is important in supporting KTO performance. As stated, P-OF is fulfilled when coherence exists between an employee's and an organization's values and goals (supplementary *fit*) and when there is alignment between an employee's and an organization's demands and offers (*complementary fit*). We found that P-OF is fulfilled in both the high- and low-performance KTOs, while it is not observed in the medium-performance KTO.

The interviews with employees from the high-performance KTOs (KTO1, KTO2, and KTO3) showed a clear P-OF. On the one hand, we found evidence of supplementary fit between employees' and the KTOs' values and goals. Indeed, employees striving for a challenging job, personal achievement, and autonomy work in KTOs that invest in knowledge transfer activities not only for economic and quantitative outcomes but also to increase employees' skills and competencies to build more vital internal skills and a more productive area. Thus, people are valued and incentivized according to their inclination and preferences. A KTO1 employee stated:

This is part of their strategy [KTO1]. I thought it was important for every KTO. Still, I talked to many other people in other KTOs in Italy, which is an entirely different level of awareness and sensitivity. They [KTO1] invest much more here; putting people before everything else is key. (Interviewee 6, KTO1)

On the other hand, we also observed P-OF in terms of complementary fit in high-performance KTOs. While employees look for a KTO that matches their values and can fulfill their goals, high-performance KTOs in turn look for people who are passionate about their jobs, motivated by challenging objectives, and want to improve their skills. This match (i.e.,

complementary fit) was perfectly observed in the most successful KTOs. A KTO2 manager told us:

The activities performed by the KTO are included in the strategic plan, and we allocate part of the budget exclusively to improving our team, skills, and activities. In this way, we try to offer our best to our people and make them happy being part of this organization. It is also true that we look for people with specific characteristics who are unsatisfied with everyone. (Interviewee 9, KTO2)

The low-performance KTOs (KTO5 and KTO6) also fulfilled the P-OF. Concerning the successful cases where P-OF was grounded in motivational values and goals, the low-performance KTOs based P-OF on hygiene factors. Employees' exclusive attention to economic and organizational aspects related to the job matched perfectly with the KTO's lack of support and personal incentives. Two interviewees described such situations:

It is not a stimulating situation, but at the end of the day, I like it [...] Between you and me, if the organization demands a lot, you have to react; if expectations are not high, you have greater freedom to deliver what you want. I don't aim high, and they do not care. (Interviewee 21, KTO5).

I like that the organization only asks a little, and I can take my time to do things relaxed. I want to accomplish tasks at my best, but I wouldn't say I like to hurry up to finish things. I worked before in a private organization where I had weekly budgets. I cannot live like this. I prefer devoting time to many things at the same time. (Interviewee 23, KTO6)

Thus, we also found, in this case, a perfect fit between individual and organizational goals and values, as well as demand and supply. On the one hand, employees are not motivated by their jobs and appreciate that their job allows them to carry out other, more important, personal activities. Accordingly, they do not devote more effort and time than strictly necessary. On the other hand, on the side of the KTOs, knowledge transfer activities are neither valued nor promoted; employees are left alone to define the activities to be pursued, the allocation of priorities, and the final strategies to follow.

The situations described for the high- and low-performance KTOs differ significantly from the case of the medium-performance KTO. Here, we did not observe P-OF. The lack of organizational commitment to knowledge transfer activities left the employees negatively perceiving their role inside the organization. An employee explained:

[...] We do our best, but the problem is upstream. How can you be a successful KTO? You cannot do much to change the situation without interest in certain things. We like our job, and we put all our enthusiasm into it, but when you give A, you would like to receive in turn A (the same amount!), not B. (Interviewee 16, KTO4).

Although employees did their jobs passionately, dedicated a lot of time and effort to daily activities, and were highly motivated to achieve good results and improve their skills, the KTO should have done something regarding strategic resource allocation and individual incentives for employees. An employee stated:

Table 3Similarities and differences between KTOs' and their employees' values and goals.

	KTO1	KTO2	КТОЗ	KTO4	KTO5	KTO6
Degree of success	High success	High success	High success	Medium success	Low success	Low success
Values, goals, and supplies (employees)					
Hygiene factors Motivating factors	Minimally present Strongly present	Minimally present Strongly present	Minimally present Strongly present	Minimally present Strongly present	Strongly present Minimally present	Strongly present Minimally present
Values, goals, and supplies (KTOs)						
Hygiene factors Motivating factors	Minimally present Strongly present	Minimally present Strongly present	Minimally present Strongly present	Strongly present Strongly present	Strongly present Minimally present	Strongly present Minimally presen

Everyone talks about efficiency, evaluation of results, effectiveness, measures, best practices, etc. All are very important and exciting [...] however, there is little attention to people, individuals, and their lives, what they bring to the work context, and even the constraints and opportunities of the structure that inevitably influence how they act. (Interviewee 18, KTO4)

To conclude, we found that KTOs with different degrees of success present different situations in terms of P-OF. Fig. 2 visually represents our model, showing that the highest degree of success is achieved when P-OF is fulfilled based on intrinsic motivational goals and values. In contrast, the lowest degree of success is achieved when P-OF is triggered by hygiene factors (values and goals). Finally, we found that in a medium-performance KTO, there was no P-OF.

6. Discussion and conclusions

6.1. Theoretical contributions

In this study, we advance the literature in several ways. For the knowledge transfer literature, we shed further light on the recent debate (Pohle et al., 2022) addressing the impact of individual-level dimensions on KTO performance. In particular, we explore the overlooked relationship between P-OF and KTO performances. For the P-OF literature, we carefully consider the antecedents of P-OF, in terms of both the organizational and personnel's values and goals, which can make a difference in the way P-OF manifests and leads, or not, to a good performance. We make three main contributions.

First, we believe that our study represents a step forward in better understanding the impact that KTO employees have on KTO performance (Pohle et al., 2022; Soares & Torkomian, 2021). Few recent works have explored the role of KTO employees' skills and competencies in performance outcomes (Conti & Gaule, 2011; Goble et al., 2017; Mom et al., 2012). However, nothing has been done to explore the effect of value-related aspects on employee behaviors and attitudes. This study addresses this gap by considering organizational behavior dynamics in KTOs, explicitly focusing on P-OF. With their values, goals, and behaviors, KTO employees represent the heart of knowledge transfer at public universities and research institutions. Indeed, the alignment between employee and KTO values and goals is key for the success of knowledge transfer activities. We show that the likelihood of achieving success is very much linked to the nature of shared values and goals. In this respect, considering people's values and goals is critical—including

during recruitment processes—to support KTOs' contributions to economic, technological, social, and environmental outcomes. This is relevant for KTOs, which are complex organizations that, on the one hand, are characterized by procedural rigidity, constraints, and absence of economic incentives, and, on the other hand, the need to have fast decision-making processes and to be open to different logics and goals (Pohle et al., 2022; Villani et al., 2017). Accordingly, P-OF could be more difficult in such organizational contexts.

Second, in contrast with the existing literature (Afsar et al., 2015; Pudjiarti & Hutomo, 2020), we challenge the positive relationship between P-OF and performance. The existing literature holds that the existence of P-OF determines extra-role behavior (O'Reilly & Chatman, 1986), decreases staff turnover (Boon & Biron, 2016), enhances work satisfaction, organizational commitment (Westermann & Cyr, 2004), and work performance (Farooqui & Nagendra, 2014; Judge et al., 2007; Tziner, 1987), and affects innovation outcomes (Menter et al., 2022; Pudjiarti & Hutomo, 2020). In other words, P-OF has been recognized as an antecedent of individual behaviors (Afsar et al., 2015; O'Reilly et al., 1991) and a driver of organizational performance and success (Chatman, 1989; Farooqui & Nagendra, 2014; Silverthorne, 2004). However, some contradictory and inconclusive evidence still exists regarding this relationship (Arthur et al., 2006; Hamstra et al., 2019). Our first contribution derives from finding P-OF in the low-performance KTOs and finding almost no P-OF in a more successful one (i.e., the medium-performance KTO). In contrast with the existing evidence, our results suggest that P-OF might not be necessary to achieve success. This opens a reflection on why this happens. KTOs in public entities have some peculiarities compared to those in more traditional and perhaps more studied private settings. Indeed, they are characterized by constraints, procedural rigidity, and compliance with external laws and internal regulations. At the same time, they face complex tasks that include managing the tensions between different logics (academic versus market), goals (academic versus managerial), stakeholders (e.g., scientists, university managers, and companies), and internal priorities (e.g., requests from different departments and other internal divisions/ areas). This means that KTOs must be endowed with a wide range of skills, abilities, and knowledge to protect and valorize academic inventions effectively and do what they usually do in the broader domain of KS (Brescia et al., 2016; Comacchio et al., 2012; Lockett & Wright, 2005; Siegel et al., 2007). Accordingly, the heterogeneity of KTO employees in terms of backgrounds, competencies, and orientations—as in the case of research-oriented, marketing-oriented, and legal-oriented

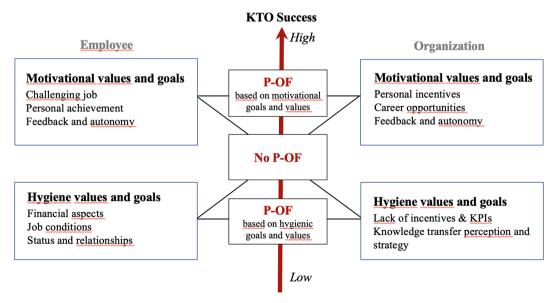


Fig. 2. A model of person-organization fit and KTO success.

KTO staff (Soares & Torkomian, 2021)—may result in a complementary misfit (i.e., demand-supply misfit) in more recently established organizations (e.g., KTOs) that do not have a consolidated and sound culture, which takes time to create. In other words, life-cycle issues may influence the relationship between P-OF and performance in KTOs. There is evidence that the age of KTOs (i.e., the number of years since establishment) is associated with learning economies and scale efficiencies (Siegel et al., 2003) in the presence of continuity of action and governance. These latter factors, in turn, impact performance. In other words, the time dimension and the continuity of governance are important for KTOs-particularly those relatively recent organizations or those that have seen several governance changes affecting their mandates—to grow and consolidate their values and develop clear objectives. Compared to more "established" organizations, where a relationship between P-OF and performance is more likely, KTOs might display differences and be more sensitive to this life-cycle influence. Therefore, the complementary and supplementary fit could be negatively affected.

Third, we contribute to understanding of why P-OF might not be necessary for achieving success, therefore explaining our first contribution. In doing so, we build on the evidence that both the lowperformance KTOs and the high-performance ones display P-OF. This evidence again challenges the relationship between P-OF and success. At the same time, it encourages us to explore the conditions under which the positive relation between P-OF and performance holds (Kristof-Brown et al., 2005). This evidence allowed us to dig into the two conditions that we mentioned in the theoretical background, and which are at the basis of P-OF: (1) what employees are equipped with, and whether this is in line with what the organization needs, and (2) what the organization provides, and whether this is in line with the employees' wants and desires (Semrau & Biemann, 2022). We found that the nature of the goals and the values at the basis of the P-OF dimension are critical to observing the effects of P-OF on organizational performance. Specifically, we observe that P-OF can be founded on motivational or hygiene values and goals. While motivational values and goals consider personal motivation a key dimension, hygiene values and goals only consider job characteristics. Our study shows that P-OF deriving from aligning hygiene factors is unlikely to lead to success. Instead, P-OF based on the alignment of motivational goals and values is very likely to lead to success (Pohle et al., 2022). Therefore, our findings challenge the P-OF literature by demonstrating that the existence of P-OF is a necessary condition for performance but is insufficient to make it occur. We assume this might depend on the fact that different time orientations exist at the individual and organizational levels.

On the one hand, motivational goals and values (e.g., personal achievement, autonomy, recognition, challenging activities) are based on a forward-looking perspective, as they can be fulfilled only in the long term. Knowledge transfer processes can be lengthy and articulated and can generate externalities (also unintended) in the long run. Hence, long-term individual and organizational values and goals might help not only in achieving the objectives but also in making them successful. In this respect, motivational values and goals are more likely to encourage behaviors of organizational commitment, on both the employee and organization sides, that are necessary to meet competitive challenges and achieve success (Kristof, 1996). On the other hand, people and organizations with hygiene values and goals (e.g., salary, job conditions) are more focused on obtaining immediate rewards and good job conditions, and they refrain from adequately committing to long-term knowledge transfer processes.

6.2. Managerial and policy implications

Our study raises important managerial implications for KTO managers, considering how to create better organizational conditions for effective technology and knowledge transfer. To create alignment between personal intrinsic expectations and organizational values and goals, which seem to be the condition for P-OF to contribute to success,

our first recommendation for KTO managers is to create organizational conditions that meet employees' expectations in terms of challenging work, personal achievement, growth, and autonomy. For all employees, it is essential to create an environment characterized by the circulation of information, communication of goals, and sharing of future trajectories so that staff can contextualize their work and have a better idea of what (and how) they are contributing to higher organizational-level and long-term goals and plans.

This is even more important in recent times, as universities and public research organizations are paying attention to a set of more articulated KTO objectives, which consider additional and more qualitative performance indicators on top of the traditional quantitative ones. It is trendy for KTOs to engage in activities to raise awareness, favoring the development of entrepreneurial mindsets in researcher and student communities. These actions do not have performance indicators regarding the number of patents, licenses, or new companies established. However, they are fundamental in generating a supportive entrepreneurial and innovative climate, ultimately leading to engagement.

The other dimension to pay attention to is continuity of action. A P-OF may take time to achieve, mainly if it is the type that builds on motivational factors. Given the peculiarities of KTO units in universities and public research organizations, which call for specialization in vertical fields and rare competencies in balancing different institutional logics (academic and market) and addressing various audiences, it is essential to maintain low job rotation for specific jobs in KTOs. This is within the remit of KTO managers. However, managers should also take note of the likely discontinuance of high-level strategies following changes in rectorship and governance, over which they have no control. Every time new governance is implemented, new trajectories may be designed that are sometimes in line with the old ones and sometimes at odds with them. This is particularly likely to occur in the so-called third mission activities, which in many countries represent more recent efforts than the two traditional missions universities promote in education and research. Activities falling within the third mission area (many of which are operated by KTOs) are sometimes still in a consolidation phase (i.e., early in their life cycle) and might be more exposed to changes whenever new governance is established. Managers in KTOs should be keen to defend autonomy and maintain challenging KTO-related objectives. Therefore, consistency and continuity of action represent another key message for KTO managers.

Finally, our findings suggest that personal achievement and growth are important. Staff members highly appreciate training, and managers must fully understand the great value of investing in and supporting staff. Continuous training is, in fact, key to keeping employees updated and ensuring they are knowledgeable about the most influential international practices and new trends. Furthermore, it is a sign that the organization cares about its employees, their professionalization, and their growth. The KTOs that invest in training signal the importance of technology and knowledge transfer from a strategic perspective, thus contributing to their employees' perception of being central to their organizations.

Our last point is a broad reflection on how to make technology transfer and KS effective. As the title of this paper suggests, people are always the engine of success in every organization. This also applies to KTOs, where matching intrinsic expectations to what staff members receive from their work environment is critical to keeping them engaged, particularly at a time of increasing importance of the third mission area for universities and public research centers.

6.3. Limitations and future research

Our study does not come without limitations. We consider six cases, but extending the sample to other successful and unsuccessful cases would be interesting to corroborate our results and add new factors that could affect P-OF. While P-OF is a crucial organizational behavior

dimension, other dimensions could be considered to better explore individual-level motivational and behavioral dynamics within KTOs. Accordingly, future research could look at different factors at play in the P-OF dynamics. The KTOs are in the process of growing and enlarging their activities and hiring more. As new competencies are introduced into consolidated work settings, the relationship between P-OF and success is continuously challenged for the above reasons.

Another future research direction could be to better investigate the relationship between KTO performance and some organizational characteristics, such as how different leadership styles could impact performance results. In this respect, the difference in perception between managers and employees could be significant according to their different roles in setting organizational operations and culture.

Finally, there has recently been (end of 2023) an important and historic change to the Italian legal framework, with the professor's privilege, introduced in 2001, being abolished. It will be interesting to see future studies comparing KTOs' role pre- and post-professor's privilege and their contribution to the well-known Bayh-Dole Act stream of studies (Grimaldi et al., 2011).

CRediT authorship contribution statement

Elisa Villani: Writing – review & editing, Methodology, Conceptualization. Rosa Grimaldi: Writing – review & editing, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Afsar, B., Badir, Y., & Khan, M. M. (2015). Person–job fit, person–organization fit and innovative work behavior: The mediating role of innovation trust. *The Journal of High Technology Management Research*, 26(2), 105–116.
- Aldridge, T. T., & Audretsch, D. (2011). The Bayh-Dole act and scientist entrepreneurship. Research Policy, 40(8), 1058–1067.
- Alexander, A., Martin, D. P., Manolchev, C., & Miller, K. (2020). University-industry collaboration: Using meta-rules to overcome barriers to knowledge transfer. *The Journal of Technology Transfer*, 45, 371–392.
- Alexandre, F., Costa, H., Faria, A. P., & Portela, M. (2022). Enhancing University-Industry collaboration: The role of intermediary organizations. *The Journal of Technology Transfer*, 47(5), 1584–1611.
- Arthur, W., Jr., Bell, S. T., Villado, A. J., & Doverspike, D. (2006). The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4), 786–801.
- Autry, C. W., & Daugherty, P. J. (2003). Warehouse operations employees: Linking person-organization fit, job satisfaction, and coping responses. *Journal of Business Logistics*, 24(1), 171–197.
- Baglieri, D., Baldi, F., & Tucci, C. L. (2018). University technology transfer office business models: One size does not fit all. *Technovation*, 76, 51–63.
- Balven, R., Fenters, V., Siegel, D. S., & Waldman, D. (2018). Academic entrepreneurship: The roles of identity, motivation, championing, education, work-life balance, and organizational justice. Academy of Management Perspectives, 32(1), 21–42.
- Battaglia, D., Landoni, P., & Rizzitelli, F. (2017). Organizational structures for external growth of University Technology Transfer Offices: An explorative analysis. *Technological Forecasting and Social Change*, 123, 45–56.
- Belitski, M., Aginskaja, A., & Marozau, R. (2019). Commercializing university research in transition economies: Technology transfer offices or direct industrial funding? *Research Policy*, 48(3), 601–615.
- Bercovitz, J., & Feldman, M. (2006). Entpreprenerial universities and technology transfer: A conceptual framework for understanding knowledge-based economic development. *The Journal of Technology Transfer*, 31, 175–188.
- Bianchi, M., & Piccaluga, A. (Eds.). (2012). La sfida del trasferimento tecnologico: le Università italiane si raccontano. Springer Science & Business Media.
- Boon, C., & Biron, M. (2016). Temporal issues in person-organization fit, person-job fit and turnover: The role of leader-member exchange. *Human Relations*, 69(12), 2177–2200.
- Brescia, F., Colombo, G., & Landoni, P. (2016). Organizational structures of Knowledge Transfer Offices: An analysis of the world's top-ranked universities. *The Journal of Technology Transfer*, 41, 132–151.
- Cesaroni, F., & Piccaluga, A. (2016). The activities of university knowledge transfer offices: Towards the third mission in Italy. The Journal of Technology Transfer, 41, 753–777.

- Chapple, W., Lockett, A., Siegel, D., & Wright, M. (2005). Assessing the relative performance of UK university technology transfer offices: Parametric and nonparametric evidence. *Research Policy*, 34(3), 369–384.
- Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. Academy of Management Review, 14(3), 333–349.
- Chen, H., & Li, W. (2019). Understanding commitment and apathy in is security extrarole behavior from a person-organization fit perspective. *Behaviour & Information Technology*, 38(5), 454–468.
- Comacchio, A., Bonesso, S., & Pizzi, C. (2012). Boundary spanning between industry and university: The role of Technology Transfer Centres. *The Journal of Technology Transfer*, 37, 943–966.
- Conti, A., & Gaule, P. (2011). Is the US outperforming Europe in university technology licensing? A new perspective on the European Paradox. Research Policy, 40(1), 123–135.
- Cucino, V., Del Sarto, N., Di Minin, A., & Piccaluga, A. (2021). Empowered or engaged employees? A fuzzy set analysis on knowledge transfer professionals. *Journal of Knowledge Management*, 25(5), 1081–1104.
- Cunningham, J. A., & O'Reilly, P. (2018). Macro, meso and micro perspectives of technology transfer. The Journal of Technology Transfer, 43, 545–557.
- Curi, C., Daraio, C., & Llerena, P. (2012). University technology transfer: How (in) efficient are French universities? Cambridge Journal of Economics, 36(3), 629–654.
- Debackere, K., & Veugelers, R. (2005). The role of academic technology transfer organizations in improving industry science links. *Research Policy*, 34(3), 32–342.
- Degroof, J. J., & Roberts, E. B. (2004). Overcoming weak entrepreneurial infrastructures for academic spin-off ventures. The Journal of Technology Transfer, 29(3–4), 327–352.
- Di Gregorio, D., & Shane, S. (2003). Why do some universities generate more start-ups than others? *Research Policy*, 32(2), 209–227.
- Eckardt, R., Skaggs, B. C., & Youndt, M. (2014). Turnover and knowledge loss: An examination of the differential impact of production manager and worker turnover in service and manufacturing firms. *Journal of Management Studies*, 51(7), 1025–1057.
- Edwards, J. R. (2008). 4 person–environment fit in organizations: An assessment of theoretical progress. The Academy of Management Annals, 2(1), 167–230.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654–677.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32.
- Commission, E. (2018). The state of university-business cooperation in Europe: Final report. Publications Office of the European Union.
- Farooqui, M. S., & Nagendra, A. (2014). The impact of person organization fit on job satisfaction and performance of the employees. *Procedia Economics and Finance*, 11, 122–129.
- Fernández-López, S., Rodeiro-Pazos, D., Calvo, N., & Rodríguez-Gulías, M. J. (2018). The effect of strategic knowledge management on the universities' performance: An empirical approach. *Journal of Knowledge Management*, 22(3), 567–586.
- Geuna, A., & Muscio, A. (2009). The governance of university knowledge transfer: A critical review of the literature. *Minerva*, 47, 93–114.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31.
- Glaser, B. G., Strauss, A. L., & Strutzel, E. (1968). The discovery of grounded theory: Strategies for qualitative research. *Nursing Research*, 17(4), 364.
- Goble, L., Bercovitz, J., & Feldman, M. (2017). Organizing for innovation—Do TLO characteristics correlate with technology transfer outcomes? In R. Fini, & R. Grimaldi (Eds.), The World Scientific reference on entrepreneurship: Volume 4: Process approach to academic entrepreneurship—Evidence from the globe (pp. 105–135). World Scientific.
- Greguras, G. J., Diefendorff, J. M., Carpenter, J., & Tröster, C. (2014). Personenvironment fit and self-determination theory. In M. Gagné (Ed.), *The Oxford handbook of work engagement, motivation, and self-determination theory* (pp. 143–161). Oxford University Press.
- Grimaldi, R., Kenney, M., Siegel, D. S., & Wright, M. (2011). 30 years after Bayh–Dole: Reassessing academic entrepreneurship. Research Policy, 40(8), 1045–1057.
- Hamstra, M. R., Van Vianen, A. E., & Koen, J. (2019). Does employee perceived person-organization fit promote performance? The moderating role of supervisor perceived person-organization fit. European Journal of Work and Organizational Psychology, 28 (5), 594–601.
- Han, T. S., Chiang, H. H., McConville, D., & Chiang, C. L. (2015). A longitudinal investigation of person-organization fit, person-job fit, and contextual performance: The mediating role of psychological ownership. *Human Performance*, 28(5), 425-439
- Hana, U., & Lucie, L. (2011). Staff turnover as a possible threat to knowledge loss. *Journal of Competitiveness*, 3(3), 84–98.
- Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68 (3), 389–399.
- Horner, S., Jayawarna, D., Giordano, B., & Jones, O. (2019). Strategic choice in universities: Managerial agency and effective technology transfer. *Research Policy*, 48 (5), 1297–1309.
- Istat. (2020). Rapporto annuale 2020: La situazione del Paese [Annual report 2020: The situation of the country]. https://www.istat.it/storage/rapporto-annuale/2020/ Rapportoannuale2020.pdf.
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology*, 92(1), 107–127.

- Kalar, B., & Antoncic, B. (2015). The entrepreneurial university, academic activities and technology and knowledge transfer in four European countries. *Technovation*, 36, 1–11
- Kolympiris, C., & Klein, P. G. (2017). The effects of academic incubators on university innovation. Strategic Entrepreneurship Journal, 11(2), 145–170.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1–49.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. Personnel Psychology, 58(2), 281–342.
- Lockett, A., & Wright, M. (2005). Resources, capabilities, risk capital and the creation of university spin-out companies. Research Policy, 34(7), 1043–1057.
- Markman, G. D., Phan, P. H., Balkin, D. B., & Gianiodis, P. T. (2005). Entrepreneurship and university-based technology transfer. *Journal of Business Venturing*, 20(2), 241–263.
- Massa, L., Ardito, L., & Petruzzelli, A. M. (2022). Brokerage dynamics in technology transfer networks: A multi-case study. *Technological Forecasting and Social Change*, 183. Article 121895.
- Menter, M., Göcke, L., & Zeeb, C. (2022). The organizational impact of business model innovation: Assessing the person-organization fit. *Journal of Management Studies*, 61 (3) 926–967
- Miller, K., McAdam, R., & McAdam, M. (2018). A systematic literature review of university technology transfer from a quadruple helix perspective: Toward a research agenda. R&D Management, 48(1), 7–24.
- Minguillo, D., & Thelwall, M. (2015). Which are the best innovation support infrastructures for universities? Evidence from R&D output and commercial activities. Scientometrics, 102, 1057–1081.
- Mom, T. J., Oshri, I., & Volberda, H. W. (2012). The skills base of technology transfer professionals. Technology Analysis & Strategic Management, 24(9), 871–891.
- Morley, M. J. (2007). Person-organization fit. Journal of Managerial Psychology, 22(2), 109–117.
- Netval. (2023). XIII rapporto Netval: Piovono idee per la rinascita. https://netval.it/doc/rapporto-netval-2023/.
- O'Kane, C., Mangematin, V., Geoghegan, W., & Fitzgerald, C. (2015). University technology transfer offices: The search for identity to build legitimacy. Research Policy, 44(2), 421–437.
- O'Kane, C., Zhang, J. A., Cunningham, J. A., & Dooley, L. (2020). Value capture mechanisms in publicly funded research. *Industrial Marketing Management*, 90, 400–416.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492–499.
- O'Reilly, C. A., III, Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3), 487–516.
- O'Shea, R. P., Allen, T. J., Chevalier, A., & Roche, F. (2005). Entrepreneurial orientation, technology transfer and spinoff performance of US universities. *Research Policy*, 34 (7), 994–1009.
- Pohle, A., Villani, E., & Grimaldi, R. (2022). Personnel motivation in knowledge transfer offices: The role of university-level and organizational-level antecedents. *Technological Forecasting and Social Change, 181*, Article 121765.
- Pudjiarti, E. S., & Hutomo, P. T. P. (2020). Innovative work behaviour: An integrative investigation of person-job fit, person-organization fit, and person-group fit. *Business: Theory and Practice*, 21(1), 39–47.
- Saether, E. A. (2019). Motivational antecedents to high-tech R&D employees' innovative work behavior: Self-determined motivation, person-organization fit, organization support of creativity, and pay justice. The Journal of High Technology Management Research, 30(2), Article 100350.
- Sellenthin, M. O. (2009). Technology transfer offices and university patenting in Sweden and Germany. *The Journal of Technology Transfer*, 34, 603–620.
- Semrau, T., & Biemann, T. (2022). When sergeants can outrank generals: Personorganization fit and the performance of franchisees as agents of their franchisor. *Journal of Business Venturing*, 37(2), Article 106177.

- Siegel, D. S., Veugelers, R., & Wright, M. (2007). Technology transfer offices and commercialization of university intellectual property: Performance and policy implications. Oxford Review of Economic Policy, 23(4), 640–660.
- Siegel, D. S., Waldman, D., & Link, A. (2003). Assessing the impact of organizational practices on the relative productivity of university technology transfer offices: An exploratory study. Research Policy, 32(1), 27–48.
- Silverthorne, C. (2004). The impact of organizational culture and person-organization fit on organizational commitment and job satisfaction in Taiwan. Leadership & Organization Development Journal, 25(7), 592–599.
- Soares, T. J., & Torkomian, A. L. (2021). TTO's staff and technology transfer: Examining the effect of employees' individual capabilities. *Technovation*, 102, Article 102213.
- Strauss, A. L., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory ((2nd ed.).). Sage.
- Sull, D., Sull, C., & Zweig, B. (2022). January 11). MIT Sloan Management Review: Toxic culture is driving the great resignation. https://sloanreview.mit.edu/article/toxicculture-is-driving-the-great-resignation/.
- Tziner, A. (1987). Congruency issue retested using Fineman's achievement climate notion. *Journal of Social Behavior and Personality*, 2(1), 63.
- Van Vianen, A. E., & De Pater, I. E. (2012). Content and development of newcomer person-organization fit: An agenda for future research. In C. R. Wanberg (Ed.), The Oxford handbook of organizational socialization (pp. 139–157). Oxford University Press.
- Villani, E., & Phillips, N. (2021). Formal organizations and interstitial spaces: Catalysts, complexity, and the initiation of cross-field collaboration. Strategic Organization, 19 (1), 5–36.
- Villani, E., Rasmussen, E., & Grimaldi, R. (2017). How intermediary organizations facilitate university-industry technology transfer: A proximity approach. *Technological Forecasting and Social Change*, 114, 86–102.
- Westerman, J. W., & Cyr, L. A. (2004). An integrative analysis of person-organization fit theories. *International Journal of Selection and Assessment*, 12(3), 252–261.
- Westerman, J. W., & Vanka, S. (2005). A cross-cultural empirical analysis of person-organization fit measures as predictors of student performance in business education: Comparing students in the United States and India. Academy of Management Learning & Education, 4(4), 409–420.
- Wheeler, A. R., Coleman Gallagher, V., Brouer, R. L., & Sablynski, C. J. (2007). When person-organization (mis) fit and (dis) satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22(2), 203–219.
- Yin, R. K. (2003). Designing case studies. *Qualitative Research. Methods*, 5(14), 359–386.
 Zhou, R., & Tang, P. (2020). The role of university Knowledge Transfer Offices: Not just commercialize research outputs! *Technovation*, 90, Article 102100.

Elisa Villani is Associate Professor of Entrepreneurship and Innovation at the University of Bologna, Department of Management. She teaches 'Organizational Behavior' at the postgraduate level. Her research interests lie in the area of knowledge transfer, university-industry collaborations, and innovation, with a focus on organizational dynamics and processes. She is collaborating actively with several researchers around the world. Elisa is Associate Editor of the Journal of Business Research and sits on the Editorial Board of the European Management Journal. She has published in top management journals like Journal of Management Studies, Technovation, Technological Forecasting & Social Change, Journal of Business Research, Journal of Technology

Rosa Grimaldi is Professor of Entrepreneurship and Innovation Management at the University of Bologna, Department of Management. Since 2015 she is Vice Rector for Entrepreneurship and relations with companies. She teaches 'Technology Entrepreneurship' at the School of Engineering at postgraduate and executive education levels. She is the Director of the Executive Master in Technology and Innovation Management (EMTIM) at BBS (Bologna Business School). Most of her scientific production is about New Business Creation, Entrepreneurship, and Technology Transfer. On these topics she has publications on national journals and international journals, including Journal of Business Venturing, Entrepreneurship Theory and Practice, Technological Forecasting & Social Change, Research Policy, R&D Management, Technology and Innovation Management, Small Business Economics, Scientometrics, Journal of Technology Transfer). She is in the Editorial board of the Journal of Technology Transfer and she is advisory editor for Research Policy.