The impact of psychological contracts on knowledge sharing in startups

O impacto dos contratos psicológicos na partilha de conhecimentos em empresas em fase de arranque

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ABSTRACT
Drawing upon established theories such as exchange theory, social capital, reasoned action, and psychological contracts, this scholarly article aims to delve into the intricate dynamics of how psychological contracts impact individual motivations to share knowledge, consequently influencing the outcomes of startups. Employing a qualitative research approach, the study utilised in-depth personal interviews and focus groups to gather data, which was subsequently subjected to meticulous content analysis using the NVivo software. The research adopted a triangulation approach, considering data from startups across diverse industries and varying levels of maturity, with insights gleaned from the perspectives of founding partners, directors, and employees. It is important to note that most existing studies predominantly focus on well-established organisations of various sizes, primarily within Anglo-Saxon countries. In contrast, this study pioneers an examination of how psychological contracts affect knowledge sharing in multi-levels: (i) micro - individual, (ii) meso – intra organisational, and (iii) macro – inter organisations, specifically within startups from emerging economies, thereby taking into account their unique idiosyncrasies. The findings shed light on employees’ primary perceptions of their obligations and the organisation’s commitments. Moreover, they unveil how contextual and situational factors influence the advance of social relations and subsequently impact knowledge sharing within startups, directly affecting individual and organisational outcomes.

Keywords: psychological contracts, knowledge sharing, knowledge management, startups.

RESUMO
Baseando-se em teorias estabelecidas, como a teoria do intercâmbio, o capital social, a ação fundamentada e os contratos psicológicos, este artigo acadêmico visa aprofundar a intrincada dinâmica de como os contratos psicológicos impactam as motivações individuais para
compartilhar conhecimento, influenciando, consequentemente, os resultados das start-ups. Empregando uma abordagem de pesquisa qualitativa, o estudo utilizou entrevistas pessoais aprofundadas e grupos focais para coletar dados, que foram posteriormente sujeitos a uma análise meticulosa do conteúdo usando o software NVivo. A pesquisa adotou uma abordagem de triangulação, considerando dados de start-ups de diversos setores e níveis variados de maturidade, com insights coletados a partir das perspectivas de parceiros fundadores, diretores e funcionários. É importante notar que a maioria dos estudos existentes se concentra predominantemente em organizações bem estabelecidas de vários tamanhos, principalmente dentro de países anglo-saxões. Em contraste, este estudo é pioneiro no exame de como os contratos psicológicos afetam a partilha de conhecimento em múltiplos níveis: (i) micro-individual, (ii) meso-intra-organizacional, e (iii) macro-inter-organizações, especificamente em startups de economias emergentes, tendo assim em conta as suas peculiaridades únicas. As constatações evidenciam as percepções primárias dos funcionários sobre suas obrigações e os compromissos da organização. Além disso, revelam como fatores contextuais e situacionais influenciam o avanço das relações sociais e, subsequentemente, impactam o compartilhamento de conhecimento dentro das start-ups, afetando diretamente os resultados individuais e organizacionais.

**Palavras-chave:** contratos psicológicos, compartilhamento de conhecimento, gestão do conhecimento, startups.

### 1 INTRODUCTION

Knowledge in organisations is seen as a critical resource in the race to obtain a sustainable competitive advantage in a dynamic economy, and, in recent years, researchers have concentrated more and more efforts on studying the sharing of knowledge between members, teams, and other organisations ((Andrade et al., 2023) Wang & Noe, 2010). A possible explanation for the growing interest is the recognition that the creation and control of the flow of knowledge, inside and outside the limits of the organisation, are essential factors to positively impact the reduction, shorter time in the development and conclusion of projects of new products, team performance, innovation capabilities, and overall organisation performance (Argote & Ingram, 2000; Cohen & Levinthal, 1990).

Within this context, fundamental reciprocal associations exist between employees and employers, which can manifest as psychological contracts. These contracts encompass a social exchange process wherein employee behaviours are driven by the expectation that their employers will reciprocate with rewards, advantages, opportunities, and other favourable outcomes (R. Andrade et al., 2022) (Aselage & Eisenberger, 2003; Chen & Kao, 2011). Psychological contracts are subjective, so their content and fulfilment are based on the individual
perceptions of the other party (Caldwell et al., 2012). However, both parties tend to assume these commitments are mutual (Rousseau, 2004).

In the context of emerging economies, startups emerge as potential promoters of development since businesses of this nature seek to explore innovative activities in the market, with proposals for scalable business models, using technology from its initial phase, where access to information and sharing of knowledge can be crucial survival factors for the organisation ((R. D. de Andrade & Pinheiro, 2023)Marchiori & Franco, 2019). During their early stages, startups often operate with limited capital investments, resulting in lean teams comprising founding partners who invest their capital and members who join the venture with growth expectations.

These startups prioritise relational aspects over monetary compensation and benefits (Franco & Haase, 2015). Against this backdrop, the present study explores the influence of psychological contracts on knowledge management and sharing within startups, focusing on how knowledge is created and flows among individuals, teams, and organisations based on their perceptions of whether their expectations have been met. The primary objective is understanding how psychological contracts interact with individual motivations to share knowledge and the subsequent impact on startup outcomes.

The study addresses the following research questions: (i) How do psychological contracts affect individual motivations to share knowledge? (ii) How do situational factors involving immediate supervisors influence social interactions among individuals, teams, and other startups? and (iii) How can psychological contracts affect individual and organisational performance in startups?

The significance of this research is underscored by the growing scientific interest in the topic and the dearth of qualitative studies focusing on startups in emerging economies, taking into account their unique characteristics and highlighting the economic and financial intricacies inherent in startups where psychological contracts play a crucial role in shaping future growth prospects and improving remuneration conditions. Moreover, this study contributes by adopting a triangulation approach, incorporating data from startups across various industries and with different maturity levels while considering the perspectives of founding partners, directors, and employees.
THEORETICAL BACKGROUND

Startups, newly created and high-tech companies, are an essential source of organisational innovation generated from the identification of the need to develop products in high-potential target markets (Gupta & Shapiro, 2014; Doshmani et al., 2018; Salamzadeh & Kawamorita Kesim, 2015; Picken, 2017; Jacobson et al., 2017). Although different in nature or objectives, these organisations emerge with the similar purpose of aggressively growing their businesses in markets understood as highly scalable (Giardino et al., 2016).

Perceived as an intrinsic part of the entrepreneurial ecosystem, startups today play an essential role in the progress of emerging markets and, therefore, have been awakening a growing interest in theoretical perspectives in the literature and government development policies (Van Agtmael, 2007; Guillén & García - Canal, 2012; Wu, & Zhou, 2016). Without these entities, emerging economies would be subject to a possible lower exploration of opportunities in new market niches and a lower attraction of investors interested in developing these organisations (Salamzadeh, 2018).

It should be noted that, although startups are formed by professionals with high technological and product development knowledge, entrepreneurs usually find themselves involved in new administrative activities and unstable economic scenarios and, in this sense, new entrepreneurs generally seek partners that can provide knowledge that helps them fill the "institutional voids" of administrative issues such as incipient market infrastructure, legal and regulatory systems, and financial and market development (Dutt et al., 2016; Stinchcombe, 2000; Abatecola et al., 2012).

It is noted in the literature that the use of newly acquired information to overcome critical factors in the development of startups must be aligned with the implementation of strategies to manage this knowledge to maintain its agility and organisational learning curve (Lee et al., 2001; Danis et al., 2011; Abatecola et al., 2012). Thus, investigating knowledge management in startups aims to foster innovation by creating new knowledge by adopting new collaborative and innovative technologies (Ugwu, 2005; Amir-Aslan, 2009; Centobelli et al., 2017).

Employees' subjective understanding of their obligations and the company's commitments make them hope for a long-term relational contract reflected in their intentions and predispositions to engage in discretionary knowledge-sharing behaviours with colleagues. from within and outside the organization (Meyer, Allen & Smith, 1993; Porter, Steers, Mowday &
Boulian, 1974; Luchak & Pohler, 2010). Such perceived obligations take many forms, from loyalty and job security to no commitment.

According to Rousseau's perspective (1990, p.123), “psychological contract refers to an individual belief regardless of the terms and conditions of a reciprocal exchange agreement between the focal person and the other party”. Such perceptions of relational obligations constitute the psychological contracts arising from managers’ explicit promises (Tomprou & Nicolaou, 2010) and the collective beliefs employees acquire from interpretations and observations of informal practices (Korsgaard et al., 1997). The critical issue here includes the belief that a promise was made in return for consideration, binding the parties to reciprocal obligations.

The study draws upon various theories, including exchange theory, social capital theory, reasoned action theory, and psychological contracts, to better understand the flow of information within and outside startups and how psychological contracts can impact this flow positively or negatively. Reasoned action theory explores the consequences of different knowledge-sharing behavioural choices, encompassing attitudes, subjective norms, and anticipated outcomes. On the other hand, exchange theory and social capital theory provide insights into structural, relational, and cognitive aspects. These include patterns of connections and influences, interactions between individuals, interpretations of behaviours, and cultural norms that shape knowledge-sharing dynamics.

2.1 PSYCHOLOGICAL CONTRACTS

The psychological contract refers to an individual's beliefs regarding mutual obligations to another person (Rousseau & Tijoriwala, 1998). In the work context, this relationship is established between employee and employer. It consists of commitments and expectations in the employment relationship that go beyond the legal employment contract, constituting what employees understand to be the company's commitments and what they owe in return (Rousseau, 1990). It is when the organisation promises the worker something that needs to be formalised in writing.

Fulfilment of the psychological contract contributes to the performance of employees since it positively affects the organisation’s performance and the employees' attitudes, behaviour and performance, which is essential for companies’ productivity (Raeder et al., 2012). A
psychological contract breach means the employer or employee's obligations and promises have not been fulfilled (Robinson, 1996). The concept of fulfilment primarily focuses on the positive aspects of psychological contracts, indicating that commitments or obligations have been upheld. Conversely, a breach highlights the negative aspects, suggesting a failure to meet those obligations.

Psychological contract obligations encompass various forms of loyalty and job security, even without formal commitment. According to Rousseau (1990) and Zhao, Wayne, Glibkowski, and Bravo (2007), two critical obligations prevail within psychological contracts: economic or monetary and relational or socio-emotional. Economic or monetary obligations are the most prevalent and involve remuneration for specific work-related activities, as exemplified by the adage "a fair day's work for a fair day's wages" (McDermott et al., 2013). Obligations between workers and employers are relatively few and far between among predominantly monetary contracts, as their duration tends to be short-term, with few or no commitments made for the future by either the worker or the firm (McDermott et al., 2013).

Relational obligations involve socio-emotional resources, such as mutual support and concern between employer and employee (Rousseau, 1990). Social and interpersonal concerns predominate in arrangements that generate high-commitment jobs. Relational psychological contracts are broader in the terms they involve, include many forms of employer rewards and individual contributions, generally cover a more extended period, and tend to have employee development and opportunities for future growth (Bal et al., 2010; Coyle-Shapiro and Kessler, 2000), anticipating contributions that add value to the employer over time or employability in the external labour market.

Employment contracts can encompass economic and relational aspects, encompassing compensation, pension and retirement benefits, and opportunities for professional development and future advancement. Likewise, the psychological contracts that employers create with their employees can mix monetary and relational characteristics in myriad ways (Rousseau, 1998).

The understanding of psychological contract obligations arises both from the explicit promises of HR and managers (Tomprou & Nicolaou, 2010) and from the beliefs that employees acquire when talking to co-workers (Korsgaard et al., 1997), that is, the implicit obligations, which result from the way employees interpret and observe informal practices and company signals, through leader actions, organisational norms and stories.
Explicit obligations are often conveyed through various human resources (HR) practices, such as formal training programs, talent management, or succession planning. These practices serve as a means for company representatives to communicate future opportunities and pathways for promotion within the organisation. By investing in training programs, for example, employers can signal their intention to provide future opportunities for employees to apply the knowledge and skills acquired.

The psychological contract is an intermediary factor that facilitates the transfer of HRM practices to organisational performance. According to Raeder, Knorr, and Hilb (2012), HRM practices influence the psychological contract by forming part of the employer's obligations towards employees, and employees perceive them as incentives. As a result, effective HRM practices implemented by employers contribute to fulfilling the psychological contract.

2.2 SOCIAL EXCHANGE AND SHARE CAPITAL THEORY

The social exchange theory is a predictor in understanding the conceptual paradigms of knowledge sharing through behaviours developed among individuals in an organisation (Tsai & Cheng, 2012). Feelings such as gratitude, trust, personal obligation, justice and commitment are reported in previous studies investigating the main conditions of knowledge transfer within organisations (Barling et al., 2000, Jarvenpaa; Staples, 2001; Bock & Kim, 2002).

Previous studies have demonstrated that leaders who foster a culture of innovative thinking and empower employees to share information contribute to the creation of a non-judgmental organisational climate, fostering a sense of fairness—an essential precursor to corporate trust and commitment (Hsu et al., 2007; Renzl, 2008).

In this context, Kogut and Zander (1992) proposed that knowledge transfer within teams primarily involves the dimensions of social capital, which encompass structural, relational, and cognitive elements. The structural size pertains to patterns of connections and influences in information sharing among individuals. The relational dimension focuses on the interactions among various organisational stakeholders, facilitating an understanding of the relationships between the actors involved. The cognitive perspective, in turn, concerns the resources that contribute to the interpretations, representations and shared systems of cultural and social norms (Granovetter, 1992; Burt, 1997; Nahapiet & Ghoshal, 1998, Van Dijk, Hendriks & Romo-Leroux, 2016).
It is evident in the literature that the theories of exchange and social capital, united with the fundamentals of knowledge sharing, can accelerate the process of transferring information between stakeholders and benefit organisations that operate in highly competitive environments, a scenario in which startups find themselves. (McFadyen & Cannella, 2004; Wasko & Faraj, 2005; Kankanhalli, Tan & Wei, 2005; Chen & Lovvorn, 2011).

2.3 GROUNDED ACTION THEORY

Grounded action theory suggests that individuals consider the consequences of alternative behaviours in the face of attitudes toward knowledge sharing (Fishbein & Ajzen, 1975). Several scholars understand that attitudes, subjective norms, the richness of the communication channel, and the ability to absorb information act as predictors that shape a person's intention to share knowledge (Bock & Kim, 2002; Ryu et al., 2003; Chen et al., 2012; Bang et al., 2001).

A combination of extrinsic rewards, a feeling of reciprocity in the relationship with leaders, a sense of self-worth and organisational climate are precursor signs of the theory of action based on encouraging knowledge sharing (Ryu et al., 2003; Chow & Chan, 2008). While previous studies have identified positive attitudes facilitating information sharing, they have yet to provide a comprehensive guide of best practices or conclusively demonstrate how existing organisational behaviours can be enhanced. Furthermore, investigations specifically focused on startups, which hold significant relevance, have yet to be identified thus far.

3 METHODOLOGY

This study is classified as exploratory-descriptive research (Prodanov & Freitas, 2013), with a qualitative approach (Creswell, 2010), and a multiple case study was carried out (Yin, 2015). The objects of study were four startups from different industries of Brazilian origin that already have validated and commercialised products. They had already tried to acquire and share knowledge between individuals, intra- and inter-organizationally. They showed explicit and implicit practices of psychological contracts, both with mutual economic and monetary obligations and relational and socio-economic obligations.

The choice of sample, characterised in Table 1, was due to the framing of each startup in different stages of maturity, from the recent entry into the market to internationalisation, so that
it was possible to verify whether there were similarities or not in the way they manage psychological contracts and knowledge management within the organisation.

Table 1. Characterisation of startups

<table>
<thead>
<tr>
<th>Startups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>EduTech</td>
<td>SoftTech</td>
<td>HardTech</td>
<td>HardTech</td>
</tr>
<tr>
<td>Firm age</td>
<td>Six years</td>
<td>Three years</td>
<td>Two years</td>
<td>Six years</td>
</tr>
<tr>
<td>Nº employees</td>
<td>60</td>
<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Interviewed</td>
<td>Manager</td>
<td>CEO-founder</td>
<td>all team</td>
<td>CEO-founder</td>
</tr>
<tr>
<td>Maturity level</td>
<td>National market</td>
<td>Regional market</td>
<td>Starting activities</td>
<td>Internationalised</td>
</tr>
<tr>
<td>Incubation</td>
<td>National</td>
<td>National</td>
<td>Local &amp; Regional</td>
<td>Regional</td>
</tr>
<tr>
<td>Acceleration</td>
<td>National</td>
<td>National</td>
<td>Regional</td>
<td>National &amp; International</td>
</tr>
<tr>
<td>Investments</td>
<td>Bootstrap &amp; capital venture</td>
<td>Bootstrap &amp; capital venture</td>
<td>Bootstrap</td>
<td>Bootstrap &amp; economic subsidy</td>
</tr>
</tbody>
</table>

Source: prepared by the author.

For data collection, Yin (2005, p. 74) highlighted the following sources of data evidence: “documentation and records in files, in-depth interviews and participant observation”. As for documentation and records in files, documentation repositories and possible management systems were initially analysed, including access to online communities of practices.

Were also carried out via Skype, a method which, according to Yin (2015), is one of the primary sources of knowledge for the study, 4 of them individually and 1 in a focus group (Morgan, 2010) with the entire startup team to perceive information and feelings that individuals have about certain specific issues and map them through data triangulation (Denzin & Lincoln, 2008).

Following necessary adjustments, the pre-test interview to validate the research instrument was deemed unsuitable and subsequently excluded from the study. To mitigate potential biases and information distortion, a different startup at a similar stage of maturity was selected for the interview process. The content analysis was structured in categories defined a priori from the literature on knowledge management so that the core of meanings could be investigated and subsequent recognition of agglomerations in themes (Bardin, 2009), as shown in Table 2.
Table 2. Categorisation tree

<table>
<thead>
<tr>
<th>PSYCHOLOGICAL CONTRACTS TYPES</th>
<th>EXPlicit (manager promises)</th>
<th>IMPLICIT (collective beliefs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>formal training</td>
<td>leader's actions</td>
</tr>
<tr>
<td></td>
<td>talent and succession</td>
<td>informal practices</td>
</tr>
<tr>
<td></td>
<td>management</td>
<td>observation</td>
</tr>
<tr>
<td></td>
<td>future promotion</td>
<td>High-performance heroes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MUTUAL OBLIGATIONS TYPES</th>
<th>ECONOMIC AND MONETARY (transactional obligations)</th>
<th>RELATIONAL AND SOCIOECONOMIC (relational obligations)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>financial compensation</td>
<td>mutual support and concern</td>
</tr>
<tr>
<td></td>
<td>compensation benefits</td>
<td>Employee Development</td>
</tr>
<tr>
<td></td>
<td>opportunity for future growth</td>
<td>Increase in employability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHARING EXTENSION</th>
<th>BETWEEN INDIVIDUALS</th>
<th>INTRA-ORGANIZATIONAL</th>
<th>INTERORGANIZATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>individual results</td>
<td>team results</td>
<td>organisational results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHARING MOTIVATION</th>
<th>EXTERNALS</th>
<th>ENVIRONMENTAL FACTORS</th>
<th>INTERNALS</th>
<th>MOTIVATIONAL FACTORS</th>
<th>BEHAVIOURAL FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>organisational context</td>
<td></td>
<td>interpersonal and team characteristics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cultural characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTROL VARIABLES</th>
<th>power centralisation</th>
<th>immediate head</th>
<th>maturity level</th>
<th>industry type</th>
<th>company type</th>
</tr>
</thead>
</table>

Source: prepared by the author.

Data from each interview were analysed individually in the software Nvivo, and 728 excerpts from interviews were crossed for each node (analysis group) seeking to establish relationships and verify contradictions to understand implicit and explicit organisational practices and individual perceptions about mutual obligations, the advantages and disadvantages of knowledge sharing and its consequences on personal and corporate results.

4 RESULTS ANALYSIS

To facilitate the understanding of data interpretation, a study framework was developed about psychological contracts and knowledge sharing in startups. Figure 1 visually represents the participants' motivations, distinct characteristics, and perceived outcomes.
As for the psychological contracts in the startups, all of them presented explicit and implicit economic and relational contracts, and, as they are lean organisations with small teams, both employees and managers demonstrated awareness of the non-formalized commitments and expectations of each party. Regarding knowledge management, all startups had implemented mechanisms for collecting, storing, and disseminating explicit knowledge. Startups in their early stages with fewer employees utilised face-to-face coaching and feedback sessions to monitor individual and team development and its impact on organisational outcomes. Startups with larger teams had comprehensive repositories accessible to all members, containing HR practices, job descriptions, and career plans. More advanced-stage companies had repositories with restricted access levels, recognising that this approach also influenced the integration of new employees and reduced training time, aligning with the perspectives of Babcock (2004) and Voelpel, Dous, and Davenport (2005).

4.1 CONTROL/MODERATION VARIABLES

To examine potential similarities and differences in the influence of psychological contracts on knowledge acquisition and sharing among individuals, intra-organizational, and inter-organizational levels, startups in four distinct stages of maturity were selected: SC - beginning of product commercialisation; SB - operating in the regional market with a single product; SA - active in the national market with multiple products; and SD - internationalised.
For Steensma et al. (20015) and Tsang et al. (2004), organisations in transition economies have knowledge transfer patterns that can differ depending on their maturity level.

Reaffirming the findings of Martinkenaite (2010), the type of industry directly influenced the HR and sharing practices entrepreneurs adopt. SB, SC and SD, which belong to the hard tech sector. It is soft and embraces the remote culture from the beginning first. At the same time, SA, which belongs to the education area and has a considerably larger team than the others, prioritises face-to-face and teamwork. Although they all adopt feedback meetings and open communication between employees and managers, only Edutech presented HR systems capable of formalising the team's intentions and leadership promises through formal records and training suggested to and requested by individuals, with bank management of talents with promotion opportunities based on meritocracy. All employees are encouraged to become partners through exemplary performance in the latter.

In terms of workforce size, it was observed that larger companies necessitate the establishment of more robust communication channels to effectively track the engagement of individuals within the team and their interactions with external entities. Startups at the SC and SB stages predominantly utilise WhatsApp groups as their primary communication tool. On the other hand, SA and SD stages have implemented internal wikis that facilitate information flow and process mapping alongside using GitHub for code storage.

Validating the understanding of Berg et al. (2020), there is a perception among all respondents that “connections move the world” (SA) and that the work environment and relationships between colleagues and immediate superiors are the main reason for startups to retain talent, since, in its early stages, remuneration is usually below market value given the financial limitations of the organisation. However, there is an informal agreement on future opportunities for growth through the valuation of results.

Finally, all startups cited the importance of participating in incubation and acceleration programs due to the networking they provide to participating organisations; as stated by SD, “If an incubator or accelerator does not have an extensive and good network of contacts, it will not it is good for nothing” and SC “thanks to the incubation process, we have signed contracts (…) the networking we have is a consequence of these ties we create with the university and the ecosystem”. This developed network of relationships was seen as a fundamental factor for promoting knowledge exchange between organisations and the perception of increased
organisational performance, corroborating the results of Bal, Jansen, Van der Velde, Lange and Rousseau (2010). It should be noted that none of the startups understood this external relationship as a risk to retaining talent or leaking information. All interviewees said they believed in their organisations’ future and career growth and increased employability in the labour market (Coyle-Shapiro & Kessler, 2000).

4.2 TYPES OF CONTRACTS

4.2.1 Explicit

Power equations within the investigated organisations have been shown to guide the paths of dynamic psychological agreements and knowledge sharing but are equally dependent on social relations between individuals (Ipe, 2003). Across all the startups interviewed, it was observed that informal communication channels tend to play a more significant role in knowledge sharing than formal channels. The effectiveness of this process heavily relies on the prevailing organisational culture.

Startups do not have HR manuals in the initial stages; formal training occurs as their members explain the need to do so. Despite not formalising agreements, all managers and employees claimed to have enough openness and freedom to demonstrate their future intentions with the company and negotiate terms of work. Startups in more mature stages presented robust HR systems, with a talent management database, rotation control, market talent monitoring, and a succession plan. Only Edutech clearly and documented a meritocracy policy disclosed to all members where anyone, regardless of level or sector, can become a partner and acquire shares in the company proportionally to their individual and group performance assessment (Martinkenaite, 2010).

The hierarchical level influences individuals' attitudes and pre-dispositions to interact with colleagues, groups and other organisations, the types of agreements and information, and the level of access among members. Tacit knowledge and follow-up of results (Nonaka, 1994) are shared in daily face-to-face or virtual meetings, with everyone present and stimulated through coexistence between senior and junior individuals. Due to their distinct attributes, startups typically have a streamlined organisational structure. The dialogue between employees and immediate superiors is intensely stimulated, and the result is monitored through feedback
meetings. In general, all members have access to all information and only knowledge that is necessarily confidential is restricted to the founding partners (Rousseau & Tijoriwala, 1998).

Explicit knowledge (Nonaka, 1994) is elaborated and formalised mainly by team leaders, does not require approval from the highest leadership and can be proposed by everyone. The most significant benefit of the investigated startups in formalising knowledge and agreements is the reduction of the integration time of new members and the need to hire basic external training since the internal processes already mapped encourage organisational learning (Tomprou & Nicolaou, 2010).

4.2.2 Implicit

Interorganizational knowledge transfer was seen from the perspective of internal relationships in the investigated startups based on connections and affinities between employees and immediate superiors and practices. The decision to share and acquire knowledge within and outside the organisations was determined by individual judgment regarding the other party's absorptive capacity, willingness to teach and learn, and intra-organizational transfer capabilities. These findings align with the research conducted by Easterby-Smith et al. (2008). Here, the leader's actions were essential to reaffirm personal impressions about informal practices and organisational norms (Korsgaard et al., 1997).

Although all startups have shown a pro-knowledge-sharing culture with direct actions from management and managerial support, including some recognition practices, valuing individual and team results along with recognition for high performance were the main reasons given by members for providing knowledge among peers and in communities of practice (Wilkesmann & Wilkesmann, 2011; Zhao et al., 2007).

Obtaining knowledge, although a generalised practice by the individuals interviewed, was actions based on rules in the sense of reaffirming their commitment to the future of the organisation to guarantee the fulfilment of implicitly signed psychological contracts (De Cuyper & De Witte, 2008; Rousseau, 1990).
4.3 MUTUAL OBLIGATIONS

4.3.1 Economic and monetary

In terms of financial compensation and remuneration benefits, startups in the early stages admitted that they could not make offers compatible with the market, given their low revenues in the first years of operation. Managers and partners, in turn, claimed to offer opportunities for future growth as a measure of equalisation of individual efforts, as they understood that monetary values alone would not be enough to retain talent and establish long-term commitments (Rousseau, 1998; De Cuyper & De Witte, 2008).

In this context, startups in more advanced stages and already capable of guaranteeing market-compatible remuneration for their team demonstrated to act in the sense of creating means to encourage the permanence of their members through the possibility of buying shares or shares of participation in the company and become partners in the medium and long term (Sutton & Griffin, 2004).

4.3.2 Relational and socioeconomic

For managing partners and employees, mutual support and reciprocal concern with personal and interpersonal factors were identified as essential for strengthening long-term, high-commitment relationships. To reaffirm the importance of individual contributions to the performance of organisations, the rewards offered by employers were negotiated in broad terms and using socio-emotional resources (Bal et al., 2010).

Although startups in the initial stages have yet to establish a formally established career plan because the team is still tiny, managers and managers demonstrated to know what is expected of both parties. The main aspects indicated were: employee development through training, opportunities for career growth that accompany the company’s product, with priority given to the oldest and highest performers and the perception of a better level of employability in the job market. Other factors were cited with lesser relevance, such as autonomy of schedules, freedom to create their work routines and free access to communication with the founding partners of organisations (Coyle-Shapiro & Kessler, 2000).
4.4 MOTIVATIONS TO SHARE

The investigated organisations claimed to see the acquisition and sharing of information as a discriminating factor for the company's success, and, based on the literature, the presented study framework organised knowledge management in several areas proposed by Wang & Noe (2010)—each one with an emphasis on topics divided between external and internal motivations to the individual.

4.4.1 External motivations

In terms of perceived reciprocity, the culture of knowledge sharing can occur within and between organisations, as supported by the work of Lave and Wenger (1991) and Chiu et al. (2006). In line with this, all interviewed startups actively participate in communities, exchanging knowledge and fostering a culture of information sharing among their employees.

Notably, no sense of rivalry or superiority was identified among members when it came to sharing information. Respondents demonstrated a collective and cooperative mindset, aligning with the existing literature that suggests a competitive organisational climate hinders the promotion of a sharing culture (Schepers & Van den Berg, 2007; Wang, 2004; Willem & Scarbrough, 2006).

Furthermore, interviewees emphasised that the perceived benefits of sharing information stemmed from the recognition and credibility acquired and potential connections with investors and mentors. This finding underscores the significance of establishing organisational incentives and rewards to motivate individuals to share their knowledge (Kankanhalli et al., 2005; Yao et al., 2007).

Contrary to the perspective of Thomas-Hunt et al. (2003), which suggests that heterogeneity predicts integration and challenges in knowledge sharing, the study portrayed heterogeneity as a positive factor. However, in the case of SD, communication difficulties among team members were reported, primarily due to language differences.

4.4.2 Internal motivations

Regarding internal motivations, the interviews highlighted that team integration, both within and outside the workplace, influence employee knowledge-sharing. This observation
aligns with the understanding of Wang & Noe (2010), who suggest that individuals prioritise sharing information with those they have established relationships with and trust.

To promote knowledge sharing, incentives, recognition, and intra-organizational reward campaigns are utilised as interventions (Liebowitz, 2003; Nelson et al., 2006), consistent with the findings reported by the interviewed startups. Recognition and meritocracy were emphasised as foundational principles for promoting greater knowledge integration. One SA company highlighted that some members became partners based on their demonstrated performance.

4.5 SHARE EXTENSION

Knowledge is massively shared by members of organisations among themselves, between teams and between organisations, individually motivated by peer recognition and a sense of self-efficacy (Chow et al., 2000). Collectively, motivation was attributed to learning mechanisms promoted by participatory and decentralised leaderships (Lin, 2007; Lee et al., 2006; Kim & Lee, 2006), such as participation in skills development programs, external training, promotion of internal workshops and collective assessment of teams.

Individuals who underwent training or considered themselves sufficiently mature in some topic of interest to the organisation voluntarily passed on their learning within their team and to other groups through tacit reproduction of content and availability of explicit knowledge in repositories through manuals and flowcharts promoting cooperation interdisciplinary (Siebenhüner & Arnold, 2007). Internal relationships, values and norms shared by the group were listed as impulses to sharing (Lam, 2000).

Until then, the investigated startups claim not to have presented levels of conflicts that have interfered with the processes of learning and knowledge sharing (Rothman & Friedman, 2001). All the startups mentioned the influence of external factors, including public opinion, organisational reputation, and market fluctuations, as potential interferences in their operations. Only SD, which is internationalised, gave relevance to regulatory changes as a preponderant factor for sharing practices (Schön & Argyris, 1996).

All startups participate in online groups and communities of practice on the individual initiative of their members and by encouraging internal leaders, pointing out that strong ties involve more excellent emotional proximity (Granovetter, 1973) and that social relationships
facilitate the transfer of knowledge and enhance the quality of the information exchanged (Cross & Cummings, 2004).

4.6 PERCEIVED RESULTS

Individually, the main perceived results were job satisfaction, commitment to the team, and a sense of truth and confidence in the company’s future and its immediate leaders. Among groups, the result of psychological contracts was reflected in the improvement of communication channels, in the sense of collectivism, in the maturity of the teams and the low turnover, even in the stages in which startups are still unable to offer economic and financial benefits compatible with the values practised, in the market.

Interorganizational exchanges were perceived as dynamic "feedback loop" structures, wherein the antecedents and consequences of knowledge transfer intertwine within constantly evolving environments that foster continuous learning. Feedback relationships between peers and immediate superiors and emotional ties were listed as direct influencers of company performance (Van Wijk, Jansen, & Lyles, 2008). Although all startups have stated that they prioritise technical knowledge when hiring new members, founding partners and HR managers were unanimous in postulating that candidates with greater adherence to the company's culture end up with priority in hiring. They understand that it is better to provide technical training than to spend time and effort trying to fit someone who does not adhere to the team, as this would disperse the team's efforts.

All interviewees perceived strategic results in the sense of enjoying the benefits of relationships and psychological contracts in a satisfactory and balanced way. All cited benefits in sharing knowledge between organisations, especially in achieving visibility and reputation within a network of relationships that can improve future employability and add values such as recognition and a sense of self-efficacy in the long term (Levin & Cross, 2004).

4.7 EMERGING CATEGORIES

4.7.1 Hybrid and balanced bonds

The hybrid and balanced obligations category emerged during the investigation process due to the peculiarity of these organisations in terms of the need to be flexible about performance goals and job security and stability in line with changes in socioeconomic conditions (Rousseau
& Schalk, 2000; Dabos & Rousseau, 2004). Haggard & Turban (2012) found that relational aspects and learning and career development opportunities overlap with monetary obligations and accompany relational elements, pointing to a possible middle path for negotiating psychological contracts.

5 FINAL CONSIDERATIONS

In terms of methodology, this study demonstrated innovation by qualitatively analysing startups from emerging economies across various levels of maturity and industry sectors. It surpassed the mere measurement of knowledge sharing by considering psychological contracts from different perspectives and hierarchical levels, encompassing economic, financial, and social obligations. Moreover, it shed light on how situational factors influenced social relationships, impacting knowledge sharing within startups and directly affecting individual and organisational outcomes.

The practical implications of the findings revealed that psychological contracts significantly influence individual motivations to share knowledge, ultimately impacting the success of startups. Specifically, the primary individual outcomes were job satisfaction, team commitment, trust, and confidence in the company's future and its immediate leaders. At the team level, improving communication channels, cultivating a collective mindset, team maturity, and low turnover were crucial factors, even in stages where startups may still need to offer competitive financial benefits.

Interorganizational exchanges were depicted as dynamic "feedback loop" structures, wherein the antecedents and consequences of knowledge transfer intertwine within ever-changing environments that foster learning. Although all startups prioritised technical knowledge, it was unanimously postulated that candidates who align well with the company's culture are given hiring priority, as there is potential for employees to become partners based on exceptional performance.

All startups demonstrated explicit and implicit economic and relational contracts, and due to their lean organisational structures with small teams, employees and managers displayed awareness of each party's non-formalized commitments and expectations. The work environment and relationships with colleagues and immediate superiors were the main factors contributing to
talent retention. Mutual support and reciprocal concern for personal and interpersonal factors were essential in fostering long-term, highly committed relationships.

Furthermore, a new category emerged during the investigation, reflecting the unique nature of startups' need for flexibility in performance goals, job security, and stability, given changes in socioeconomic conditions. This hybrid and balanced obligations category prioritised relational aspects and opportunities for learning and career development alongside monetary obligations, suggesting a potential new direction for negotiating psychological contracts.

For future research, it is essential to identify behaviours and managerial actions that demonstrate support for psychological contracts and knowledge sharing. Developing a guide of sound and reliable practices and potential scales to measure individuals' willingness to share different types of knowledge through various communication channels would also be valuable avenues to explore.

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