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An Exploratory Study Linking Intellectual Capital and Technology Management towards Innovative Performance in KIBS

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Abstract: This study aims to fill a gap in the sparse literature that empirically investigates the relationships between intellectual capital (IC), technology management, and innovative performance in knowledge-intensive business services (KIBS). Semi-structured interviews with middle and senior managers from KIBS have been conducted with the purpose of exploring the various strategies, policies, and practices in managing the organisational intellectual capital and technology to enhance innovation performance. Several themes related to the development of intellectual capital in KIBS have been analysed (i.e., key dimensions of human, structural, and relational capital). The findings show that all KIBS investigated place importance on either recruiting the most qualified staff or building up their competencies and skills. Moreover, KIBS allot sizable resources for creating an organisational culture that encourages employee empowerment and knowledge sharing. Technology-forward KIBS have strategies for developing dynamic technological capabilities for knowledge management, business process flexibility and efficiency, and sustaining innovation. The unfolded investigation has both theoretical and managerial implications, pointing to the noteworthiness of sustainable and strategic approaches of intellectual capital management on purpose to support innovation.

Keywords: intellectual capital (IC) management; knowledge-intensive business services (KIBS); technology management; innovative performance; qualitative research



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1. Introduction

Intellectual capital (IC), an organisation's knowledge receptacle and source of intellectual value generation and regeneration, has become a prominent topic in management and business science over the last decades. Numerous scholars have endeavoured to explain the essential contribution intellectual capital makes to a company's business performance and competitive advantage achievement, as well as its impact on the development of innovation capabilities [1,2]. Effective management of the knowledge encapsulated in various intellectual capital components such as human capital, structural capital, and relational capital to achieve business success has become the goal of organisational strategies developed by successful enterprises [3].

IC is a multifaceted and interdisciplinary concept that has been approached from various perspectives. An interdependent relationship exists between IC and knowledge management (KM) [4–7] since IC comprises all the knowledge resources embedded in various organisational areas. At the same time, the linkage between IC and innovation has been investigated by many researchers [8–12]. Going forward, scientists have repeatedly underlined the interdependent relationship between innovation and technology. Nevertheless, in an economic context where both the reliance on technology and (technology-based)

innovation have tremendously accelerated, the scarcity of (empirical) research dedicated to investigating the relationship between intellectual capital, technology, and innovation is unexpected. Furthermore, though knowledge-intensive business services (KIBS) are seen as promoters of technology and innovation, the management research devoted to KIBS and specifically to the relationships referred to above is sparse.

To address this research gap, Dinu [13] conducted a structured review of the literature concerning the association of IC, technology, and innovation, investigating the extent and the findings of the empirical research aiming to clarify how IC management relates to an organisation's technological orientation and innovativeness to sustain the innovative performance in KIBS. Thirty-seven articles were identified in the end and only six comprised qualitative research on these topics. The articles revolved around several themes: technological orientation sustains IC by leveraging knowledge for innovation; technological capital supports the organisational dynamic capability to enhance innovation performance; and technological intensity is linked to organisational performance.

Given the scarcity of the literature that investigates the relationships between IC, technology management, and innovative performance in KIBS, and taking into account the current relevance of these topics, this study aims to explore the themes by employing qualitative research methods. The paper introduces the concepts in the second section, dedicated to the literature review. After that, the research methodology is presented. The findings are discussed in the fourth section, which is followed by sections on conclusions and implications but also limitations.

2. Literature Review

2.1. Intellectual Capital as an Overarching Construct

While traditionally, enterprises made most of their operational investments in physical (tangible) assets, with the advent of the information society, there has been a switch towards the intangibles, which some authors referred to as intellectual capital investments [14,15]. Bukh et al. [16], while comparing various taxonomies of intellectual capital, found that most of them concerned relations with employees, customers, and organisational processes. Sveiby [4] proposed a tripartite classification of the intangibles, namely employee competence, internal structure, and external structure, while from a knowledge perspective, the intangibles are created by the organisations' personnel. The constituents of each category vary from author to author.

Edvinsson and Sullivan [17] defined intellectual capital concisely as "knowledge that can be converted into value" (p. 358). On the other hand, Kianto et al. [18] (p. 364) understood IC as "the sum of all the intangible and knowledge-related resources that an organisation is able to use in its production processes in an attempt to create value". The authors stressed, therefore, the crucial importance that the knowledge management practices, seen as dynamic implements, have in leveraging the intellectual capital assets, conceived as being static (or stock retrievable at a certain moment in time). In Kianto et al.'s view, knowledge management practices reflect the purposeful, systematic administration of the IC assets.

Using metaphorical thinking, the organisational knowledge capital can translate into organisational knowledge resources. Managing intellectual capital can be seen as intently utilising all the intangible resources available to a company with the aim of adding value reflected in economic interest [19]. Other studies, e.g., Rossi and Magni [20], have asserted the importance of the interaction between service providers and their beneficiaries in co-creating value in the service-dominant logic, where an interactive collaborative model is employed.

2.2. Disentangling IC Components: Human, Relational and Structural Capital

The three main components of intellectual capital, as widely agreed upon in the field's literature throughout time, are human capital, structural (organisational) capital, and relational capital [3,21–25]. Other classifications included organisational capital in-

stead of structural capital [26], and customer capital [27–29] or social capital [30], both encompassing relational capital. Building on the model introduced by Edvinsson and Malone [3], Kianto [31,32] added another component, the renewal capital. In Kianto's view, the organisational renewal capability comprises knowledge and innovation management competencies that allow the organisation to renew its knowledge bases and develop dynamic capabilities to adapt to changes and also to support innovation performance [33]. The elements of organisational renewal capability are strategic competence for focused development, leadership's innovation management and creativity skills, exploiting time wisely, connectivity reflected in social relationships, managing knowledge for renewal, and learning orientation, which indicates a propensity for openness, reflexivity, and continuous improvements. Researchers have described renewal capital as referring to learning and creativity [5], as well as to knowledge creation. Other authors have proposed new conceptual frameworks for intellectual capital. They have noted that rational, emotional, and spiritual knowledge are the underlying elements in all components of intellectual capital [19].

Human capital includes tacit knowledge in all of its forms, including experience, skills, and intuition, as well as all other forms of implicit knowledge. There are many contextual factors that influence shared knowledge, the most important of which are trust and a strong organisational culture [1,2,6]. Human capital is not the result of a summation process applied to all individuals that make up a group; rather, it is the result of an integration process of competencies, skills, know-how, and learning capabilities via training and instruction, etc. [1,6].

In addition, relational capital is the knowledge that is linked with the multilevel relationships that are created both within an organization and across different organizational structures. This knowledge achieved via partnerships, collaborations, trans-organisational links, etc., enables members to improve their personal acumen [1,12] while long-term partnerships consolidated via technology advancements and propensity towards collaboration are conducive to organizational growth, business performance, and innovative performance [1,2,7].

Moving to structural capital, the information that is innate both in the structure of a company and in its organizational culture is what is referred to as structural capital [6,12]. The business processes in a company are governed by rules that were developed by decision-makers, in addition to a set of beliefs and principles, to a predefined philosophy regarding goal achievement via dynamic capabilities, technology advancement, and so on. In spite of the fact that human capital is the central component of intellectual capital and the knowledge-creation engine, structural capital is the factor that steers human capital. The finality of the company will be quite low if a shared vision, values, and principles do not excite the entire dynamics of information integration and knowledge sharing [12]. Because it serves as the operational framework that human capital must pass through in order to be converted into operational capital, structural capital is an extremely important component of the business processes [3,5,6]. It is the factor that ultimately determines the level of information exploitation, sharing, and research that can foster a strong organisational culture.

Conflating these dimensions, intellectual capital is built on knowledge and comprises the knowledge resources that can be converted into value [10]. IC includes, e.g., ideas, general knowledge, computer programs and data processes, designs, and intellectual property. Managing intellectual capital aims at value creation and value extraction. From the value-adding point of view, the managers' task is to transform HR assets (knowledge, institutional memory, and collective experience) into organisational intellectual assets (technologies, inventions, data, patents, customer-related assets, procedures, etc.) conducive to innovation [34]. However, the structural capital, the infrastructure the companies develop to support maximisation of the intellectual output, is as important and comprises information systems, company know-how, and organisational culture, in addition to intellectual property and complementary business assets such as marketing plans, supplier relationships, distribution networks, and so on.

By employing strategic management of the available intangible resources and capabilities to develop core competencies that are difficult to imitate, an enterprise has the opportunity to achieve a competitive advantage [3,21]. At the same time, the organisation should ensure that the capabilities at its disposal are renewed and dynamically adapt to market changes to allow innovation and to enhance business performance [14,35,36].

2.3. KIBS, Technology and Innovative Performance

Quinn, Anderson, and Finkelstein [37] and Alexandru et al. [38] have stated that intellectual and information processes rather than hard assets create the most value in the new economy through R&D, technological innovation, design, and so on. In 1995, Miles et al. [39] introduced the KIBS concept in a report to the European Commission, as businesses relying on professional knowledge had grown tremendously. A common categorisation distinguishes between t-KIBS, companies which employ intensively state-of-the-art scientific and technological knowledge, e.g., R&D services and software development firms, etc., and p-KIBS, which include legal services, accountancy, management consultancy, and marketing services. KIBS are usually providers of services to other organisations and are known to be technology adopters, diffusers, and innovation promoters. As such, knowledge-intensive organisations rely on attracting (and retaining) the best internal competencies and skills, external knowledge, and management competencies in order to remain successful.

The definition of KIBS has remained a contentious matter in the literature. Authors have attempted various explanations for the concept. Miles, who led the team that produced the first report concerning these entities for the European Commission [39], has clarified ambiguities concerning KIBS' foundational elements. According to Miles et al. [40], KIBS rely on expert knowledge produced by professionals as the primary workforce for such companies. The services KIBS develop are about doing not making things, and they are of an intangible nature (software, databases, content are included); these services are aimed as input for other business processes (and not for businesses in general). Examples of knowledge products offered as services include a wide range of specialisations (management, legal, accountancy, architecture, R&D, engineering, IT, advertising, etc.). It has been stressed that official regulations (e.g., NACE classification of European industrial activities), especially in the context of reflecting the information society environment, have categorised economic activities by sector without distinguishing between private and public entities. Nevertheless, the distinctive element for KIBS is their input into other organisations' business processes and the knowledge intensity of their services. Other aspects such as size or internationalization are still ambiguous.

In the digital economy, technological competence and network competence positively influence innovation success, and both are linked to organisational technological strategy [41]. Heffner and Sharif [42] have asserted that knowledge creation and technological innovation are the outcomes of fusion processes between knowledge, technologies, and various organisational resources [43]. An economy based on knowledge, supported by intelligent technologies, will sustain value creation and profit by managing knowledge and intangible assets [7,44].

Innovation is essential nowadays for a company's success, and intellectual capital is a key driver of innovation [8,10,45]. According to Subramaniam and Youndt [8], intellectual capital components have a different impact on the types of innovative capabilities, depending on how they are combined. Human capital by itself is not directly conducive to radical innovation but only in interaction with social capital, which was found to have an effect on incremental innovation. On the other hand, the incremental innovative capability is positively affected by organisational capital. Individual knowledge is integrated at the organisational level through leadership, management, technology, and organisational culture [46]. Apart from knowledge integration, codification and mapping are relevant processes for knowledge exploitation, and all these operations can be facilitated nowadays by information technology.

Various researchers have discussed the relationship between intellectual capital and technical innovation e.g., [8,47,48]. Sanz-Valle et al. [49] have determined that organisational learning affects technical innovation and is, in turn, influenced by organisational culture. Extant research has approached the impact of intellectual capital on firm and innovation performance through the acquisition and development of innovation capabilities [8,50]. According to Thorgren et al. [51] and Vătămănescu et al. [7,52], innovative performance measures the improvement and development of products/services, improvement of competitive position and R&D effectiveness, as well as cost reductions.

The effect of intellectual capital components on innovation depends on the company's technology level [53]. Companies with higher technology intensity are better placed to innovate [54]. A firm's technology level affects the intellectual capital–innovation relationship, which also changes with the innovation type [10]. In firms with high levels of technology, human capital, which is generally more skilled, exerts a positive influence on product and service innovation. In contrast, structural capital plays the main role in companies with low technological levels [55]. As resulted from the structured literature review conducted by Buenechea-Elberdin [9], there is no consensus, however, on how intellectual capital and its components affect innovation.

The COVID-19 pandemic, declared a public health emergency of international concern on 30 January 2020 by the World Health Organisation [56], has been an example of how the various dimensions and constituents of an organisation's intellectual capital have been harnessed to cope with the crisis, adapt to new, virtual work models and processes, and develop new knowledge [57–59]. By leveraging their resources of human capital (technical competencies, know-how, and adaptability), structural capital (managerial strategies, information and communication systems, and organisational culture), and relational capital (stakeholder networking), organisations have been able to ensure not only business continuity but also to strive and even grow.

3. Materials and Methods

A qualitative method has been chosen for this research, whose goal was to explore the organisational practices for managing intellectual capital in KIBS. Despite the fact that qualitative research outcomes are sometimes seen as potentially less objective and generalisable than quantitative research, there are obvious benefits related to it. Interviews are seen as “the workhorse” in social sciences; they are usually cheaper and expeditious for gathering essential factual data [60]. Interviews permit the researcher to probe facts; they allow quick comparisons and can unveil the emotional perspectives of the social experience. At the same time, methodological pluralism is beneficial for the research outcomes. While the interview types can vary depending on the methodological choice and the research goals, interviews can take a positivist and deductive approach when the aim is to test the theory, and the interviewer guides the interview process accordingly.

Middle and senior managers from six companies located in Romania and operating internationally (see Table 1) have agreed to participate in a semi-structured interview covering the topic of IC management in KIBS while particularly stressing its relationship with technology and innovation. The interviewees have been selected during another research project which collected quantitative data for a statistical study on the topic of intellectual capital management in KIBS. Managers from ten companies, who filled in the initial questionnaire, representing a variety of KIBS sectors (as per [40]) have been asked to partake in the interview. Some have declined due to lack of time. Because of the restrictions associated with the COVID-19 pandemic, which were still in place, the interviews took place online via email, in the first semester of 2022.

Table 1. Information regarding the companies and the interviewees.

Company	Business Sector	Core Activity	Number of Employees	Managerial Position	Age of the Manager (y.o.)
1	IT	Software development for data protection	Less than 50	Middle management	Under 35
2	IT	Providing ICT solutions to an international beauty company	Less than 50	Middle management	36–45
3	IT	AI-powered quality engineering services	Less than 50	Middle management	Under 35
4	IT	Software development firm with an international clientele	Less than 250	Middle management	Under 35
5	IT	Cyber security solutions for the military information sector	Less than 10	Top management	36–45
6	IT and Banking	FinTech activities management in a digital hub	Less than 250	Top management	Over 45

Interviewee 1 works in an international company specialising in software development for data protection and is responsible for the relationships with the student community and student recruitment. Interviewee 2 handles projects in a newly established IT centre providing ICT solutions to an international beauty company which is currently strengthening its in-house technological capabilities. Interviewee 3 manages tasks in the IT department of a company that provides AI-powered quality engineering services. Interviewee 4 is in charge of projects in a software development firm with an international clientele. Interviewee 5 has responsibilities in a company providing cyber security solutions for the military information sector. Interviewee 6 manages FinTech activities in a digital hub established by a universal bank.

As underlined by Brinkmann [61], using standardised questions allows comparison between the replies and, possibly, quantification. On the other hand, semi-structured interviews have the potential to gather more knowledge, facilitated by the dialogue between the researcher and the interviewee. In the first phase, ten standardised questions were addressed electronically to all the participants who agreed to provide insights on the research topics. The dispatch of the questions by email has been chosen, given the restrictions accompanying the COVID-19 pandemic until late in 2022. The second round of complementary questions was initiated in all cases, aiming to clarify and detail some ambiguous or underdeveloped points of discussion to increase the reliability and validity of the qualitative data, and thus the research veered towards a semi-structured interview model.

From this perspective, the interview method has been utilised within an explanatory research framework to comprehend better the relations between intellectual capital management, technology management, and innovation in KIBS. This approach is in line with the academic recommendations. As Saunders, Lewis, and Thornhill [62] recommended, to put together a theoretical framework for employing this research method, one must first determine the main variables, constituents, themes, and topics and the predicted or presumed relationships between them. After the data are collected, a deductive approach can be followed to build explanations.

According to Manzano [63], theory-driven interviews represent a realist approach to the interview method. The researcher will test the theory using an in-depth inquiry by employing a proactive stance to direct the discussion. The interviewees in such cases should be knowledgeable people with experience in a specific matter. There is not a determined number of interviews that would achieve the requirement for sample saturation. Ideally, the realist interviews should aim for an iterative process, where the interviewees answer semi-structured questions, and their replies can be clarified and completed accordingly to allow for a proper understanding of the investigated matter.

Saunders and Townsend [64], while reviewing the reporting and justification of the number of interviews conducted by researchers in the business field, have found a range between one and three hundred and thirty and only seven articles specifically dedicated to this topic. Even in those cases where researchers justified the number of participants, the suggestions were based on practice instead of scientific evidence. For example, in the case of homogenous populations, the common practice indicates a number between 6 and 12 participants as appropriate to achieve saturation.

In what concerns the sample size and saturation (the occurrence of new information) in qualitative research, Malterud, Siersma, and Guassora [65] have proposed that the information power should take precedence, as there are no general standards applicable so far in what concerns saturation. In the authors' view, information power is an expression of internal validity, and adequacy and data quality appear more important than the actual number of participants. The information power of the sample is contingent on the study aim, the sample specificity, the use of established theory, the quality of dialogue, and the analysis strategy. The sample's extent can be reduced if the participants' characteristics are highly relevant to the aim of the research. In this respect, the sample size for the purpose of the current research is deemed sufficient, all the more that the research uses combined quantitative methods.

Even though the specific relationships that make the object of the study have been researched to a limited extent, the conceptual, theoretical underpinnings are ample. Therefore, a smaller sample can be considered adequate for our study. Furthermore, all six respondents have significant experience working in technical and professional KIBS, and they hold middle and senior managerial positions. The interviewees are in the position to offer quality data, given their professional background and status and also their experience.

4. Results and Discussion

According to Saldana [66], qualitative data analysis starts with reviewing the data and underlining relevant ideas, assessing connections, and interpreting the acquired data. The qualitative data analysis continues by revealing patterns and meanings. Following this method, the analysis of the interview results has been structured around several themes. For convenience, the list of interview questions is provided in Table 2.

Table 2. Interview questions.

Dimension	Question
Human Capital (adapted from Bontis [21])	Does your company employ staff with the highest level of competencies/skills in its industry? If so, can you provide specific examples of recruitment policies and practices? Does your company continuously train staff to acquire and develop digital skills? If so, can you provide details about policies, practices, and prioritised digital competencies?
Relational Capital (partially adapted from Vătămănescu et al. [7])	Does your company develop new knowledge and innovation by engaging with partners (including R&D organisations, business schools, technological institutes, etc.)? If so, can you provide some details about how this works in practice?
Structural Capital (partially adapted from Petty and Guthrie [22]; Cassol et al. [45])	Does your company have flexible and efficient business processes? If so, can you provide some practical examples? Does your company encourage the informal sharing of business knowledge among employees? If so, can you provide some practical examples? Does your company have the technological capability in place to capture relevant new knowledge from staff for business purposes? If so, can you provide some practical examples? Does your company encourage an organisational culture of trust and collaboration? If so, can you provide some practical examples?
Innovative Performance (partially adapted from Thorgren et al. [51]; Vătămănescu et al. [7])	Does your company have a strategy based on up-to-date technology for new product/service development or business process improvement? If so, can you provide some details about such strategies? Has your company produced incremental/radical innovations in its sector? If so, can you provide some details about the innovation management in your company? Has your company's competitive position/performance improved due to technology-based innovation? If so, can you provide some details about the effects of this innovation on the company?

4.1. Human Capital Development

4.1.1. Competencies and Skills

The first interview question was concerned with the staff's competencies and skills and particularities of recruitment policies and practices (*Does your company employ staff with the highest level of competencies/skills in its industry? If so, can you provide specific examples of recruitment policies and practices?*). As results from the responses, companies today struggle to find and recruit all the specialists they need for business development. To overcome this problem, they attempt to find alternate or at least mitigating solutions by deploying strategies that aim to help identify suitable candidates and grow the necessary skills. Subsequently, ample resources, budget, and time are required on behalf of the companies to entice and retain valuable human resources.

Interviewee 1 indicated that their company makes significant investments in recruitment tools and talent pools for engaging with suitable candidates. Apart from expertise, soft skills are sought after. In addition to the standard recruitment resources and practices, a dedicated university recruitment team is tasked with building robust internship and graduate programs. Student recruitment is part of the HR strategy. *“Both candidates from technical universities and non-technical ones are sought to build our technical and sales units. Students can decide to join various programs and can start working part-time, do internships, or get employed full-time when they graduate”* (Interviewee 1). Interviewee 2 stressed that their employer acts towards building a digital hub. Hence, they are looking for the highest level of competencies and skills in the IT industry. *“The most sought-after competencies are related to IT (Project Management, Product Owner, Business Analyst, Developer—for all technologies, DevOps, testing, etc.). As the company plans to triple its IT unit fast, it is currently advertising and establishing partnerships with universities to promote internship programs also”* (Interviewee 2). A similar strategy appears to be employed by the company of Interviewee 3, which is a software developer offering custom-made solutions to its customers. Therefore, competencies in back-end development, front-end development, integration services, machine learning, support functions, etc., are required. As the IT market is very competitive and it becomes more and more difficult to recruit the right people, the company developed an efficient recruitment process to avoid lengthy procedures. *“This allows us to gain a competitive advantage because people want a fast interview process since they have many offers on the table. Moreover, we allocate our best people to lead technical interviews to ensure we select the right people with the highest skills”* (Interviewee 4).

Other companies seem to choose different or more nuanced approaches depending on the job's tasks. They do not necessarily look for individuals with the highest competencies and skills. Instead, *“The strategy is to attract employees that have some core skills (e.g., they have a degree that is related to the tasks that the employee will have to do, or they are proficient in foreign languages) and then provides the necessary training on the job to prepare the employees for their tasks”* (Interviewee 3). On the same line, Interviewee 5 admits that it is difficult for companies nowadays to find staff with the highest level of competency or skills: *“In Information Security, as is the case also in IT, there is a severe shortage of trained personnel, and it makes more sense to hire people with good horizontal development and train them vertically in the specific skills required for the job”*. Interviewee 6 underlines the need for complex, mixed competencies in the FinTech industry, where employees require a combination of advanced IT and financial skills, and finding the appropriate personnel is not easy: *“Our employees build critical financial infrastructure platforms used in global transactions. However, the most significant competitive advantage is combining technical skills, business process, governance knowledge and soft skills to work in global multicultural teams”*. As a consequence, some of these skills are built through training on the job.

Overall, there seems to be competition to attract the student population and offer hands-on education and job development opportunities. Alternate approaches tap into undeveloped potential by offering on-the-job training. While advanced technical competencies and skills are sought in sectors developing state-of-the-art technologies, technical abilities are developed gradually, over time, in less demanding domains. Apart from

technical abilities, soft skills are a desirable component in the employees' profiles. These findings are in line with previous developments [57–59] contending the noteworthiness of the human capital in terms of skills and competencies as prerequisites for organizational and systemic innovation.

4.1.2. Training

When inquiring about digital skills development through continuous training, it appears that companies, at least in the KIBS area, offer extensive opportunities to their employees. The second interview question was: *Does your company continuously train staff to acquire and develop digital skills? If so, can you provide details about policies, practices, and prioritised digital competencies?* Permanent learning seems to be implied by the job requirements, especially in the IT development field. Training programs are organised both online and face-to-face, have a shorter or longer duration, and can be more generic or specialised, depending on the desired outcome. The physical restrictions brought by the COVID-19 pandemic amplified both the reliance on digital skills and e-learning programs.

All the interviewees stated that their companies constantly offer to staff various modules, either built in-house or acquired from other sources, adapted to their development needs and provide individual access to global training platforms, e.g., Udemy or Coursera. *"The learning path is based on self-learning, which from my point of view, is efficient, effective, and flexible"* (Interviewee 3). The most targeted competencies are data analysis and data science (Interviewee 2). Reconversion programs are offered to staff without a technical background if they wish to move to the IT development segment (Interviewee 6). Some companies assign *"a mentor for staff working in various technical departments"* (Interviewee 1) or *"a line manager with the aim of designing their career path and personal development plan. The personal development plan consists of the employee's learning objectives, KPIs and action points. These are measured monthly"* (Interviewee 4). Other companies facilitate the knowledge exchange between staff members: *"We use informal seminars held by other employees where they choose a subject that they master, and they explain it to others in open sessions that anyone in the company can join"* (Interviewee 5).

Conflating the responses, data analysis and data science seem to be a recurrent training theme, as companies offer options for professional conversion and career development. In addition, employees have access to online learning resources anytime and are encouraged to take responsibility for this learning process through self-learning management. Overall, it can be concluded that KIBS see themselves as learning organisations and nudge their employees to enhance their abilities and open new career paths. The evidence gives credit to the extant literature [36,57,67,68] which supports the imperative of investing in the human resources as a sustainable strategy for enhancing the individual abilities and the organizational capabilities.

4.2. Relational Capital Development

Partnerships for Knowledge Acquisition and Innovation

The next question (*Does your company develop new knowledge and innovation by engaging with partners (including R&D organisations, business schools, technological institutes, etc.)? If so, can you provide some details about how this works in practice?*) focused on innovation issues and collaborative networks. Regarding the collaboration with partners, it appears that most companies represented here have established fruitful partnerships, but they are not very extensive in all cases. In most cases, firms collaborate with universities for new knowledge creation and future recruitment, while partnerships with R&D institutions and tech start-ups focus on technological innovation. Some excerpts are presented below.

While most companies appear to prioritise collaborative relationships with universities, also incentivised by the recruitment opportunities (Interviewee 1), others seek partnerships with R&D institutions *"as a way to develop new knowledge and consequently gain a competitive advantage"* (Interviewee 3). In some companies, innovation is seen as an internal focus, given the specificity of the business (Interviewee 6) or *"driven and led from inside, by constantly*

researching the market trends and external knowledge sources and by assessing our competition. We test new products at a smaller scale to verify our ideas before implementing them at the company level" (Interviewee 4).

Nevertheless, technology-forward companies have a more encompassing approach, engaging with both universities and technological institutes for research purposes, favouring the innovative process, and expanding the existing knowledge. *"The knowledge transfer is bidirectional as the process is designed to allow the more traditionally theoretical sectors to benefit from the applied experience"* (Interviewee 5). Finally, some companies take a middle-ground position, allowing for knowledge transfer: *"Our company is innovative and has many partnerships with tech start-ups that develop the latest technologies and algorithms, such as predictive analysis, machine learning, augmented reality, and artificial intelligence, as this provides a competitive advantage in the medium term. Until now, such competencies were not available in-house, but the situation will change with the development of our own IT R&D centres"* (Interviewee 2).

Corroborating these statements, it may be concluded that the answers are consistent with previous studies [7,11,24,32] pointing to the importance of establishing sustainable transorganizational relationships with a view to avail open innovation, innovative performance, and innovativeness. As also posited by these studies, long-term partnerships consolidated via technology advancements and propensity towards collaboration are conducive to organizational growth and business performance.

4.3. Structural Capital Development

4.3.1. Business Processes

The next series of questions delved further into exploring the factors that drive organisational innovation. To this end, the first question (*Does your company have flexible and efficient business processes? If so, can you provide some practical examples?*) revealed some interesting data. Informal knowledge sharing seems to be a common practice in successful KIBS, though its extent ranges from facilitation practices to extensive knowledge management strategies. Various formats are employed to create the context, either face-to-face, virtual, or hybrid meetings that occur spontaneously or regularly, depending on the work practices. While some individuals are less affected by the virtual medium, others find it more challenging, as they feel it lacks the informality ensured by face-to-face exchanges. Digital tools are used to provide a platform for communication. Based on the responses, it seems that most knowledge sharing happens among members of the same group or functional structure, as reflected by some comments.

Interviewee 1 indicated that their company encourages creativity and focuses on results, nurturing constant interaction and feedback between the employer and the employees. *"Remote working is the generally agreed model by default. Employees have the freedom to choose if and when they would like to go to the physical office, depending on their job role. The firm ensures the IT infrastructure for remote work processes. There are bigger and smaller work teams and sub-teams managed at different levels according to the functional responsibilities (e.g., IT, sales, etc.) and the geographical focus"* (Interviewee 1). Interviewee 4's firm employs a comparable approach: *"We promote an intrapreneurial culture which gives room to the people to build their own tools and processes. Self-organised teams have the flexibility to apply tools and approaches the way they find best for their needs. There are organisation processes to ensure business continuity, consistency and alignment within the entire organisation. We are agile and adjust the processes or change them in case they don't serve our purpose anymore and constantly innovate to find the best solutions for our customers and staff"* (Interviewee 4).

On the other hand, other organisations might not necessarily achieve flexibility, despite seeking efficiency. As Interviewee 2 states, their company has a global presence and bureaucratic, cumbersome processes. However, the firm works towards implementing digitalisation, which is expected to accentuate agile practices. *"Moreover, feedback is requested from employees when it comes to process improvement"* (Interviewee 2). The sectoral restrictions might also impede the business process flexibility. *"Working in a (universal) bank makes business processes highly regulated and often bureaucratic. There is a cost for compliance and*

regulatory processes that must be in place to provide a reliable service. Technology is used in all processes, and there is a continuous improvement approach to make the work more efficient (Interviewee 6).

Finally, some companies occupy a position in between the previous ones. While the work process follows strict workflows that guide the employees in solving the customer's problems, some customisation and innovation are allowed. *"There are specific resources dedicated to capturing employees' ideas, or the staff can discuss with managers if they wish to contribute to workflow improvement. Both physical and virtual teams can be organised for specific projects. Working methods are very flexible, and some of them change from one day to another in order to be able to adapt to the needs of the project, the customers or the employees. Besides the rules imposed by the company, each team has its specific rules* (Interviewee 3). Other companies had to adapt to new realities in the COVID-19 pandemic context. While their organisation had efficient business processes, Interviewee 5 revealed that flexibility was an issue before. *"The situation has changed tremendously, meanwhile. Even though part-time and flexible schedules were, in principle, available before the pandemic, they did not seem to be really accessible to the employees. Now remote work has become a given, and work processes and procedures have been redesigned accordingly. Generally, each employee is trusted to take on a large task and manage his time allocation and interactions with others to complete it successfully. Teams are usually pre-defined based on the business unit's needs and are generally not reconfigurable* (Interviewee 5).

When it comes to business process flexibility and efficiency, there seems to be a wide range of approaches and practices, depending on the company's industry and its philosophy. Many firms had to suddenly confront a new work reality as the COVID-19 pandemic spread, namely remote work. For some, this has been an opportunity to embrace new work practices fully, while for others, it has been an impulse for a delayed change. Nevertheless, remote and hybrid work has proved easier for companies in the IT sector, where people were already accustomed to new work models, and the dependency on a physical location is less of a requisite. Remote and hybrid working has been facilitated by the advancement in information and communication technology, which is more readily embraced in the IT industry. One exception remains: the banking sector, where the pressure of compliance with external regulations continues to be high. There appears to be a more flexible approach to organisational structure in the same sector, as the staff is encouraged to seek agility in responding to customer and organisational needs. Moreover, it seems that most companies attempt to gather and incorporate employee input in work process improvement, the present perspective being indicative of previous studies [53,54] tackling this issue.

4.3.2. Tacit Knowledge Management

Regarding the next question (*Does your company encourage the informal sharing of business knowledge among employees? If so, can you provide some practical examples?*), responses have confirmed the importance attached by the represented KIBS to informal knowledge sharing, from meetings where staff can exchange feedback and learn updates from the managers on a variety of topics (Interviewee 1) to incentives reflected in performance assessment for working across team borders and extending one's contribution outside one's direct responsibilities (Interviewee 6). One exception was stressed by Interviewee 5 and concerned the sector of information security software development, where the concept of the "Chinese Wall" (a virtual barrier blocking information sharing in certain environments) is familiar. *"However, within certain bounds and in groups working within the same security context, information sharing is encouraged as it has been proven to lead to better products"* (Interviewee 5). At the same time, as Interviewee 4 noted, *"The pandemic made informal knowledge sharing a bit more challenging due to the lack of face-to-face interaction"* (Interviewee 4). A similar remark was made by Interviewee 2.

Regarding the practices and tools the companies employ to support knowledge sharing, especially during the COVID-19 pandemic, the interviewees revealed that various online platforms and collaborative digital networks facilitate the exchanges, e.g., Slack,

ADP, Zendesk, etc. *“Meetings are also organised, both in hybrid and virtual formats. Usually, there are face-to-face meetings if both the manager and the employee are in the same venue. The weekly/monthly or general meetings are virtual, so everybody from that specific team/project can participate and interact”* (Interviewee 3). In other words, as also posited by Alexandru et al. [38], evidence is brought forward that the organization’s support to informally share knowledge is very important, resulting in best practices whenever it is suitably capitalized.

4.3.3. Dynamic Technological Capabilities for KM

The following question (*Does your company have the technological capability in place to capture relevant new knowledge from staff for business purposes? If so, can you provide some practical examples?*) revealed that concerning capturing new knowledge from staff for business purposes, various strategies or practices apply, from informal to highly regulated, depending on the nature of the information and the purpose of its processing. While some companies regularly gather feedback and new ideas from all staff about business processes, as indicated by Interviewees 1 and 2, for example, there are organisations where this is still a work in progress: *“This is a “work-in-progress”. We have made significant advances in capturing and formally documenting “tribal knowledge”, but there is room to improve”* (Interviewee 5). It seems that some organisations learnt from previous experience that valuable process knowledge is lost if not stored in-house and have started developing their own R&D centres to avoid outsourcing IT projects (Interviewee 2). As Interviewee 4 described, in their company, staff has access to Confluence, where information on quality management system and how things are done is stored. *“Employees have the option to insert suggestions, comments, new ideas and insights. Moreover, each person has a 1:1 meeting with their manager at least once per month, where they discuss feedback, suggestions, new ideas and improvements. Yearly, before defining the next year’s strategy, we ask the staff for input, which is collected via a dedicated online form with various areas for strategy”* (Interviewee 4).

Moreover, in specific FinTech segments, *“Capturing and managing knowledge is a regulatory requirement. There are processes to recertify and audit the team’s process to manage knowledge. An example is the archiving requirements, change traceability, review, and approval processes. All those processes are based on multiple technology solutions. There are also procedures concerning information storage, information classification, the associated documentation, the decision-making process, etc. For software releases, different types of documents have to be produced and stored, including test results, handover procedures, user manual updates, etc. Different platforms are used for different purposes, e.g., internal vs. external information”* (Interviewee 6).

Other organisations go further and not only collect staff insights on various matters but involve their employees in product testing and new product development. *“For example, we work on a project concerning the development of a mobile game. Staff is asked to play the game daily for 5–10 min in order to get used to the new features and to provide feedback and ideas for improvements”* (Interviewee 3).

From a bird’s eye view, the methods used for collecting new knowledge include more traditional tools, e.g., meetings, talks, and documents, but also surveys and extensive documentation. In some cases, companies turn to developing in-house R&D hubs to prevent valuable knowledge loss. These assessments are in line with other investigations [11,12,43], which point to the exigency of inward and outward knowledge exchanges on purpose to foster organizational development and innovation.

4.3.4. Organizational Culture Management

The next question in the interview guide (*Does your company encourage an organisational culture of trust and collaboration? If so, can you provide some practical examples?*) has triggered insightful information. All interviewees confirmed a dedication from the organisation’s management to develop an engaging and encompassing culture. The abundance of details regarding the employment of an organisational culture of trust and collaboration proves the relevance of this intellectual capital component and orientation for its proper capitalisation via different means, as illustrated below.

All KIBS represented devoted resources to strengthening trust and collaboration among employees and between them and the managers, facilitating integration and a feeling of belonging, for example: *“The company encourages an organisational culture of trust and collaboration”* (Interviewee 2). *“Trust and collaboration are encouraged in project teams”* (Interviewee 6). Examples of organizational culture development include team-building experiences and open-door policy from both the direct manager and the upper management levels (Interviewee 5) and free activities organised monthly, e.g., seasonal parties, sports activities at the office or outside, workshops, free joint lunches, etc. (Interviewee 3). In multicultural environments and workplaces where certain categories of employees are under-represented, policies are put in place to address imbalances. *“There are various policies in place to develop the organisational culture. We have a strong diversity and inclusion program for all countries, as well as a focus on women’s development and connecting employees. Employees are granted time regularly to get involved in CSR projects, we gather together and spend time together, and most of the time, this is conducive to trust and valuable connections”* (Interviewee 1).

Moreover, some firms take organisational culture development a step further. *“Our culture encourages authentic connections, trust, and collaboration, which are essential for our growth. We ask for people’s input and feedback on various matters and listen to their voices because they are the main drivers of our culture’s evolution. We encourage feedback on the spot and promote a culture of kindness. We also build a context of psychological safety in order for people to have the trust to open up, knowing that their voice is heard, their opinion matters, and their input is taken into account”* (Interviewee 4).

In workplaces where confidentiality is required, employees are expected to collaborate without revealing specific job-related information. This can put trust under pressure *“as there are formal bounds to what information can be entrusted to other people, which is defined by the security requirements of the specific project/engagement. On the other hand, applying these models does lead to reduced efficiency as there are always cases where a problem could be easier explained by sharing more information. Still, it is a trade-off that is part of daily operations, but data and customer security take priority”* (Interviewee 5).

To conclude, developing inclusive and supportive organisational cultures appears to be widespread in the KIBS sector, creating the appropriate climate for productivity and performance through trust and collaboration. As more prominent companies with an international presence attract knowledge workers from various backgrounds, the internal culture tends to stress cultural awareness and empowerment of those categories of employees that were more often discriminated against in the traditional work environment. In some firms, efforts are being made to create common physical and psychological spaces where staff can interact and exchange knowledge. Furthermore, organisations compete to attract and retain talented employees by providing personal and professional development, as well as team-building activities and complimentary benefits. Even in those sectors where work confidentiality restrictions impose limitations on sharing, open-door policies promoted by the management can compensate for a potential loss of trust. Some companies go a step further in creating a culture of kindness, integration, and psychological safety, while others establish systems that reward collaboration, as also evidenced by prior studies.

4.3.5. Strategic Technology Management for Innovation

Further on, the next question (*Does your company have a strategy based on up-to-date technology for new product/service development or business process improvement? If so, can you provide some details about such strategies?*) revolved around the existence of an articulate strategy regarding cutting-edge technology as a prerequisite for multilevel business improvements. In many cases, the interviewees occupy managerial positions in software development companies or firms that rely on the digitalisation of work processes; therefore, the management of technology for innovation bears strategic importance. *“Our company relies heavily on the use of the latest technologies (AI, AR, NFT, ML). It has its own R&D centre and one of the most technologically advanced factories, where the entire production process is automated”* (Interviewee 2). As Interviewee 3 stressed, *“For a software company supporting AI-powered*

services, employing state-of-the-art technology is a MUST, both in developing new products/services and also for internal business processes". Additionally, Interviewee 5 underscored the intense competition in the information security sector, which is forced to develop its product strategy based on cutting-edge technologies. Otherwise, companies would not be able to survive in the market. "Probably the entire information security sector, due to the strong competitive forces at play here, is forced to develop its product strategy based on cutting-edge technologies. Otherwise, companies would not be able to survive in the market" (Interviewee 5).

Interviewee 4 addressed the need for ensuring technological flexibility and to adapt quickly to satisfy the customers' needs better: "We define our strategy using objectives and key results indicators to allow us to adjust quickly and change rapidly in case better ways of doing things become available. We work with top-notch technologies to provide our customers with the best quality servers (for example, we are GOLD Microsoft Partners). We treat each customer independently and listen to their needs and objectives to refine the business process to fit their business logic, their targets and their project needs". In a similar manner, Interviewee 1 underlined that keeping up to date with technological advancements is necessary in order to launch products that better serve the clients' interests. To that end, "An internal tech academy is available to employees, who can benefit from best-in-class certificates and are stimulated to grow constantly" (Interviewee 1). Finally, in the FinTech sector, the role of technology management has become paramount. "Technology takes the most significant part of a considerable investment budget. The technology has to be maintained up to date for security reasons and ease of maintainability. At the same time, considering the security and stability focus, only proven and stable technology can be used" (Interviewee 6).

Overall, devising technology strategies that rely on the employment of state-of-the-art technologies both for product/service development and organisational business processes appears to be the norm in the KIBS companies represented here, as the technology market is highly competitive. Keeping abreast with the latest technological trends and tools is an existential requirement in such a market. Nevertheless, the client's needs take precedence and providing fit-for-purpose services that comply with their business logic is the ultimate goal, as depicted below. Therefore, the responses give credit to prior examinations [58,59], confirming the relevance of connecting the organizational propensity towards technological advancement and the customers' frames of reference.

4.4. Innovative Performance

The final questions concerned the innovative performance in the inquired KIBS. One of the questions sought to clarify aspects related to innovation management (*Has your company produced incremental/radical innovations in its sector? If so, can you provide some details about the innovation management in your company?*). With regard to the company's innovativeness and the type of innovation achieved, it can be noted that not all the interviewees could provide an accurate or exhaustive answer, as some were not directly involved in the innovation management, as it was the case for Interviewees 1 to 4. It appears that some of the represented companies have achieved both radical and incremental innovations in their sectors, which in some cases led to process and structural changes, as illustrated below.

"In some cases, we have come up with a radically new product which was followed by incremental improvements. However, in most cases, products are developed based on incremental improvements over existing technologies. Innovation has led to new product units within their respective business units, and in some cases, we have resorted to acquisitions, spin-offs, and partnerships to adjust (Interviewee 5).

On the other end, financial services seem to be a sector where change is slower, and the competitive advantage is not necessarily related to the employment of the latest technology since competitors have access to the same technologies, but possibly more from the financial capital, the brand, and trust. "The focus is on stability and reliability, and scale. Only proven technologies and products are adopted, and without them, there is no business. Advanced technologies in retail banking enable mainly process optimisation and, to a lesser extent, differentiation" (Interviewee 6).

The final question (*Has your company's competitive position/performance improved due to technology-based innovation? If so, can you provide some details about the effects of this innovation on the company?*) availed some interesting perspectives. *"Using innovative technologies allowed us to optimise processes and to position ourselves as a partner of choice, capable of coming up with the best approach for the customer needs, from the design stage to implementation and then maintenance and support"* (Interviewee 4). *"Technology-based innovation has improved our company's competitive position and performance"* (Interviewee 1). *"The firm will not be able to stay in business without technology and innovation. Lack of technology innovation can become a source of competitive disadvantages"* (Interviewee 6).

Interviewee 2 indicated that certain technological solutions (e.g., a customer data platform, virtual try-on, real-time personalisation, and products and platforms based on state-of-the-art technologies) have helped their company improve their competitive position as well as performance. As a consequence, the company has decided to create an in-house IT R&D centre. Interviewee 3 pointed to alterations of the work processes subsequent to the firm taking advantage of incremental innovations: *"Teams have been restructured, and now, each team has employees that only work on a specific topic. In the past, there used to be mixed teams"* (Interviewee 3).

In sectors such as information security, where competition is intense, continuous innovation becomes the bottom line of the business model. *"Technological innovation has improved our company's competitive position. We should keep in mind, though, that without innovation, we would not be in business at all (or any of the other companies in this field), so I think it depends on the scale upon which we are measuring this improvement. When all of the peer companies in a highly competitive market are also innovating in order to stay ahead in business, it is not easy to assess if your position is better compared to theirs. I believe that product-based innovation has put us in a front position, but in my opinion, this is short-lived. The others are catching up fast, and you must be prepared for the next "big thing". So, it comes down to a race"* (Interviewee 5).

As interviewees 1 to 6 generally confirmed that technological innovation has improved their company's performance and/or competitive position, they have acknowledged at the same time that this has become the norm in the high-tech sector. Since they are players in a market where competitors are highly performant, competitive advantages can be easily erased by new developments. As a consequence, remaining competitive positions can be seen as a permanent race against others, but also against relying on the status quo, thus confirming the conclusions of other researchers [7,48].

With a view to grasping the main points advanced by the interviewees, Table 3 presents a synopsis of the answers in accordance with the pivotal concepts addressed, that is human, relational, and structural capital and innovative performance.

Table 3. Synopsis of the interviewees' main approaches.

Dimension	Sub-Dimension	Main Approaches
Human Capital	Competencies and skills	Advanced technical competencies and skills are sought in sectors developing state-of-the-art technologies; Technical abilities are developed gradually, over time, in less demanding domains; Soft skills are an important element when scrutinizing employees' profiles; Skills and competencies are the main prerequisites for organizational and systemic innovation.

Table 3. Cont.

Dimension	Sub-Dimension	Main Approaches
Relational Capital	Training	Companies provide opportunities for professional conversion and career development; Employees have access to online learning resources anytime and are encouraged to take responsibility for this learning process through self-learning management; KIBS see themselves as learning organisations and nudge their employees to enhance their abilities and open new career paths.
	Partnerships for knowledge acquisition and innovation	Establishing sustainable transorganizational relationships with a view to avail open innovation, innovative performance, and innovativeness is imperative; Long-term partnerships consolidated via technology advancements and a propensity towards collaboration are conducive to organizational growth and business performance.
Structural Capital	Business processes	Remote and hybrid working has been facilitated by the advancement in information and communication technology, which is more readily embraced in the IT industry; There is a more flexible approach to organisational structure as the staff is encouraged to seek agility in responding to customer and organisational needs.
	Tacit knowledge management	Various online platforms and collaborative digital networks facilitate individual knowledge exchanges; Organizations support employees to informally share knowledge, resulting in best practices whenever it is suitably capitalized.
	Dynamic technological capabilities for KM	Companies turn to developing in-house R&D hubs to prevent valuable knowledge loss; Companies acknowledge the importance of inward and outward knowledge exchanges on purpose to foster dynamic technological capabilities towards innovation.
	Organizational culture management	Efforts are being made to create common physical and psychological spaces where staff can interact and exchange knowledge; Creating a culture of kindness, integration, and psychological safety, as well as establishing systems that reward collaboration, have become common practices.
Innovative performance	Strategic technology management for innovation	Devising technology strategies that rely on the employment of existing capacities for both product/service development and organisational business processes is imperative in very competitive markets.
	-	Keeping abreast with the latest technological trends and tools is a mandatory requirement. Technological innovation succeeds in improving the company's innovative performance and/or competitive position.

Corroborating these findings, evidence was brought that KIBS are oriented towards leveraging all the IC components with a view to consolidating a propelling environment for innovative performance, with technological capabilities emerging as crucial factors.

5. Conclusions and Implications

The research shows that KIBS companies often find themselves in very competitive markets, not only in relation to their services but also when recruiting essential staff. Evidence was brought that suitable management of intellectual capital springs as a prerequisite for innovative performance and innovativeness provided that technological advances are also capitalized. This is conducive to noteworthy insights into the increasing value of intan-

gible resources in the equation of strategic and sustainable organizational development. Even though various studies have indirectly tackled these interconnections, as highlighted when addressing the research gaps, few investigations have qualitatively examined them, especially in the case of KIBS.

In this vein, the current approach theoretically adds to the extant literature on the topic, by availing a phenomenological view of a well-defined sector. The research findings reconfirm the theoretical underpinnings put forward by Kianto et al. [5,18,31–33], Edvinsson and Malone [3], and others [8,10,46,50] concerning the effectiveness of the strategic approach to knowledge management in organisational learning and knowledge renewal, and the instrumental value of knowledge management practices in leveraging intellectual capital assets to expand dynamic capabilities and innovation performance.

In terms of practical and managerial implications, the study raises straightforward issues. Firstly, in order to overcome difficulties linked to employee selection and business development, organisations must employ strategies to cope with shortages of skilled staff and succeed. To this end, firms need to invest resources to attract suitable candidates and to extend partnerships with universities to “grow” their future human resources. Furthermore, companies must plan for the future by developing continuous training and upskilling programs. Secondly, apart from technical abilities, soft skills are a desirable component in the employees’ profiles. As business digitalisation expands, all KIBS require employees to undertake permanent training on the job to acquire advanced digital skills, especially in the fields of data analysis and data science.

For practitioners, this research provides evidence of the importance of developing and effectively managing intellectual capital in all its components—human, structural, and relational—with the view to achieve competitive advantage and business performance. The study highlights the value added by adequately managing human capital through competency building and continuous upskilling to encompass both technical and soft skills. Furthermore, expanding partnerships for knowledge acquisition strengthens relational capital, which in turn nurtures innovativeness. Nevertheless, business development is hampered without leveraging these resources for growing structural capital assets through competent knowledge management, promoting an open and inclusive organisational culture, increasing the organisational dynamic capabilities to adapt to changes in the business environment, and updating business processes. Last but not least, judiciously leveraging technological opportunities is paramount nowadays and conducive to competitive advantage and business success in KIBS.

KIBS are learning organisations that continuously update and upgrade their knowledge resources to remain competitive and transfer this characteristic to their employees, who need to enhance their abilities permanently and stay open to new career paths. The knowledge acquisition and transfer involve third parties such as universities, R&D institutions, start-ups, etc., with whom KIBS establish collaborative partnerships for innovation. On the other hand, KIBS favour informal knowledge sharing between employees and many set policies and practices that encourage collaboration and knowledge exchange among staff members. With this view, they make use of digital technologies that facilitate communication, collaborative work, and knowledge retention.

To ensure an integrative and engaging environment, KIBS should commit dedicated resources to develop the organisational culture, which aims at establishing trust, collaboration, inclusiveness, well-being, and empowerment as the central values. Subsequently, this is reflected in enhanced productivity and performance. Employee well-being and business process flexibility had taken centre stage, especially in the context of the COVID-19 pandemic, when social restrictions and remote working became the norm.

Technology ensured business continuity for many KIBS during the COVID-19 pandemic. It has been shown in the literature [59] and reiterated by the interview participants that virtual teamwork can be affected by a sense of disconnection with team members but a strong collaborative culture, cognizant leadership, and effective communication build trust and a common purpose. As the interviewees have also noted, the virtual workplaces

brought with them specific strains, such as feelings of isolation, communication and team management challenges, etc., but, on the other hand, advanced information technology has offered an indispensable networking environment which allowed a switch to a “new normal” and even favoured positive changes. Some advantages, e.g., remote work options and schedule flexibility, have been embraced by many employees, as underlined by the participants in the interview.

Technological innovation appears to be at the core of KIBS’ strategies for development and growth. However, while some of the represented companies have achieved both radical and incremental innovations in their sectors, which in some cases led to process and structural changes, it should also be noted that new policies based on technological developments in the service industry are not generalised, with some sectors taking slower steps or choosing more traditional strategies for their business model development.

Despite the acknowledgement of the interviews’ research value for revealing the individuals’ emotional perceptions in the understanding of facts that have happened in the past or their future intentions, credit is also given to the inherent methodological limitations (as pointed by Jerolmack and Khan) [69] regarding attitudinal fallacy consisting in erroneously inferring behavioural facts from verbal accounts, since people do not always do what they say and what they say might be influenced by the context. From this perspective, the results of the research bear a subjectivity bias. Furthermore, the data were obtained from a small sample, so the results cannot be generalised.

Nevertheless, while the information obtained from interviews cannot be generalised and applied at the industry level or beyond, it still offers a valuable outlook into the business philosophies and practices of various companies pertaining to the KIBS sector in relation to intellectual capital, innovation, and technology management. Future research could address the qualitative-driven limitations by including more companies and interviewees from various sectors, or by complementing qualitative research with quantitative or mixed research designs.

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