









Links between intellectual capital and mexican SMEs performance from a systemic perspective

Vínculos entre el capital intelectual y el desempeño de las pymes mexicanas desde una perspectiva sistémica

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Abstract





Intellectual capital [IQ] emerges from the ability and capacity of human talent to generate value, both present and future, which gives companies a significant competitive advantage. For effective management, it is crucial for organizations to understand the interrelationships between their components and their impact on performance. This article identifies and describes the links between IQ and business performance, as well as its main challenges and barriers when it comes to integrating its components from a Systems Perspective [SP]. Using a qualitative methodology with a descriptive scope, and semi-structured interviews with the companies under study. Links between the three components of the IC and Productivity, Competitiveness, and Profitability are identified, and the challenges inherent in the integration of these components are exposed.

Resumen

El capital intelectual [CI] emerge de la habilidad y capacidad del talento humano para generar valor, tanto presente como futuro, lo cual confiere a las empresas una significativa ventaja competitiva. Para su gestión eficaz, es crucial que las organizaciones comprendan las interrelaciones entre sus componentes y su impacto en el desempeño. Este artículo se enfoca en identificar y describir los vínculos entre el CI y el desempeño empresarial, así como en analizar los principales desafíos y obstáculos que surgen al integrar sus componentes desde una perspectiva sistémica [PS]. A través de una metodología cualitativa de alcance descriptivo, se realizaron entrevistas semiestructuradas a las empresas objeto de estudio. Los resultados revelan vínculos entre los tres componentes del CI y la productividad, la competitividad, y la rentabilidad, y se exponen los desafíos inherentes a la integración de estos componentes.

Links between Intellectual Capital and Mexican SMEs Performance from a Systemic Perspective		
Objectives	Methodology	Contribution
 Describe links between IC and Business Performance.  Identify challenges in integrating IC components.	 Descriptive and qualitative, literature review, case study, semi-structured interviews.	 To expose the essential variables to understand and facilitate the management of IC in companies.

Intellectual Capital, Systemic Thinking, Causal mapping

Vínculos entre el Capital Intelectual y el desempeño de las Pymes mexicanas desde una Perspectiva Sistémica		
Objetivos	Metodología	Contribución
 Describir los vínculos entre el CI y el Desempeño Empresarial.  Identificar los desafíos para integrar los componentes del CI.	 Descriptiva y cualitativa, revisión de literatura, estudio de caso, entrevistas semiestructuradas.	 Exponer las variables esenciales para comprender y facilitar la gestión del CI en las empresas.

Capital Intelectual, Pensamiento Sistémico, Mapeo causal

Area: Advocacy and attention to national problems

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Introduction

The wide range of knowledge assets, also known as invisible or intangible assets, pose a challenge for their recognition in financial statements due to their immaterial nature. However, their strategic relevance is undeniable, as they are fundamental to value creation and the development of sustainable competitive advantage. In response, large companies have recognised the imperative need to measure and manage these assets, in order to inform their strategies and generate long-term value [Benavides, 2013; Pacheco-Velázquez et al., 2024]. Moreover, it has been shown that these assets contribute significantly to improving both individual and organisational performance, especially in terms of innovative behaviour [Carmeli & Tishler, 2004; Damanpour, 1992; Youndt & Snell, 2004].

As a consequence, the concept of Intellectual Capital [IC] emerges from the interaction between various intangible components, reflecting the capacity and ability of human talent to generate present and future value. This value, in turn, allows companies to build a sustainable competitive advantage [Benavides, 2013]. Although the study of IC in business is not recent, the valuation of knowledge and, therefore, of IC, remains a challenge, making it difficult to manage and measure its economic impact [Ramón & Hinojosa, 2020; Villegas et al., 2017].

Overcoming this challenge would allow companies to better understand how and to what extent these components influence their performance, and thus determine their market positioning [Lev & Sougiannis, 1996]. Some research in this regard has identified that IC components have a positive and significant impact on Business Performance [Kengatharan, 2019; Tovstiga & Tulugurova, 2009; Vázquez-Ávila et al., 2014], and provide competitive advantage directly and indirectly [Chatterjee et al., 2022; Villegas et al., 2017]. Furthermore, it shows the value-creating capacity for firms of these components, and highlights common elements between IC and business models [Ujwary-Gil, 2017]. However, it has been found that the impact on performance can be positive but not always significant [Kianto et al., 2017; Pigola et al., 2022], as well as not all studies agree on the components that most affect performance and their elements [Kianto et al., 2017; Villegas et al., 2017].

In the context of Small and Medium Enterprises [SMEs], Intellectual Capital [IC] acquires an unprecedented relevance, as it represents a high-value asset due to its ability to generate a higher economic return from its intangible assets [Axtle-Ortiz, 2009]. Ignoring this aspect implies that SMEs in Mexico are missing out on a crucial resource for their development.

The lack of recognition of the components or variables of IC prevents these companies from reflecting their real value, with the result that more than 90% of them underestimate the total value of their company by up to 30%. This implies limits in accessing better interest rates with banks, not being able to work with AAA+ clients or suppliers, or with funders or corporate investors [MNP Consultores, 2023].

In their field study of SMEs in Mexico, Maranto and Tagle found that, of the performance achieved by SMEs, 66% was obtained by internal factors, represented by organisational structure, human resources and technology; these terms being relatively similar to those used to denote the basic components of IQ [Maranto-Vargas & Tagle-Rangel, 2007].

This is why the management of IC is a key element in the model of the outstanding or competitive company of the 21st century [Arias-Ordóñez et al., 2007], remaining as a management of intellectual assets from a managerial or strategic point of view [Martins & Viedma, 2006].

As a consequence, the value of Intellectual Capital [IC] lies in the ability of each individual within the organisation to make decisions that optimise the flow of data, information and knowledge. These decisions can maximise returns or minimise costs, among other benefits, thus driving business effectiveness and efficiency [González & Rodríguez, 2018].

Therefore, effective management of intangible assets requires understanding their components and recognising their intrinsic value within the organisational structure [Axtle-Ortiz, 2009].

In consideration of the previously mentioned factors - the relevance of knowledge and its management, the capacity of Intellectual Capital [IC] to generate present and future value in SMEs, the difficulty of reflecting its components in financial statements, its potential to develop competitive advantages and improve organisational and individual performance, and the limitations in access to credit and financial opportunities due to the lack of recognition of its value - a comprehensive study on this topic is justified. Thus, the main objective of this study is to describe the links between IC and the performance of the companies studied from a Systemic Perspective, identifying the variables that make up its components, and the main challenges they face in the integration of the components of IC.

By virtue of this, the aim is to answer the following questions: What are the links between IC and the performance of the companies studied from a Systems Thinking perspective? What are the main challenges and barriers to the integration of the components of IC faced by the SMEs studied?

Accordingly, and in order to guide this research, the structure of the research will consist of:

- Introduction
- Intellectual Capital
- Essential elements of the linkages between IC, and Business Performance
- The Systemic Perspective on the integration of IC and Performance
- Methodology
- Results and Discussion
- References

Intellectual Capital

The concept of IC defines in depth strategic resources as its main focus [Chatterjee et al., 2022]. IC management focuses primarily on the creation, acquisition and effective management of all intellectual resources required to meet business goals and successfully execute its strategies [Arias-Ordóñez et al., 2007]. Thus, IC is the result of the interrelation between three basic or general components [Benavides, 2013].

Human Capital [HC] can be described as the set of all the knowledge, skills, abilities, skills, expertise and experiences of the individuals of an institution, which can be used to achieve the objectives of the company [Stewart, 2001]. Structural Capital [SC] would be all the structures, procedures, routines and cultural aspects that allow the knowledge and practice generated by the CH to be compiled, ordered, improved and disseminated throughout the firm and even transformed into intellectual property [Bontis, 1998].

Client Capital or Relational Capital [RC] is the set of existing and potential resources that emerge from the networks of individual and/or organisational relationships or that are collected through these networks [Cabello-Medina et al., 2011], and in other considerations, it is the knowledge that covers the relationships between the organisation and its stakeholders [customers, investors, suppliers, government agencies, etc.], as well as the image that is built of the organisation to the outside world [Bontis, 1998; Brooking, 1997; Stewart, 2001].

Essential elements of the linkages between IC, and Business Performance

IC is based on strategic intangible resources [Chatterjee et al., 2022], which in order to achieve better business performance, skills, abilities and other related elements must be used efficiently [Barney, 1991; Makadok, 2001]. Of the components that make it up, it is possible to find CH as the main one in the generation of value [Bontis, 1998].

The performance variables, from the many presented, concentrate on competitiveness as the capacity to respond over time, profitability as the maximum income obtained from sales considering the investment, and productivity conceiving the results of a work process and the inputs consumed in it, and from the quality that arises from the work processes that makes them improve in a permanent, sustainable and systemic way [Pacheco, 2002].

To evaluate it, both objective and subjective variables have been considered, however, studies have leaned towards indicators such as: growth, profitability and market share, both in financial and non-financial terminologies [Barradas-Martinez et al., 2021].

In this sense, the financial domain can be represented by profitability, growth and market value, while the non-financial or operational domain could include particularities of competitiveness such as innovation, quality, employee and customer satisfaction, and reputation [Varadarajan & Ramanujam, 1990] as one of many.

Accordingly, performance impacts considering IQ are mainly weighted on dimensions with subjective character, e.g. generally satisfied customers, reduced problem-solving time, and sales growth [Bontis, 1998] to name a few. However, it is possible that control variables negatively affect the values of these components [Villegas et al., 2017], so the influence of IQ may or may not be significant on performance [Pigola et al., 2022]. Some of these links can be identified as: constant implementation of new ideas, immediate access to necessary information, knowledge distribution processes in the company, or the localisation and application of knowledge for dynamic environments [Vázquez-Ávila et al., 2014], to name a few. As a consequence, this allows a correct management and evaluation of knowledge assets to improve strategic planning and influence organisational behaviour [Lerro et al., 2014].

Thus, in companies that are oriented towards the service sector, a stronger strategic planning and focus is necessary due to the intangible nature of their activities [Kianto et al., 2010]. However, environmental factors, such as socio-economic or cultural factors, influence IC procedures [Tovstiga & Tulugurova, 2009], as well as its components may be moderated by age or gender in improving performance [Chatterjee et al., 2022], so that the ability of firms to know and apply knowledge also has considerable influences on performance [Phusavat et al., 2013], being necessary to know these interactions between IC, and business performance.

The Systemic Perspective in integrating IC with Performance

The visual breadth provided by PS would consider the different perspectives of others [Chapman, 2004], and understand the interrelationships between elements, and is considered the best approach to manage and refine complex circumstances in reality [Reynolds & Holwell, 2010].

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Furthermore, the mapping of mainly qualitative data facilitates their organisation, which from this integral and systemic approach would make it possible to visualise them as interrelated sequential arguments [Mahajan et al., 2019], and to understand the effectiveness of the strategies used by a team to manage the complexity of their tasks [Espejo & Reyes, 2016]. This allows us to view IQ from an integrative view [Sánchez et al., 2007], facilitating the understanding of the phenomenon and its interactions over time [Forrester, 1971]. These causal maps can then be simulated in computer software, making it possible to explore these interactions within systems, and to verify whether they produce novel behaviours or change over time [Bonabeau, 2002].

Decision makers thus have the ability to manage the complexity and uncertainty resulting from their interaction with a dynamic environment, in addition to generating solutions that are feasible, attractive and durable [Ackermann & Eden, 2010], facilitating the management of complexity through their processes of data extraction, organisation and analysis [Ackermann & Alexander, 2016]. It is for this reason that it has been put forward in depth in other research as a systemic perspective or approach that provides a better understanding of complex systems, explaining the why and how of the occurrence of events [Checkland, 1993; Senge, 2010].

Methodology

With a constructivist philosophical underpinning [Creswell & Creswell, 2018], a qualitative approach research is proposed, for a case study with a non-probabilistic design for convenience and opportunity, collecting data directly from the sectors where the members live the problem under investigation [Hernández-Sampieri et al., 2010], and taking into account the characteristics and particularities of the companies under study, as well as the environment and the sector in which they operate [Stake, 1995; Yin, 2014]. Data were collected using non-participant observation, semi-structured interviews with three companies in the services sector, the Grupo Corporativo Hotelero Las Brisas Hotels & Resorts, the consulting firm IpCom with advisory services on technological and digital solutions, and the corporate firm MNP Consultores, experts in the field of IC in Mexico and corporate issues.

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In addition, the reading of documents, books, or articles is used as a literature review [Hernández-Sampieri et al., 2010; Schettini & Cortazzo, 2016].

On the other hand, Atlas. Ti. 2024, which from an inductive approach codes the concepts for their subsequent grouping according to their relationship, both from those compiled through the literature consulted, as well as from the interviews. This allows a mapping of these relationships and an understanding of the study phenomenon [Hernández-Sampieri et al., 2010].

The interview transcripts are placed in the programme and relevant documents from the literature for open coding and textual analysis of each word. The open codes created are then grouped into categories using axial coding [Braun & Clarke, 2021]. Finally, Ithink 8.0 software is used to represent the complexity of the variables from different levels of focus [Chapman, 2004]

This whole process of data collection and analysis from the tools facilitates the organisation of a considerable amount of qualitative data, allowing it to be presented as interrelated sequential arguments, and a holistic and systemic approach [Mahajan et al., 2019].
Results and Discussion

Links between IQ and Performance from a Systems Thinking perspective

The structure of this section was built from the coding and categorisation of variables by Atlas.Ti software. 2024. This was firstly agreed by an initial open coding with the literature documents considered and the interviews conducted. Subsequently, an analysis was carried out and a series of grouped categories were determined with axial coding [Mohajan & Mohajan, 2022]. Finally, these categorisations allowed the analysis of the links between IQ and Performance. For their analysis, the results are presented at three levels, from Macro level linkages to Micro level linkages. This allows us to observe the behaviour of the variables from a general level without going into specific details, to the disaggregation of the groups formed by the variables for a more detailed analysis. The Meso level linkages contemplate the disaggregation of the general variables, while the Micro level linkages represent the disaggregation of the variables at the Meso level.

General linkages [Macro and Meso Levels]

The links established between IC and Business Performance variables in general are mainly represented in the literature by the ability of IC to positively impact Performance through the firm's intangibles [Benavides, 2013]. These relationships are represented according to the capabilities generated by the components of IC that tend to influence firm outcomes, either through improved productivity or performance [Kengatharan, 2019; Phusavat et al., 2013], generating competitive advantages [Chatterjee et al., 2022], success in meeting the goals set by firms [Vrontis et al., 2021], and profitability [Villegas et al., 2017].

However, these linkages are better represented at a more disaggregated level [Meso Level], reflecting the dynamics between the components of the overall variables. This result reflects the conclusion of the application and analysis of axial coding by grouping representative variables into categories [Mohajan & Mohajan, 2022].

The open coding yielded some 193 codes, which were analysed and grouped into 7 main categories, from which a further 22 subcategories are derived that represent at the Meso level the relationship between the variables, see Table 1.

Box 1

Table 1

Categories identified and grouped

Categories	Subcategories
Human Capital	- Cognitive Skills and Capacities. - Behavioural Skills and Capacities. - Essential Skills and Capacities.
Relational Capital	- Customer Relations. - Supplier Relations.
Structural Capital	- Organisational Culture. - Management, evaluation and control processes. - Corporate Image and Reputation. - Organisational Information Systems and Structures.
Productivity	- Cost Reduction - Fulfilment of Objective - Response Time
Competitiveness	- Market position. - Sales growth. - Customer satisfaction. - Innovation.
Profitability	- Return on Sales.
External Factors	- External Agents. - Socio-economic factors. - Cultural Factors. - Technologies. - Social Events.

Source: Own elaboration

These categories and subcategories found coincide with those presented by authors in different analyses of IQ and Performance. The case of IC corresponds to those proposed by the classical literature, referring to CR, CH, and CE [Bontis, 1998; Brooking, 1997; Stewart, 2001], while Performance is made up of the variables Productivity, Competitiveness and Profitability [Pacheco, 2002]. On the other hand, variables referring to the environment could be found, which refer to socio-economic, cultural, and technological factors [Tovstiga & Tulugurova, 2009], social and external agents [Tovstiga & Tulugurova, 2009].

As a result of the research, the Meso-level linkages yield different relationships that can be visualised in Annex 1:

- The RC is linked to social events to establish relationships with both suppliers and customers, and these have results in the company's Productivity, Competitiveness and Profitability. It also relies on the company's structural tools and processes for its management.
- CH is linked to aspects such as the working age generations and the job opportunities offered by the market, as well as to new technological trends. It also interacts with structural aspects of the company, relates to customers and suppliers, and generates links with Productivity and Business Competitiveness.
- The EC is linked to job opportunities, technology trends, and social events, to establish relationships with both suppliers and customers, and to provide the tools and functions necessary for their functionality with results in Productivity and Competitiveness.

Micro Level Linkages

The Micro Level analysis of the linkages between the variables yielded more detailed results of how these linkages are established between the variables, as can be seen in Annex 2.

In this analysis it was possible to identify that the subcategories of RC are linked to the subcategories of Profitability, Productivity, and Competitiveness.

These linkages were initially identified through negotiation strategies with suppliers, leading to Reduced Input Costs, and as a result, improved Profitability on Sales, which is consistent with other research findings such as those of [Kengatharan, 2019].

In addition, Customer Relationships grant the opportunity and access to the market increasing the chances of improving their market position. Also the results achieved with the strengthening of Customer Relationships thanks to Social Events, Innovation of processes and procedures, and the use of technological tools.

These events and relationships promote the exchange and acquisition of information by the company, which makes it possible to identify the preferences and requirements of customers, to innovate and generate new forms of management that meet their needs, driving sales growth.

The CH subcategories were linked to Competitiveness and Productivity as a result of Cognitive Skills and Abilities, Behavioural Skills and Abilities, and Essential Skills and Abilities to generate innovative ideas from the employee, such as a comprehensive multidisciplinary team that can address the needs and requirements of customers, which is in line with arguments put forward in the literature such as those of [Kianto et al., 2017]. Innovation in these processes and procedures derived from customer needs and preferences drive Customer Satisfaction.

These skills and capabilities are in turn linked to environmental spheres such as Active Working Age Generations, Job Opportunities offered by the market, and Technologies, generating the need for constant learning due to technological advances, and highlighting the attitudes and behaviours of employees towards job instability due to the opportunities offered by the market, and the beliefs and purposes of employees, which finds similarity on the need for the technological link for its development in other research such as that by [Tovstiga & Tulugurova, 2009].

Experience and knowledge of best practices are linked to the ability to restructure business processes and procedures in line with these best practices, and in turn to document them for later use, which is consistent with previous studies.

In turn, age is a component linked to the Generations variable, which is also linked to the use of technological tools, and the attitude towards education and training, reflecting the resistance of those with more experience to use and adopt them, which may result in delays in Response Time to customers.

Similarly, the new generation finds it easy to use and apply technological tools, and can speed up the achievement of objectives set out in the established time, as well as establish better relations with clients. However, their attitude and behaviour is more unstable, as despite receiving training and work incentives, they are not guaranteed to stay in the company after having acquired these skills and abilities, which concurs with results found on the moderating influence of age such as those of [Chatterjee et al., 2022].

The EC subcategories link to the Productivity and Competitiveness subcategories by providing incentives for Target Fulfilment, measuring the efficiency of operational processes by reducing Response Time, and implementing technological tools to streamline them. The Image and Reputation of the company generates access or opportunities to establish its Position in the Market, this is also supported by an Organisational Culture that fosters the spirit and awareness to achieve that position and the fulfilment of objectives. While that same Organisational Culture is sometimes difficult to change when it comes to encouraging those experiences and knowledge of best practice to be documented, this is linked depending on the size of the company.

Management Evaluation and Control Processes such as the implementation of well-documented processes and well-established policies, allow operations to be done more efficiently and reproducibly, regardless of the experience or knowledge of the employee, favouring the Achievement of Objectives. Likewise, training and education activities foster knowledge for the achievement of Goal Attainment and learning, while technological tools enhance these activities.

In addition, technological trends drive the need for training to update knowledge and new practices, and enable the implementation of new technological tools.

These tools facilitate and streamline business activities and processes, resulting in the possibility of reducing the Response Time to customers and facilitating the Fulfilment of Objectives, which coincides with the results on the mediation of CE with CH found in other research such as that of [Kianto et al., 2017], with the aim of achieving Sales Growth.

However, the expected results are not necessarily achieved by the mediation of employees' Behavioural Skills and Capabilities.

Main challenges in the integration of Intellectual Capital components

The main barriers to integrating the components of IC could be found both inside and outside the company.

Knowledge obsolescence: Firstly, it was detected how in dynamic industries, knowledge quickly becomes obsolete. Employees must constantly keep up to date, which can create pressure and difficulty in balancing expertise and versatility.

Professional Specialisation: Some employees acquire very specific knowledge applicable only within the companies in their professional profile, limiting their capacity for external mobility. Professional specialisation in specific areas may mean a lack of knowledge of complementary aspects relevant to the business activity and the needs of the company. Moreover, this may discourage the pursuit of more generalised learning.

Employee behaviour: Employee behaviour can be affected by a variety of elements resulting in both positive and negative behaviour for the company, depending on performance. The application of incentives to employees does not necessarily drive a proactive attitude towards their work activities. In turn, their behaviour or attitude influences their daily professional activities and decisions in a random way.

Work-life balance for group training and education: opportunities for professional training and education are hindered by the presence of work unavailability, workload, and personal interests of employees, resulting in the neglect of available courses or programmes.

Labour market competitiveness: The opportunities offered by the labour market condition the behaviour of employees in search of greater benefits. Once they are educated and trained, they gain knowledge that is of high value to other companies in the market, deploying the initiative to leave their current location and move to other companies. This leaves the company that invested in their training without this useful asset of knowledge valuable to it.

Generational Culture: Storing knowledge of relevance to the company when it has not been considered, or is customary, alludes to resistance from the organisational culture, which implies a transformation of the organisational culture for acceptance and fluidity of the process. The more experienced generations, on the other hand, face vicissitudes and difficulties due to the implementation of new technological tools in the work context as a result of technological advances.

Newer generations tend to move or change companies more often, leading to less job stability compared to more experienced generations. The more experienced generations in comparison prefer more conservative operational practices, out of habit or personal comfort, which leads to a rejection of new technological implementations in the company.

Clear definition of Strategic Objectives: Similarly, in order to integrate the IC components and improve their management, the strategic objectives of the company must be considered and clearly established, which will facilitate the best direction and application of these IC components.

Conclusions

It can be concluded that the components of IC are linked to Performance variables, mainly in the non-financial dimension of Performance, and not necessarily directly. Human Skills and Capabilities are necessary for the generation and application of ideas that drive Sales Growth, the achievement of results, and the Fulfilment of Business Objectives.

Innovation, arising from employee ideas, enhances the delivery of solutions to customers, achieving Customer Satisfaction and Sales Growth.

The company's Information Systems and structures facilitate and provide different structural forms that support the activities of the employees to achieve the expected performance results. While having a favourable Image and Reputation provides the opportunity for a better Market Position.

The implementation of well-documented processes and well-established policies allows operations to be more likely to be efficient and reproducible regardless of employee experience or knowledge. Whilst Customer and Supplier Relationships primarily generate access to opportunities in a highly competitive marketplace, fostering market advantage through the establishment of strong and trusting relationships, as well as in Return on Sales.

The main challenges in integrating the components of IC showed that management itself faces obstacles regardless of the sector or business activity that companies are engaged in.

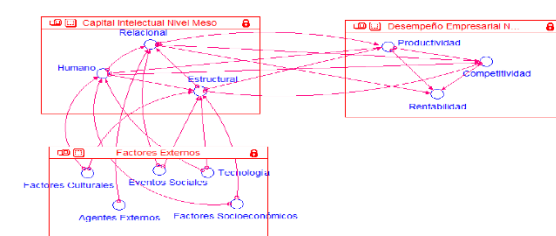
Of these, the obsolescence of knowledge and the need for constant updating due to technological advances could be identified, as well as the resistance of organisational culture and human behaviour to store relevant knowledge in the company, as there was no need to store it in the past.

Finally, without clearly defined strategic objectives, better direction and implementation of the IC components and their management approach would become more complex.

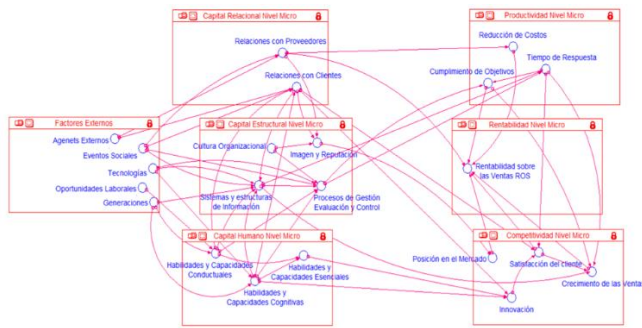
Furthermore, employee behaviour is impossible to predict, but indirectly influences company results, with resistance to change, assimilation of new practices and tools by more experienced staff, and job instability due to market offers from other companies. While the workload or the unavailability of working hours makes it difficult to develop knowledge from training or qualification.

Annexes

Annex 1. Meso-level linkages



Annex 2. Micro Level Linkages



Annex 3. Links in Atlas Ti. 2024

https://drive.google.com/file/d/1R96S30gkfeTS73suDFQKYKq-FUEIACm0/view?usp=drive_link

Declarations

Conflict of interest

The authors declare that they have no conflicts of interest. They have no known competing financial interests or personal relationships that might have appeared to influence the article reported in this paper.

Contribution of the authors

Cala-Hernández, Josué: Contributed to the idea, conceptualisation, writing, construction and analysis of the research.

Ramírez-Herrera, Dania: Contributed to the validation, formal analysis and revision of the research.

Availability of data and materials

This article was based on access to repositories to identify the state of the art of the research topic, with a bibliographic survey of books, journals and scientific articles in both English and Spanish, obtained mainly from Web of Science, Scopus, Elsevier, among others.

In addition, through semi-structured interviews and observation, it was possible to construct the coding and grouping of the variables identified.

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Abbreviations

CI	Intellectual Capital.
CR	Relational Capital.
CE	Structural Capital.
CH	Human Capital.
PS	Systemic Thinking.
PyMEs	Small and Medium Enterprises.

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Background

Benavides, L. E. [2013]. Medición, valoración y determinación del impacto del capital intelectual en la generación de valor en la empresa. *Tendencias*, 13[1], 100–115.

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