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The intermediary role of territorial economic intelligence between human capital and the economic development of territories

Le rôle intermédiaire de l'intelligence économique du territoire entre le capital humain et le développement économique des territoires

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Abstract

This study falls within the realm of territorial economics and aims to explore the possible impact of human capital on the economic development of a specific location, in this case, the city of Agadir. The authors adopted a deductive research approach and a post-positivist perspective to answer the question of whether human capital can act as a driver for the development of the city. A theoretical model linking human capital, economic intelligence, and economic development was created and tested on a sample of 257 individuals attempt by managing the territorial businesses in Agadir City. The findings revealed a strong correlation between these concepts, with human capital having the potential to significantly contribute to the city's development. However, the results also showed the importance of enhancing the participation of new actors in the city's management to fully realize its growth potential. The study sheds light on the relationship between human capital, economic intelligence, and economic development and highlights the importance of considering this relationship in promoting the growth and development of cities like Agadir.

Keywords: Human capital; Territory; Economic development; Economic intelligence; City of Agadir.

Résumé

Cet article s'inscrit dans le cadre d'une étude en économie territoriale visant à explorer la contribution du capital humain territorial au développement économique du territoire, tout en examinant les spécificités théoriques et les outils d'analyse empirique. L'objectif principal est de répondre à la question suivante : « Peut-on considérer le capital humain territorial comme un moteur pour le développement économique de la ville d'Agadir ? ». Pour répondre à cette question, nous avons adopté une approche méthodologique déductive et post-positiviste. Nous avons effectué une analyse rigoureuse en croisant la théorie avec les observations du terrain pour élaborer un modèle hypothétique reliant le capital humain, l'intelligence économique et la valorisation économique. Ce modèle a été testé auprès de 257 acteurs impliqués dans la gestion des affaires territoriales de la ville d'Agadir. Les résultats de notre étude indiquent une contribution significative et positive entre les différents concepts examinés. En outre, nous avons souligné l'importance de valoriser de nouveaux acteurs pour une meilleure gestion de ce bien collectif qu'est la ville.

Mots-clés : Capital humain ; Territoire ; Valorisation économique ; Intelligence économique ; Ville d'Agadir.

Introduction

The goal of this study is to delve into the subject of human capital's impact on economic growth in Morocco, which, despite being a longstanding topic in the country, has not been thoroughly explored in theoretical terms. The current body of research primarily focuses on descriptive analysis, leaving room for improvement in terms of explanatory and predictive capabilities. Our research seeks to address this gap by examining objective and subjective measures of human capital's role in territorial development. While our scope is geographically confined, it offers valuable insights into this under-theorized area.

Despite the significant attention given to the concept of human capital's contribution to economic development in recent years, as evidenced by the proliferation of related research, there remains a lack of consensus among scholars and a dearth of empirical evidence. This lack of clarity can be attributed to a variety of factors, including the diversity of academic disciplines that engage with the topic and their varied theoretical perspectives. It's not only of academic importance to investigate this topic, but also of economic significance. However, the challenge lies in finding commonly accepted indicators to comprehend the impact of human capital on territorial growth, as well as the potential role that economic intelligence could play in this process.

This research endeavors to examine the possibility of territorial human capital contributing to the growth and development of Agadir City. The central inquiry of this paper asks: "Can territorial human capital drive the advancement of the city of Agadir?" To answer this question, the study employs a post-positivist approach that follows a deductive method of reasoning. This methodology involves the formulation of hypotheses, which are then used to make predictions that can be verified through testing. This approach is primarily influenced by post-positivism and adopts a deductive mode of reasoning.

To address the issue at hand, this paper employs a comprehensive approach that begins with a theoretical and conceptual foundation, followed by the selection of study variables and concludes with empirical verification through structural equations model (SEM). As such, the paper is divided into three sections. The first section focuses on the theoretical and conceptual background, exploring the key concepts. The second section details the methodology and research context. The third section presents the analysis and discussion of the results obtained. The results of the study have successfully addressed the posed problem and provided insights into the spatial dynamics of human capital in the context of economic development.

1. At the intersection of various theoretical views: Human capital and economic development

In this part, we aim to articulate the theoretical concepts surrounding the social and spatial evolution of human capital and its relationship with the economic development of territories, in order to discern potential relationships and formulate the research framework.

1.1. Human capital as a social and spatial phenomenon

Human capital concept is widely used in the field of economics, which makes it difficult to pinpoint exactly where it first came from, especially since it has taken on several synonyms since the classics.

Before the 20th century, associating capital and Man is an insult to the latter, because human activity cannot be measured, gaged, like that of a simple machine that is evaluated by its output, because it is dangerous that economic theories and corporate strategies take into accountand quantify human activity. They consider that this terminology devalues human dignity by assimilating individuals to sets of knowledge and skills little different from the components of a machine.

The concept of human capital was first introduced in the 1960s through the seminal works of several researches. Since then, it has become a widely recognized concept and has been used to address various economic and social issues. Over the years, the concept of human capital has continued to evolve and has been regularly applied in various fields.

Currently, many scholars view human capital mechanisms as both a social and economic phenomenon that encompasses the education, the knowledge and several attitudes embodied by individuals in a particular territory. To discuss human capital, it is evidential to take a specific temporal and spatial trajectory, taking into account various factors such as the time and space laws, particularly those that enable coordination among territorial actors.

Similarly, the notion of territorial human capital as an analytical tool provides robust insights into the functioning and collective actions of a territory. This is because the knowledge and collective experiences of territorial actors accumulate and evolve, aimed at promoting governance mechanisms that address the social and economic issues affecting local populations (El Moutaoukil and Chakir, 2021).

Integrating the idea of territorial human capital presents a significant challenge to the academic community. This paper aims to bridge the gap between existing theoretical researches and practical observations by considering territorial human capital as an expansion of territorial social capital. Human capital can be defined as:

- Combination of abilities and expertise gained with education and practical experience;
- Incorporating both abilities and encompassing knowledge, learning and personal connections;
- Having three key dimensions in socio-spatial terms: relational, cognitive, and structural.

Alongside the analysis of territorial human capital and the functioning of the socio-economic landscape, new perspectives on the economic enhancement of territories have emerged. These new perspectives center around the nature of public action and the mechanisms used to regulate and manage the organization of societies within a given space. In this section, we will delve into the intricacies and unique features that contribute to the economic growth and development of territories.

1.2. Economic Development of the Territory

The economic enhancement of territories is one of the tools implemented in the framework of territorial development policies. It reflects a trend that consists in emphasizing the double win strategies that allow the enhancement and development of the territory.

Since its appearance in 1975, territorial development has evolved a great deal in theory and especially in practice. During the 1980s, the economic context was favorable to its expansion. First of all, because the globalization of the economy has enlarged urban spaces. Territories were obliged to position themselves in relation to others in international competition. Then, the valorization of territorial actors obliges the decision-makers to highlight their space and thus to distinguish themselves from competing territories. Territorial specificity becomes an economic value that territorial managers willingly communicate (Chakir and El Moutaoukil, 2022).

The development of the territory thus becomes a collective process where all the public, private and civil actors are involved in order to achieve the territorial thing and the satisfaction of the needs of the territorial stakeholders. It is therefore a way of thinking and implementing a territorial development policy in market contexts. It is linked to economic development issues.

Territorial enhancement is also a strategic tool, an interface between companies and their customers or between the local authority and those it wishes to attract. It is therefore an adjustment tool between the development policies of a territory and the people to whom they are addressed. These people are endowed with a stock of human capital accumulated on the basis of interactions made in the territory.

In order to delve deeper into the concept of territorial economic development, it's important to consider three key components

- The business and investment climate;
- The logistical development of the territory;
- The existence of an image and a territorial identity.

Nevertheless, possessing human capital is insufficient on its own, proper implementation of economic intelligence is a crucial factor in maximizing the economic value of the territory. In this context, territorial actors with diverse skills and perspectives can serve as a catalyst to enhance the social and spatial recognition of human capital.

1.3. Economic Intelligence: A Renewal for the Development of the Territory

Economic intelligence is a term with multiple meanings that encompasses a vast body of literature and terminology. This renewed interest is tied to the mutations in the production system and the growing complexity of actor's needs, requiring the use of various things to express and assess the implications of policies.

From a territorial perspective, economic intelligence refers to the collective efforts of gathering, analyzing, and disseminating information that is useful for the actors within the territory, with the intention of utilizing it. These activities are conducted within the legal framework and include measures to protect the territory's resources, while ensuring efficiency and cost-effectiveness (Redouaby and Lafrem, 2020).

Territorial economic intelligence encompasses all the techniques and methods that help decision-makers gain better insight and control over their area of operation, by utilizing available data to make informed and strategic decisions. In essence, it is the art of gaining knowledge and understanding in order to act.

The responsibility of managing territorial human capital and economic value creation lies

jointly with private actors who initiate such activities and public actors who oversee territorial management. Economic intelligence, in this sense, should provide an alternative approach to comprehend and assess the value creation mechanisms, considering both physical and informational flows that human activities bring about (Masson, 2013).

To enhance the territorial economic development, it is crucial to establish a framework for improved access to the territory and a more favorable investment climate. This calls for the coordination of all actors involved in territorial valorization, with the ultimate goal of maximizing the overall performance of the territory.

Nevertheless, the valorization of the territory can give rise to two situations: either to let the market do its work and favor concentration in order to be efficient; or to carry out a policy of territorial equity which leads to a complementarity of resources between regions at the risk of leading to inefficiency. It is in the face of this antagonistic dilemma that it is necessary to mobilize economic intelligence practices (Raimbault, 2013).

Despite efforts to achieve economic intelligence and improvement, it appears that these objectives have not yet been met across all territorial levels. There is a disparity in the way that actors approach these goals, as well as in the planning tools used, indicating that the process of enhancing the territory is still in its early stages and has not yet fully integrated with the economic intelligence of the territory.

Building upon these theoretical foundations, we can formulate a rough understanding of territorial economic intelligence by looking at three commonly used tools to comprehend the concept.

- Making information available to actors;
- Steering and support of actors;
- Incentives for intentional coordination between actors.

The impact of human capital on economic development is undeniable. It has become increasingly important to invest in the human capital of territories to ensure their potential for long-term growth and sustainability. Economic intelligence can be seen as a mediating factor between human capital and economic development, providing an opportunity to make sound and informed decisions regarding investment strategies.

Rousseau (2009) has written a comprehensive paper on the role of Human Capital and Economic Development of cities. The paper delves into the mediating role of economic intelligence and its impact on territorial development. The author discusses how advances in Artificial Intelligence and Machine Learning can be leveraged to develop smarter, nimbler, more responsive economic policies that drive urban growth. He also proposes practical strategies to identify, analyze and ultimately capitalize upon opportunities for economic transformation in the context of globalized markets and technological disruption. So we will try in this paper to explore the role of economic intelligence in influencing the level of economic development for territories.

To illustrate the theoretical implications discussed, it seems necessary to present the underlying theoretical hypotheses and justifications.

H.1: Territorial Human Capital Positively and Significantly Contributes to the Economic Development of the Territory.

The potential contribution of territorial human capital to the economic development has been widely studied in the economic literature. One of the first authors to address this topic was Jacob Mincer in the 1960s. He developed the human capital theory, which states that investment in education and training of individuals can have a positive impact on their future productivity and therefore on economic development. Since then, many authors have expanded on this theory by studying the links between human capital and territorial development. Among them, we can mention Gary Becker, Edith Penrose, Richard Murnane, etc.

More recent studies on the contribution of territorial human capital to economic development include (Gruzina et al., 2021; Vukovich et al., 2018; Trigilia, 2001) various methods, such as spatial analysis, regression analysis, etc., to evaluate the impact of human capital on economic development, and provided concrete results on how different forms of territorial human capital can stimulate economic development at the territorial level.

H.2: The territorial human capital positively and significantly contributes to the economic intelligence of the territory.

The contribution of territorial human capital to the economic intelligence of a territory is often associated with economist Richard Florida (1995) and his concept of creative classes. Florida

argues that regions that attract and retain creative talents tend to be more innovative, competitive, and economically sustainable.

Other authors such as Charton et al. (2003) have also worked on this subject. They suggest that territorial human capital can be defined as the set of intellectual, cultural, and social resources of a territory that can be mobilized to enhance the competitiveness and attractiveness of the territory and, therefore, the practices of economic intelligence.

More recent studies, such as Jones et Schneider (2006); Meisenberg et Lynn (2011); and Nešković et al. (2016), suggest that territorial human capital reinforces the mechanisms of economic intelligence in several ways.

Firstly, the level of education and training of the residents of a territory can impact the territory's ability to develop and implement effective economic intelligence strategies. The more educated and trained the population is, the more capable they will be of creating and managing innovative and competitive businesses.

Moreover, human capital can also influence the quality and quantity of research and development that takes place in a territory. A territory with a qualified and experienced workforce is more likely to conduct high-quality research projects and develop innovative acts.

Finally, human capital can also influence the relational networks of a territory. A qualified workforce can facilitate coordination and inter-actor partnerships, thus contributing to strengthening the territory's position on the economic scene.

H.3: Territorial Economic Intelligence Positively and Significantly Contributes to Economic Development.

Territorial economic intelligence can have a significant impact on the economic development of a territory due to several theoretical factors. Firstly, economic intelligence can improve a territory's competitiveness by providing information on market opportunities and threats, as well as the strategies of competitors. This can enable territorial actors to make informed decisions to enhance their position in the territory (Calof, 2016).

Furthermore, economic intelligence can also support the development of a territorial economy by encouraging cooperation and collaboration among actors. This can foster the creation of new

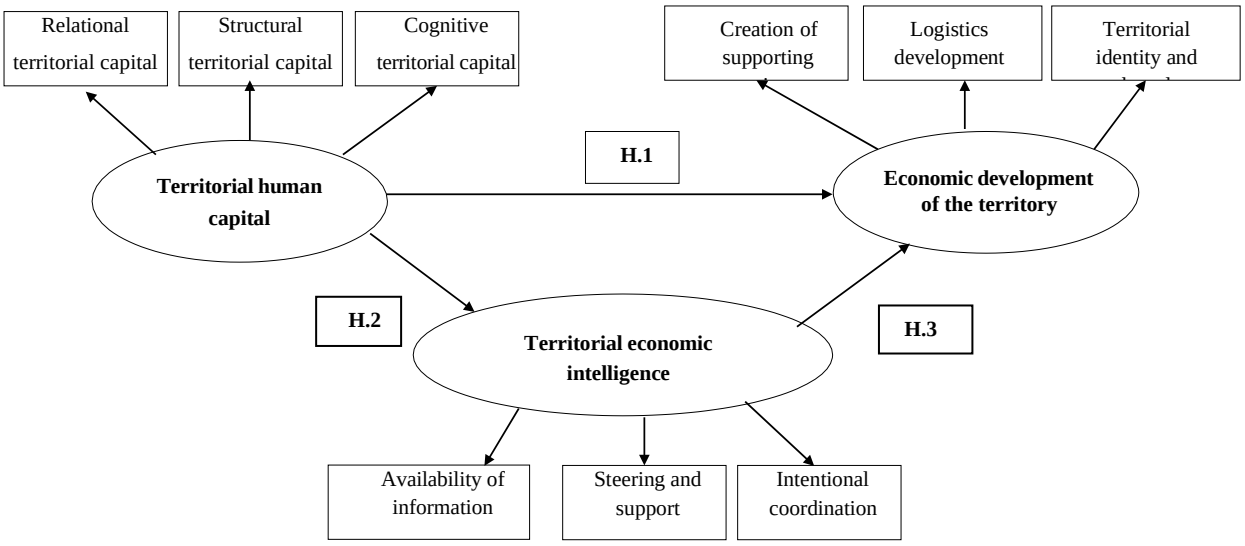
process and services, as well as the adoption of new technologies, which can drive economic development (Korauš et al., 2017).

Finally, economic intelligence can also play a crucial role in protecting a territory's intellectual assets, ensuring that knowledge and innovations are protected by patents and intellectual property rights. This can help preserve the value of economic actors and encourage foreign investments (Pan et al., 2016).

In conclusion, economic intelligence can positively influence the economic development of a territory by enhancing competitiveness, promoting logistic development, and protecting intellectual assets. This can lead to sustainable economic enhancement and an increase in wealth for the local population.

To summarize the findings of this analysis, we have established a comprehensive theoretical framework that outlines the essential concepts and interconnections, taking into account various theoretical perspectives. This framework serves as a solid foundation for constructing measurement scales and improve them through empirical research. The resulting research framework, which takes into account both abstract theory and real-world observations, is illustrated in the accompanying figure.

Fig.1 Theoretical research framework



Source: Authors

Operationalizing the key concepts and sub-concepts is a critical step in testing the research model. To achieve this, the authors have identified 22 measurement items that reflect various aspects of territorial human capital, economic intelligence of the territory, and economic valorization of the territory. These measurement items will be assigned numerical values using a five-point Likert scale, with five categories of responses starting from strongly disagree to strongly agree. The table provided in the study details the various items used to assess the concepts being studied.

Table 1: Underlying Theoretical Constructs and Chosen Assessment Indicators

Concepts	Measurement scales	Item Code
Territorial human capital	Common cultural background and aligned values and lifestyle	CCOG_1
	Similar outlooks on business partnerships	CCOG_2
	Matched outlooks and goals	CCOG_3
	Close, frequent personal interaction	CREL_1
	Esteem and mutual confidence	CREL_2
	Spread of information and sharing in business circles	CSTR_1
	Various levels and types of territorial interaction.	CSTR_2
Economic development of the territory	The territory's investment climate allows for economic development	CPP_1
	Disseminating the entrepreneurial culture leads to the enhancement of the city	CPP_2
	Facilitating and backing ventures in growing sectors can boost the territory's appeal	CPP_3
	Having well-built physical structures can boost the territory's value	DL_1
	Setting up logistics hubs is a way to enhance the territory's attributes	DL_2
	Modernizing the structures for access to the territory allows for better economic development	DL_3
	The existence of a territorial identity contributes to economic development	IIT_1
	Territorial branding is an enhancement of the territory	IIT_2
	Preservation of the territorial heritage enhances the territory	IIT_3
Territorial economic intelligence	Enabling access to information increases the involvement of territorial actors	DINF_1
	Transparency fosters the participation of territorial actors	DINF_2
	Tracking and backing of territorial actors reinforces their engagement	CAP_1
	Involving territorial actors in steering activities boosts their participation	PAC_2

	Collective action by actors enhances the participation of actors	CINT_1
	Working together with actors is a powerful way to get territorial actors involved	CINT_2

Source : Authors

It is time to move forward with the reasoning behind our methodology and provide a detailed description of our research area, adding credibility to our study.

2. Methodology and materials

Our research approach is primarily influenced by the post-positivist paradigm of deduction. This method is based on the principle of alternating between abstract theory and real-life observations. In this sense, the researcher formulates their research question by drawing on established theories, generating hypotheses, and then testing them to confirm or disprove them.

To address our research problem, we conducted a comprehensive review of relevant literature, including works that relate to our key concepts and topics of interest. This review helped us build a sound framework for our analysis. Adhering to the post-positivist paradigm, we then modeled the data to gain deeper insights into the concepts of territorial human capital, economic intelligence, and valorization.

We selected the city of Agadir as our research field due to its diverse range of actors and its significance in the economic and administrative landscape of Morocco. Our choice to study the economic valorization of this territory is based on its logical and relevant nature. The access to the research field provides us with ample opportunities to identify the various territorial actors involved in managing the city of Agadir, including institutional, economic, and civil actors. These actors include:

- The primary actors responsible for managing territorial activities in the city of Agadir are those with significant institutional power in the public sector, such as the regional council, the provincial council, the local authority of Agadir, various governmental departments, public institutions, and companies.
- The city of Agadir boasts a thriving business community, comprising of companies and cooperatives that play a crucial role in driving its economic growth and development.

In this research, we have zeroed in on the key categories of economic actors and their corresponding representative organizations.

- Civil actors also play a crucial role in the economic development of the city. Civil society organizations (CSOs) with a focus on territorial management are active participants in the democratic process and contribute to the development and implementation of decisions and projects by elected institutions and territorial public authorities. Through their participation, they help ensure that the needs and concerns of the local community are taken into account in the decision-making process.

To fully grasp the process of economic valorization, a thorough examination of a representative sample of all involved stakeholders would have been necessary, requiring numerous surveys conducted over a prolonged period of time. To achieve this, careful consideration was given to the selection of samples and their respective lists and strata. The accompanying table provides a comprehensive summary of the information used for sample collection.

Table 2 Calculating the sub-sample sizes

Actors categories	Sub-populations	Information sources	Sub-samples	Survey rate	Response rate	Final survey
Public actors	32	Snowball of data fromfield visits (2019)	24	75 %	**100 %**	**24**
Economic actors	54 565 companies	Morocco Wilpro database (2021)	96	0.18 %	**83.33 %**	**80 companies**
	306 cooperatives	ODCO (2021)	74	24 %	**94.60 %**	**70 cooperatives**
Civil actors	9 875	Civil society direction (interior ministry-2021)	95	0,96 %	**87.36 %**	**83 SCOs**

Source : Authors

In the end, we carried out the study with a sample of 289 actors who manage territorial affairs in Agadir through a questionnaire survey. Out of these, only 257 questionnaires were used for analysis. The data from these questionnaires was analyzed to test the proposed model and provide answers to the questions related to the contribution of territorial human capital to the economic development of the territory.

3. Results and discussion

The quantitative study was conducted in three stages through factors and structural analysis. The research adopted the procedure proposed by Churchill (1979) and revised by MacKenzie et al. The first stage involved conducting an exploratory factor analysis on the measurement scales. This involved a series of principal component analyses, the results of which were evaluated using the KMO and Bartlett's Sphericity tests. Any items with factorial contributions lower than 0.5 (Evrard and Roux, 2009) were removed. To assess the reliability of the measurement scales, Cronbach's alpha coefficients were calculated.

In the second stage, to test the SEM (Structural Equation Modeling) model, the PLS (Partial Least Squares) method was used. This method is more suitable than the covariance-based methods in terms of objectives and constraints of use. It allows for testing developing models, handling non-normally distributed data, and working with small samples. The results of the analysis and discussion of the findings will be presented in the following stages of the study.

3.1. Results of the data analysis

Before proceeding with SEM modeling, reliability and validity tests of the quantitative measurement instruments should be conducted to ensure that the scales actually measure the constructs they are intended to measure.

In other words, in order to prepare the data for validation, we used exploratory factor analysis to purify and test the homogeneity of the scales included in the questionnaire. The aim was to check whether the scale accurately assessed the construct it was supposed to measure and whether the items grouped well into factors through principal component analysis.

3.1.1. Purification of the Territorial Human Capital Measurement Scale

The assessment of the reliability of the data is necessary before starting a factorial analysis. In this sense, the test of the homogeneity of the measurement items, with the factors of the studied construct, requires a study of the factor structure and the goodness-of-fit indices resulting from an orthogonal Varimax rotation. The results of this analysis are presented in the table below.

Table 3 Summary of the factorial analysis after Varimax rotation and Kaiser normalization of the "Territorial human capital" construct (IBM SPSS V.24)

Quality of representation		**Item/factor correlation**		
		Component 1	**Component 2**	**Component 3**
CCOG_1	0.7150	0.768		
CCOG_2	0.7281	0.767		
CCOG_3	0.6132	0.630		
CREL_1	0.4722		0.377	
CREL_2	0.6306		0.851	
CSTR_1	0.4958			0.462
CSTR_2	0.8347			0.821
Interpretations		**Cognitive capital**	**Relational capital**	**Structural capital**
Factoring index	Critical values	Values		
Eigenvalue of the selected factor	> 1	2.934	2.055	1.357
% of variance explained	-	31.918	23.077	15.333
% of cumulative explained variance	> 60%	31.918	54.995	70.328
Cronbach's Alpha	> 0.6	0.750		
KMO Index	> 0.5	0.764		
Meaning Bartlett	< 0.05	0.000		

Source : Authors

In the light of the results obtained, it appears that the values of the correlations are higher than 0.5, with the exception of the items "CREL_1" and "CSTR_1", revealing that the variables have common characteristics. Their purification therefore becomes relevant. The Kaiser test of sampling precision, which measures the overall integrity between variables, is 0.764. (Evrard et al., 2003) show that the closer this index is to 1, the more the variables can undergo factoring. Moreover, the measurement scales have a satisfactory reliability as the Cronbach's alpha coefficient shows an acceptable value of 0.750.

3.1.2. Purification of the scale of measurement of the economic value of the territory

For the scale measuring the economic valorization of the territory, we will apply the same procedures of principal component analysis to test the reliability and homogeneity of the items with the factors by assessing the quality of the factorial contributions. An orthogonal Varimax

rotation allowed us to bring out a clear factorial structure and tolerable goodness-of-fit evaluation indices, as shown in the table below.

Table 4 Summary of the factorial analysis after Varimax rotation and Kaiser normalization of the construct "Economic development of the territory" (IBM SPSS V.24)

Quality of representation		Item/factor correlation		
		Component 1	Component 2	Component 3
CPP_1	0.8270	0.818		
CPP_2	0.8611	0.790		
CPP_3	0.6782	0.622		
DL_1	0.6251		0.777	
DL_2	0.8375		0.829	
DL_3	0.6051		0.616	
IIT_1	0.4782			0.421
IIT_2	0.5864			0.680
IIT_3	0.3801			0.457
Interpretations		**Creation of supporting projects**	**Logistics development**	**Territorial Identity and brand**
Factoring index	Critical values	Values		
Eigenvalue of the selected factor	> 1	3.175	1.645	1.159
% of variance explained	-	35.273	18.278	12.881
% of cumulative explained variance	> 60%	35.273	53.551	66.432
Cronbach's Alpha	> 0.6	0.758		
KMO Index	> 0.5	0.762		
Meaning Bartlett	< 0.05	0.000		

Source: Authors

The quality of representation of the items "IIT_1" and "IIT_3" in the factor space is not satisfactory, which is why we decided to eliminate them and to be satisfied with the other measurement variables. The correlations between the other items and their factors are significant, suggesting low discriminant validity between them. As for the test of sample precision and reliability, we can conclude that the measurement scale used meets the validity conditions.

3.1.3. Purification of the scale of measurement of the territory's economic intelligence

We have operationalized the economic intelligence construct in six items, each referring to the measure of the involvement and participation of territorial actors with regard to a previously studied factor. The addition of this latent variable constitutes, in our eyes, a methodological and statistical challenge since the modeling by structural equations will take into consideration this construct. In this respect, we tested the homogeneity of the scales under the condition of the factoring parameters. The results of the principal component analysis are presented in the table below.

Table 5 Summary of the factorial analysis after Varimax rotation and Kaiser normalization of the construct "Territorial economic intelligence" (IBM SPSS V.24)

Quality of representation		**Correlation item/factor**		
		Component 1	**Component 2**	**Component 3**
DINF_1	0.7711	0.645		
DINF_2	0.8564	0.837		
PAC_1	0.7782		0.831	
PAC_2	0.8282		0.820	
CINT_1	0.8872			0.877
CINT_2	0.7668			0.752
Interpretations		**Availability of information**	**Steering and support**	**Intentional coordination**
Factoring index	Critical values	Values		
Eigenvalue of the selected factor	> 1	3.813	2.075	1.748
% of variance explained	-	33.558	24.909	11.474
% of cumulative explained variance	> 60%	33.558	58.467	69.941
Cronbach's Alpha	> 0.6	0.880		
KMO Index	> 0.5	0.786		
Meaning Bartlett	< 0.05	0.000		

Source : Authors

The factorial analysis retained the six items of the construct studied. That said, all the factorisation parameters are satisfactory, which allows us to retain the "Territorial economic intelligence" dimension as it was conceived since the operationalisation of the construct. It must be admitted, however, that the goodness of fit of the construct is very representative since the

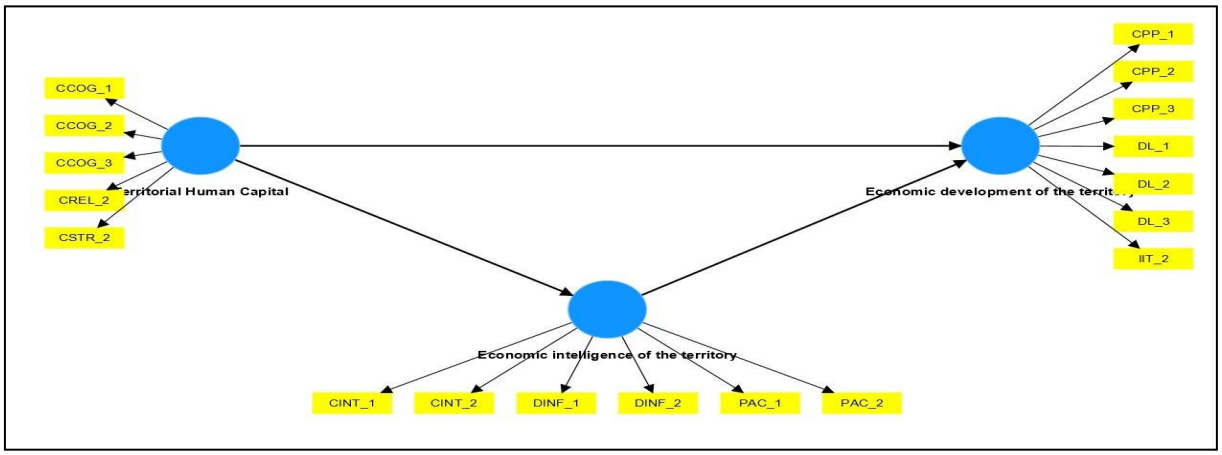
majority of the coefficients are very far from their critical values. In addition, the three exploratory factor analyses allowed us to fine-tune our hypothetical modelby taking into account the cleaned items, resulting in a statistically representative specification of the structural equation model.

3.1.4. Structural equation modeling

To validate our model, we employed the most recent advancements in PLS analysis, using SmartPLS v.3. SEM modeling typically involves five stages: defining the model, establishing its validity, calculating its parameters, evaluating its fit, and finally, conducting a confirmatory analysis.

Defining the model is the first step, and involves creating a visual representation of the overall measurement path. In this stage, the various components of the model and their interconnections are identified, as depicted in the accompanying figure.

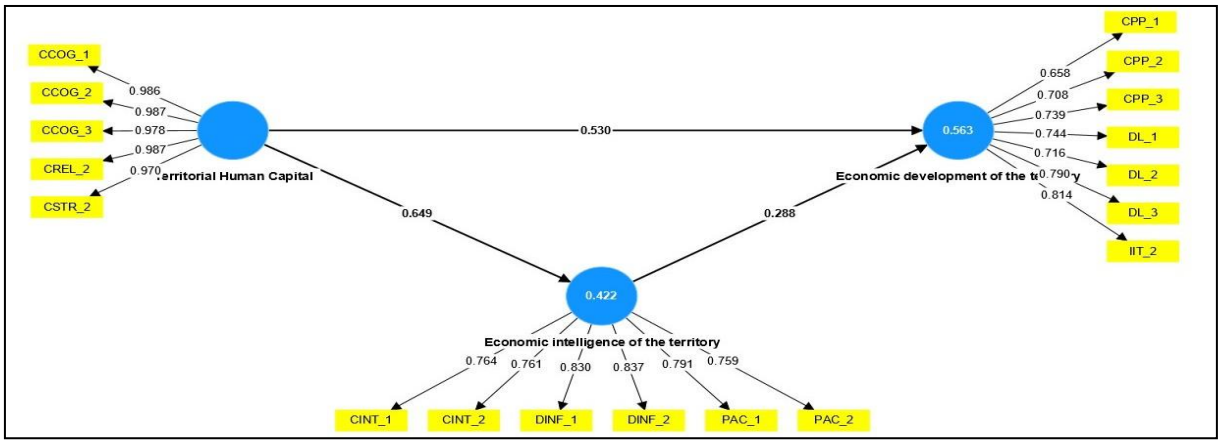
Fig. 2 Specification of Global model (Using SmartPLS V. 4.0)



Source: Authors

The SEM methodology we're using has two phases, the first being the identification of the model based on 18 observed variables that are believed to signify three underlying latent variables. To ensure the validity of the model, the order condition (number of degrees of freedom) needs to be evaluated, as advised by Schumacker & Lomax (2004). Our model passes this test, with a positive degree of freedom (dof=218). In the next phase, we'll be estimating the model using the PLS algorithm on a sample of 257 territorial actors in Agadir. This will result in the creation of the figure depicted below.

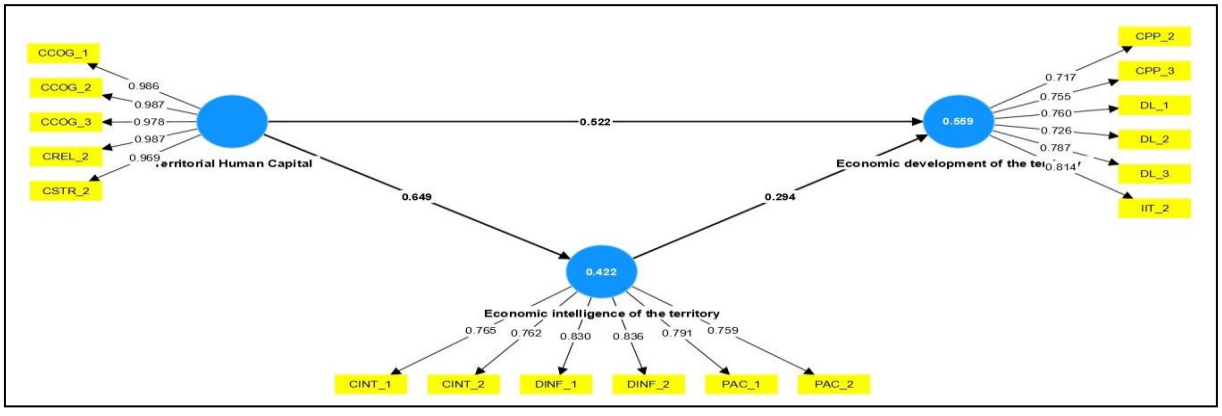
Fig. 3 Estimation of Global model (Using SmartPLS V. 4.0)



Source: Authors

The findings of the model parameter estimation showed that the majority of the measurement items utilized had values of contribution (loading factors) higher than 0.7. However, one item "CPP_1" that was used to gauge the economic valorization of the territory had a relatively low correlation coefficient. To get a better understanding of the dimensions and contribution links, a readjustment is required. This involves removing the item that does not meet the criteria for validity and order. The newly specified global model is as follows:

Fig. 4 Calculating the revised overall model (Using SmartPLS V. 4.0)



Source: Authors

Assessing the suitability of the revised model involves evaluating its capacity to accurately reflect the data. This entails examining both its convergent validity and its discriminant validity. Convergent validity is calculated through the use of consistency measures, such as Cronbach's alpha or Fornell and Larcker's internal consistency (1981). The results should be interpreted in accordance with the guidelines outlined by Nunnally (1978).

Discriminant validity evaluates whether a construct is distinct from other constructs in the model. This is done by calculating the average variance extracted (AVE) between the construct and its measurement indicators and comparing it to the variance between the construct and other constructs. An AVE value above 0.5 indicates good discriminant validity, as outlined by Chin (1998). This can be visualized in the correlation matrix, where the correlations between constructs are displayed in the lower left-hand side of the matrix diagonal, and the square root of the AVE for each construct is displayed along the diagonal, as depicted in the accompanying table.

Table 6 Evaluating the discriminant nature of the model (Using SmartPLS V. 4.0)

	AVE	Territorial human capital	Territorial economic intelligence	Economic development of the territory
Territorial human capital	**0.964**	**0.982**		
Territorial economic intelligence	**0.626**	0.649	**0.791**	
Economic development of the territory	**0.578**	0.713	0.633	**0.761**

Source : Authors

Therefore, we move forward with evaluating the overall model through the use of various tests and critical values. The following table presents the results of important indicators including Cronbach's alpha, composite reliability, average extracted variance, R^2, and the Goodness of Fit (Gof) index.

Table 7 Assessing the fit of the global model: Key indicators (Using SmartPLS V.4.0)

Constructs	Cronbach's Alpha	Composite reliability	AVE	R^2	Goodness of fit Index
Territorial human capital	0.991	0.992	0.964		0.5953
Territorial economic intelligence	0.881	0.909	0.626	0.422	
Economic development of the territory	0.855	0.891	0.578	0.559	

Source : Authors

The results of our analysis have indicated that our model meets the standards of quality established by data analysts. However, to verify the reliability of these results, a bootstrapping analysis must be conducted to determine the significance of the relationship between territorial human capital and economic valuation in various scenarios. The outcome of this analysis can be seen in the accompanying table.

Table 8 Estimating Causal Models through Hypothesis Testing and Bootstrapping

	β	Statistic T	P	Decision
H1. Territorial human capital =>Economic development of theterritory	0.522	4.433	0.000	**Supported**
H2. Territorial human capital => Territorial economic intelligence	0.649	7.873	0.000	**Supported**
H3. Economic intelligence of theterritory => Economicdevelopment of the territory	0.294	2.549	0.011	**Supported**

Source : Authors

The results of the Bootstrapping show that the territorial human capital contributes positively and significantly to the economic intelligence of the territory and in the same way the economic intelligence contributes to the economic development. However, these findings do not allow us to affirm the mediating role of economic intelligence in the contribution of territorial human capital mechanisms to economic development, hence the relevance of separate regressions following the methodological procedure recommended by (Cohen, 2003).

The usual representation of a mediator effect involves three variables: the independent variable (territorial human capital), the dependent variable (economic development of the territory) and the mediator variable (economic intelligence of the territory). The relationships are measured by the standardized correlation coefficients. A four-step analysis was conducted to confirm the existence of the mediation effect. The table below summarizes these different regression steps.

Table 9 Mediation test: Territorial human capital → territorial economic intelligence → territorial economic development

Regression	***Regression coefficients(+ T-test value)***	**Decision**
Territorial human capital => Economic development of the territory	C1= 0.714; t =12.079	**Presence of the Mediator Effect**
Territorial Human Capital => Territorial economic intelligence	C2 = 0.651; t = 8.064	
Territorial human capital + Territorial economic intelligence => Economic development of the territory	C3 = 0.521; t = 4.438 C4 = 0.297; t = 2.603	
Mediating effect: - C1 > C3: the mediating effect is established - C3 is relatively small, but significant: **mediation is partial**		

Source: Authors

To present robust conclusions to the research question, we aim to compare the main findings with the literature and provide a thorough analysis

3.2. Discussion of results

At the conclusion of this study, it appears that the combination of theoretical examination and practical application makes this work a valuable contribution to the field of research regarding the relationship between territorial human capital and economic valorization in an urban area. The current emphasis on human capital in economic development research cannot be fully understood without taking into account the evolution of economic intelligence processes and mechanisms. The results of this study indicate that human capital has a positive and significant impact ($\beta = 0.522$) on the economic valuation of Agadir, the urban area studied.

The city of Agadir has been equipped with a strong relational and cognitive potential, stemming from the negotiation process of urban operations between actors. This has enabled it to play a major role in its own development. However, the study finds that the driving forces behind the economic growth of Agadir are primarily the promotion of entrepreneurialism, physical infrastructure networks, and preservation of territorial heritage. Its advantageous geographical location, linking the North and South of the country, combined with a diverse range of functions and natural assets, including a dynamic population, has made Agadir a desirable location for national and international investment.

Despite the advantages of territorial human capital, viewed solely as a means of capacity-building among actors, it poses a potential threat to democracy and citizenship. The public interest may become just one among many in the bargaining between actors. This could lead to a blurring of the lines between democracy and management and render cities susceptible to the influence of economic forces alone. Therefore, it’s imperative to foster a system of solidarity and collaboration among networks and cities, and to redirect the focus of actors towards reinforcing these networks, modeled after the principles of territorial economic intelligence. In the case of Agadir, this should be incorporated into a broader policy aimed at strengthening the role of external administrative services.

The results obtained support the partial role played by economic intelligence in the development of Agadir city. This finding is in line with the current understanding of the connection between human capital and development via economic intelligence. However, implementing such a

transition is not a straightforward task given the complex challenges in managing the city and coordinating the various stakeholders involved. Any plans for this transition should therefore be viewed as guidelines rather than set rules, as the reorganization of the area must be tailored to the specific context and considerations of the local environment.

Conclusion

The present study aims to examine the impact of different forms of territorial human capital on the economic development of Agadir city. The paper is structured into three main sections. In the first section, we provide an overview of the key concepts and their theoretical foundations. This includes a review of the conceptual and evolutionary development of these concepts and the measures that can be used to operationalize them.

In the second section, we outline the methodology and research design. To gather data for our analysis, we conducted a survey of territorial actors in Agadir city using a questionnaire, resulting in 257 usable responses. These data were then analyzed to address the research questions. In the third and final section of the paper, we present the results of our analysis, which were obtained using recent advancements in structural equation modeling with the SmartPLS procedure. These results provide insights into the contribution of human capital to the economic value of an urban area.

Our findings suggest that there is a mutually beneficial relationship between human capital, economic intelligence, and value added. This relationship has been shown to evolve in a way that benefits both parties, without compromising the unity and integrity of the others. The current state of transition in the urban environment of Agadir and the various social, institutional, and managerial changes occurring in the city provide further evidence of this. The diversification of actors and the implementation of new norms are essential to shift from a monocentric vision of the city to a polycentric approach to urban development.

While this research offers valuable insights, it’s important to acknowledge some limitations. One such limitation is the difficulty in obtaining data from actors, which impacted the investigative method used. Given these limitations, further research is needed to address the relationship between human capital, economic intelligence, and value. As a next step, we plan to conduct a comprehensive study of the city of Agadir and the public and private actors involved in managing territorial businesses in the Souss Massa Region. This will help to provide

more robust answers to the underlying questions of the relationship between human capital, economic intelligence, and value.

The study provides scientific insights into the factors that contribute to economic development in the region and the role that territorial economic intelligence can play in this process. The findings of the study suggest that territorial economic intelligence can help to bridge the gap between human capital and economic development by providing the necessary resources, knowledge, and expertise.

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