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Formation of the entrepreneurship competence on business opportunities management for sustainable development

Formación de la competencia emprendimiento en gestión de oportunidades de negocios para el desarrollo sostenible

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ABSTRACT

Objective: To analyze the limitations in the development of entrepreneurial skills in the management of business opportunities for executives in the Cuban state business sector, evaluating the current context and proposing solutions to strengthen sustainable development.

Materials and methods: A non-experimental descriptive design with a mixed approach was employed. Methods included bibliographic and documentary analysis, factual diagnosis, participant observation, structured interviews, and participatory workshops. Additionally, academic articles, institutional documents, and training programs were analyzed to identify gaps and limitations in entrepreneurship competence training.

Results: Significant deficiencies were identified in continuous training programs, with limited inclusion of specific competencies such as opportunity identification, creativity, teamwork, and effective communication. Organizational rigidity; centralized decision-making, and the historical perception of entrepreneurship as incompatible with the state system restrict business opportunity management. Integrated approaches were proposed to redesign academic programs, fostering collaborative networks and practical methodologies.

Conclusions: Developing entrepreneurial competencies is essential to invigorate the state business sector and contribute to sustainable development in Cuba. Academic programs must be redesigned to align education with market demands and promote sustainable entrepreneurship ecosystems.

KEYWORDS: continuing education, entrepreneurial competence, business opportunities management, sustainable development

RESUMEN

Objetivo: Analizar las limitaciones en la formación de la competencia emprendimiento en la gestión de oportunidades de negocios de directivos del sector empresarial estatal cubano, evaluando el contexto actual y proponiendo soluciones para fortalecer el desarrollo sostenible.

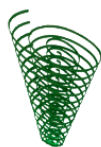
Materiales y métodos: Se empleó un diseño no experimental descriptivo con enfoque mixto. Los métodos incluyeron análisis bibliográfico y documental, diagnóstico fáctico, observación participante, entrevistas estructuradas y talleres participativos. Además, se analizaron artículos académicos, documentos institucionales y programas de formación para identificar vacíos y limitaciones en la formación de competencias emprendedoras.

Resultados: Se identificaron deficiencias significativas en los programas de formación continua, con escasa inclusión de competencias específicas como identificación de oportunidades, creatividad, trabajo en equipo y comunicación efectiva. Las estructuras organizacionales rígidas; la centralización de decisiones y la percepción histórica del emprendimiento, incompatibles con el sistema estatal limitan la gestión de oportunidades de negocios. Se propusieron enfoques integrados para rediseñar programas académicos, fomentando redes colaborativas y metodologías prácticas.

Conclusiones: La formación de la competencia emprendimiento en gestión de oportunidades de negocios se develó como un elemento crucial para dinamizar el sector empresarial estatal y contribuir al desarrollo sostenible en Cuba, lo que justifica el rediseño de los programas académicos para alinear la educación a las demandas del mercado y promover ecosistemas de emprendimiento sostenibles.

Palabras clave: formación continua, competencia emprendimiento, gestión de oportunidades de negocios, desarrollo sostenible

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Introduction

The importance of the formation of the entrepreneurship competency in business opportunity management lies in its contribution to the achievement of the Sustainable Development Goals (SDGs) and in overcoming the associated challenges. This competency is linked to the ability to identify and take advantage of business opportunities, generating sustainable results in a context of crisis and uncertainty where the consideration of the management of marketing forces is decisive in the formation of the competency (Salas et al., 2021).

Academic interest in entrepreneurship is based on its proven contribution to economic growth, the revitalization of the socio-productive sector, the promotion of regional spaces, the dynamization of innovation processes and the generation of new jobs (Campana & Chamorro, 2022; Morales, 2023; Moyano & Marín, 2024).

The systematization of the scientific literature made it possible to appreciate relevant multidimensional contributions that integrate educational, psychosocial and economic approaches.

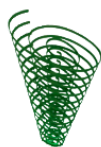
Authors such as Fayolle et al. (2006), Moriano et al. (2006) and Kirby (2006) highlight the influence of education and motivation on entrepreneurship; Tremillo (2011) emphasizes learning to undertake as a new competence; Jiménez (2012) emphasizes macroeconomic conditions; while Cobo (2012) and Carrillo et al. (2024) stress the need for innovation and technological adaptation.

However, other conceptual positions such as Agboola (2004), emphasizes experiential pedagogy; while Kantis et al. (2019); Kelley et al. (2010) and Monzón and Torres-Ortega (2021) approach entrepreneurship from a systemic and contextual perspective. Likewise, Cabana-Villca et al. (2013) and Rodríguez-Vahos et al. (2024) link entrepreneurship with territorial economic development, in contrast to Muñoz et al. (2018) and Fernández (2020), who prioritize organizational transformation and strategic opportunity management.

The most accurate perspective, in the opinion of the authors of this study, is that of Bacigalupo et al. (2016), which conceptualizes the formation of entrepreneurial competence in business opportunity management as a systematic process of developing knowledge, skills and attitudes that enable managers to identify, evaluate and take advantage of opportunities in dynamic environments.

In the current Cuban context its promotion process should be through continuous training of managers and it is recognized with great potential to generate important contributions in response





to the SDGs, specifically in SDG 4: Quality Education and its specific targets: 4.3, 4.4 and 4.c (United Nations [ONU], 2023), focused on improving access to inclusive and equitable education, particularly in least developed countries and small island developing states.

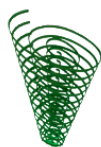
The above competency training responds to the goals set by the ONU (2023): strengthening skills for access to employment, boosting formal education for sustainable development, promoting partnerships for development, building strong institutions and creating innovative learning spaces.

In short, these areas are the most benefited from the contribution of this study to the sustainable development.

The problems associated with the formation of entrepreneurship competence in management of business opportunities for sustainable development, evidence several antagonistic relationships, which are manifested in the following aspects:

- Lack of education for entrepreneurship: the absence of training programs focused on competencies and entrepreneurship within the Cuban educational system, as well as the lack of careers related to the profile of Administration and Management, generate the need to implement specialized continuous training processes that respond to the demands of sustainable development.
- Historical perception of entrepreneurship: the old view of entrepreneurship as a process associated with capitalism and, therefore, in antagonism with the state sector has limited the entrepreneurial attitude of Cuban businessmen. This has hindered the acquisition of knowledge, skills and practices related to the management of business opportunities, which was notably reflected in the scarce presentation of business projects in Cuba's Foreign Investment Opportunities Portfolio 2014-2023 (Ministry of Foreign Trade and Foreign Investment [MINCEX], 2021).
- Challenges in the pace of continuing education: although there is a favorable environment for promoting continuing education and business management, the progress in this area is insufficient to meet the demands of sustainable development. In part, this is due to the labor market's limited awareness of its needs for competency-based training, which makes it difficult to generate specific academic demands.
- Limitations in the continuous training of managers: the training programs aimed at managers in Cuba lack a competency-based approach, and they are usually designed under theoretical





and traditional schemes. This disconnection generates a practical contradiction with the needs of the labor market as a guarantor of sustainable development.

The lack of a competency-based approach in the training of managers in Cuba limits their ability to respond to the market and to sustainable development. In view of the existing gap, the present study is carried out in order to analyze the limitations in the training of entrepreneurship competence in the management of business opportunities of managers in the Cuban state business sector, evaluating the current context and proposing solutions to strengthen sustainable development.

Materials and Methods

The study adopted a non-experimental, descriptive design, with a mixed approach. The methodology was selected for its suitability to approach complex phenomena, such as the formation of entrepreneurial competences in managers of the state business sector in Cuba, without intervening directly in the conditions of the study. The research period covered from January to December 2023 and was developed in the province of Sancti Spíritus.

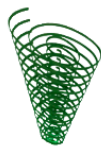
The unit of analysis of the study was composed of 24 first level managers in charge of business management in 24 state enterprises selected by means of a non-probabilistic intentional sampling. The sample represented 34.29% of the total number of managers with these responsibilities within a population of 70 enterprises of the state business sector in Sancti Spíritus. The selection criteria considered the economic relevance of the enterprises, their high export capacity, their role in the modernization of infrastructure, the generation of added value, economic diversification and their contribution to sustainable development, in accordance with the Lineamientos de la Política Económica y Social del Partido y la Revolución (Comité Central del Partido Comunista de Cuba [PCC], 2021).

In order to analyze the current context of the formation of entrepreneurial competencies for the management of business opportunities in managers of the state business sector in Cuba, the following variables were defined and studied by means of the methods and techniques described below:

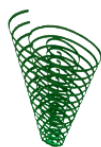
1. State-owned business participation:

- Indicators: number of projects registered in the Foreign Investment Opportunities Portfolio (MINCEX, 2021) and their comparison with the national average and extreme values.
- Methods y techniques:



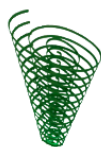


- o Descriptive statistical analysis: to identify trends, compared participation between provinces and highlighted patterns at the national level.
- o Simple multidimensional scaling: to compare the participation of different territories, highlight similarities and differences in the results.
- 2. Variables related to entrepreneurship competencies. The following aspects were analyzed:
 - a. Specific entrepreneurship competencies:
 - Indicators: identification of opportunities, creativity, teamwork, communication, sense of risk.
 - Methods y techniques:
 - o Participant observation: to document the practical application of these competencies by managers in real business management scenarios.
 - o Structured interviews: to explore how managers perceived and applied these competencies in their work context.
 - b. Attitudes towards entrepreneurship:
 - Indicators: managers' perception of the importance of entrepreneurship in business management.
 - Methods y techniques:
 - o Structured interviews: to capture the explicit and implicit attitudes of the participants.
 - o Participatory workshops: to analyze how attitudes influenced the willingness to implement innovative practices.
 - c. Specific knowledge and skills:
 - Indicators: level of technical and conceptual preparation of managers.
 - Methods and techniques:
 - o Documentary review: to analyze academic programs to detect training gaps in relation to the required competencies.
 - o Simple multidimensional scaling: compared continuing education programs in terms of content and approach.
 - d. Entrepreneurial intentions:
 - Indicators: willingness of managers to implement innovative and sustainable practices.
 - Methods and techniques



- o Participatory workshops: to project future scenarios based on business opportunities.
 - o Cause-effect analysis: to relate the intentions to the barriers detected in the organizational environment.
- 3. Context variables:
 - a. The study identified five key contextual dimensions that influence the participation of the state business sector in the management of business opportunities: 1) Procedures (processes and methodologies employed in business management, as well as the internal rules governing decision making); 2) Training (characteristics of training processes and the development of competencies in managers of the state business sector); 3) Organization (internal structure of companies and the way in which roles and responsibilities are distributed); 4) Policies (regulatory and strategic environment affecting business management) and 5) Human factors (capabilities, attitudes and motivations of managers and employees of the business sector).
 - Methods and techniques:
 - o Cause-effect analysis: this made it possible to classify the causes that affect innovation and entrepreneurship in state-owned companies, in correspondence with the dimensions of the context, and to identify the most critical areas.
 - b. Se consideraron, además, otros indicadores de carácter territorial como: recursos geográficos, infraestructura, potencial productivo y condiciones del ecosistema empresarial.
 - Methods and techniques:
 - o Documentary review: to include analysis of strategic reports and financial statements.
 - o Participant observation: to evaluate the practical impact of these factors on business management.
- 4. Variables associated with academic programs:
 - a. Thematic coverage of the programs: inclusion of topics related to entrepreneurship and business.
 - b. Teaching modality: face-to-face, blended and online.
 - c. Competency-based approach: presence or absence of a competency-based approach in academic programs.





- **Methods and techniques**
 - Documentary review: to include the analysis of the content of five academic programs present in Sancti Spíritus, the identification of the study modalities implemented in each program and the alignment of the programs with the development of key competencies.

Results and discussion

The results achieved were grouped into two main sections, in correspondence with the objective of analyzing the limitations in the formation of entrepreneurship competence in the management of business opportunities of managers of the Cuban state business sector, evaluating the current context and proposing solutions to strengthen sustainable development.

The sections are as follows:

- Participation of the business sector in the management of business opportunities.
- Training of entrepreneurship competency in business opportunity management.

Participation of the business sector in business opportunity management.

- Quantitative evidence: The analysis of the Portfolio of Business Opportunities in Cuba (MINCEX, 2021) reflected a discreet but sustained increase in the participation of the state-owned business sector. At the national level, 729 projects were registered; among them, only 25 correspond to the province of Sancti Spiritus. This figure is below the national average (45 projects), although it exceeds the minimum recorded (18 projects). Even when excluding extreme values, such as those of the Mariel Special Development Zone (52 projects), Sancti Spíritus maintains a low performance.

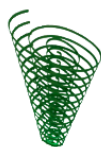
This result suggests an untapped potential in the management of business opportunities, despite the fact that the entrepreneurial ecosystem of Sancti Spíritus has favorable factors, such as:

- Adequate geographic and infrastructure resources.
 - Managers with constant training. Directivos con preparación constante.
 - Significant production potential for export, producing 7 of the 9 most demanded products for export in Cuba, according to the Portfolio of Exportable Funds (MINCEX, 2025)
- Qualitative evidence:

Through the workshops held with 24 managers from strategic sector, 23 main causes that limit the participation of the state business sector in the management of business opportunities were identified (Figure 1). The causes were grouped into the following contextual dimensions:

1. Procedures: lack of clear methodologies to identify and manage business opportunities.





2. Training: insufficient training of managers, with emphasis on the lack of specific entrepreneurial competencies (23 mentions).
3. Organization: rigid and centralized structures that hinder adaptability and the creation of negotiating teams.
4. Policies: misalignment between government policies and business needs.
5. Human factors: reluctance towards entrepreneurship, combined with limited leadership and opportunity management skills.

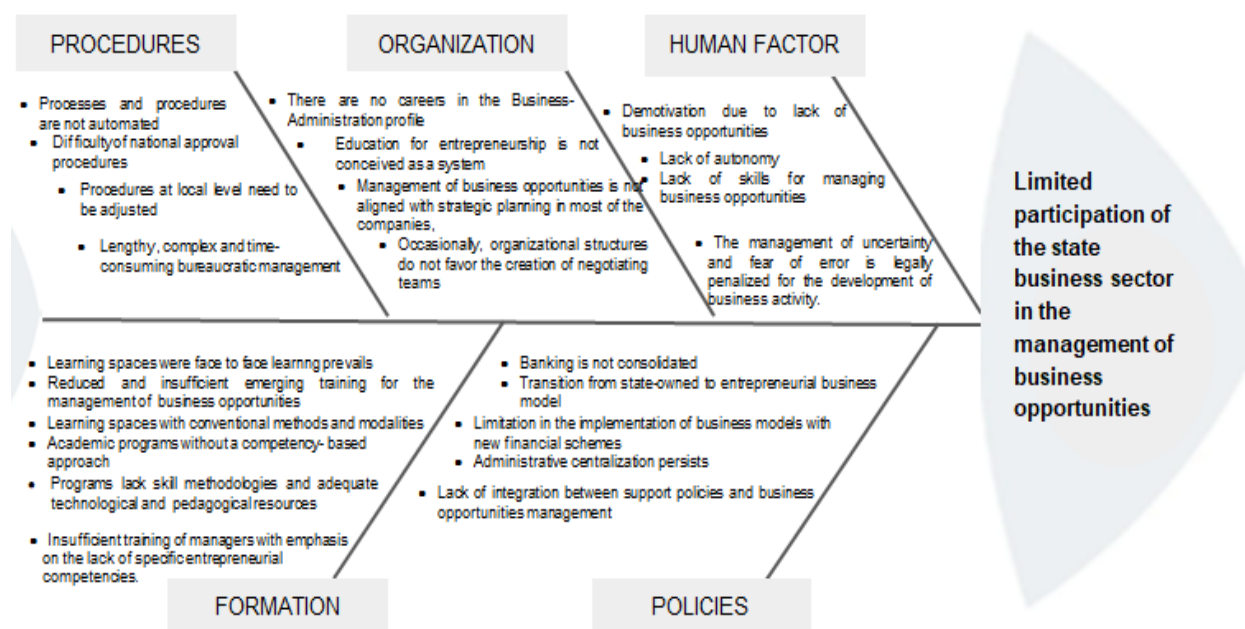


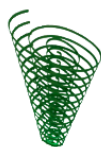
Figure 1. Cause-effect analysis

Source: own elaboration.

Underlying factors and organizational context:

In addition, the triangulation between structured interviews with three first level managers and the participant observation of the interactions and practical activities of managers in the context of business opportunity management in real scenarios, revealed structural conditioning factors that cannot be transformed in an essential way from training, such as:

- o Lack of alignment between business management and strategic planning.
- o Centralized decision making.
- o Rigid organizational structures that do not favor the formation of negotiating teams.
- o Lack of entrepreneurial profiles among managers.
- o Limited financial and innovation schemes, particularly in modalities such as exports.



Training of entrepreneurship competency in business opportunity management.

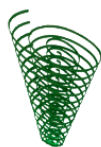
The result was structured in three fundamental elements: practical theoretical findings and context, documentary review of academic programs and reflections on the process of management development as part of the continuing training in Cuba.

- Practical theoretical findings and context

A segmented bibliographic analysis that included 122 authors from 12 countries revealed important patterns, trends and gaps in the formation of entrepreneurial competencies at the global level. These findings provide a solid basis for contextualizing the strengths and weaknesses of the Cuban approach, as well as opportunities for incorporating successful international practices. Some international patterns in the formation of entrepreneurial competencies were observed:

1. Fostering public and private networks: Mexico and Colombia stand out for the development of programs that integrate actors from government, academia and business to foster collaborative entrepreneurship ecosystems (Carrillo et al., 2024; Díaz et al., 2022). This model of interaction could be adapted to the Cuban context, where collaboration between institutions is still limited.
2. Social inclusion and rural development: in countries such as Ecuador and Peru, training programs prioritize the inclusion of marginalized sectors and the strengthening of rural development (Kantis et al., 2019). Such strategies could be applied in Cuba to diversify economic opportunities beyond urban settings.
3. Sustainability in entrepreneurial projects: in Argentina and Chile, the teaching of entrepreneurship is integrated into more formal educational levels; it is focused on the sustainability of projects, ensuring that the skills acquired respond to social and environmental needs (Parada et al., 2023; Jiménez, 2012).
4. Networking and business incubators: in Spain, there is a trend towards the development of incubation and acceleration programs that foster networking and receive significant institutional support (Bravo et al., 2020; Rodríguez-Vahos et al., 2024). This approach is crucial for Cuba, where business networking is limited.
5. Financial and technical support systems: in Germany and the United Kingdom, the orientation towards the creation of financial support and technical advisory systems has facilitated innovation in business management (Celeita and Cocunubo, 2022). This model offers applicable lessons to strengthen access to resources in the Cuban context.





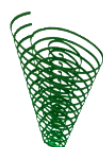
In contrast, in Cuba, scientific production on the training of entrepreneurial competencies is limited (Carpio et al., 2024). Although some studies highlight the importance of these competencies in local development, there is still a significant gap in their incorporation into continuing education programs for managers in the state business sector. In comparison with international models, Cuba shows a lack of collaborative networks between academic and business institutions; insufficient practical and participatory approaches to develop specific skills; and an absence of strategies to integrate entrepreneurial competencies into broader educational levels.

According to Salas et al. (2020), the analysis of entrepreneurial participation in 22 countries shows that sustainable entrepreneurship share common variables, such as, innovation, identification of opportunities and attention to market needs. These variables coincide with the trends identified by the Global Entrepreneurship Monitor 2021/2022 (GEM, 2022), highlighting that Latin American countries have a higher rate of sustainability in entrepreneurship than developed economies.

From the literature review, the following key competencies for the management of business opportunities in Cuban managers were identified: opportunity identification, creativity, teamwork, effective communication and sense of risk (Salas et al., 2020), which can be adapted to the Cuban environment through methodologies that combine theory and practice, promoting continuous and progressive learning.

To strengthen training in entrepreneurial skills, three integrated approaches are proposed. First, *Start-Up* Education should focus on designing specific programs for early-stage entrepreneurs, with a practical approach that facilitates the resolution of concrete problems and the consolidation of business ideas. Secondly, it is suggested to implement the *Entrecomp* Model (Bacigalupo et al., 2016), which promotes a progressive development of entrepreneurial competencies, advancing from basic to expert levels, which ensures a staggered and adaptive training. Finally, the importance of inter-institutional cooperation is highlighted, fostering effective partnerships between academia, business and government. This approach recognizes that learning and the development of competencies transcend academic spaces, integrating all actors in the entrepreneurial ecosystem to generate a sustainable and coordinated impact. Although Cuban managers demonstrate a remarkable ability to solve practical problems, they lack structured initial training to develop entrepreneurial spirit, attitude and intentions. The inclusion of these competencies in the pre-incubation and business incubation stages is essential to consolidate solid entrepreneurial ecosystems. Studying and redesigning current academic programs will be a





fundamental step in overcoming this gap and aligning continuing education with the demands of sustainable development.

- Documentary review of academic programs.

It was used with the objective of identifying whether the academic programs received could favor the formation of entrepreneurship competence in business opportunity management. Five academic programs whose scope is the improvement of managers for the management of business opportunities, similar in each Cuban province, were analyzed. The following were considered: graduate programs of the Branch School, Diploma in Foreign Trade and Foreign Investment (CSCIE), updates of the Directorate of International Relations of the Provincial Administration Council (DRI-CAP), Master's Degree in Management of the University of Sancti Spiritus "José Martí Pérez" (UNISS) and Diploma in Management and Business Management for cadres and reserves of the UNISS - Higher School of State and Government Cadres (UNISS-ESCEG). The detailed results are shown in Table 1.

Table 1. Analysis of academic programs with presence in the province of Santi Spíritus

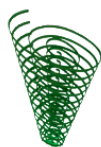
Comparison criteria		Academic programs for management development				
		Authorized institutions				
		Agriculture Branch School	CSCIE	DRI-CAP	UNISS	UNISS-ESCEG
Forms of postgraduate studies/degree		Courses	Diploma	Updates	Master's Degree	Diploma for cadres
Modality	On-site	X		X	X	X
	Semi-attendance		X			
	Online	-	-	-	-	-
Frequency of overcoming 2019 - 2024			2		2	4
Content	Business opportunity management topics in the program		X	X		-
	Entrepreneurship topics in the program	-	-	-	X	-
Design oriented to competency-based training		-	X	-	-	-

Source: own elaboration

The most relevant findings of the program review focused on:

1. Thematic coverage: only the CSCIE addresses advanced competencies for complex businesses such as exports and foreign investment, but omits basic skills for identifying new opportunities.





2. Approach and modality: long, face-to-face programs predominate, limiting flexibility of access for managers, restricting autonomy in learning.
3. Regional dissimilarities: simple multidimensional scaling shows that, although there are similarities between academic programs, the lack of cohesion and updating affects their effectiveness.
4. Prolonged academic programs (diploma and master's degrees) prevail in the 2019-2024 period, whose time does not contribute to emerging solutions that sustainable development needs.

The role of the Board of Directors in management updates favored the ordering of procedural rules, indications and policy compliance, which offered content capsules in informal academic spaces for concrete difficulties in the implementation of business opportunity management, and served as support for the shortcomings of the current academic programs.

According to the didactic perspective in Cuban regional studies at the Universities of Cienfuegos, Sancti Spíritus and Villa Clara and the methodological preparations to coordinators of diploma courses for cadres and reserves of the Higher School of State and Government Cadres, the need to implement innovative changes in training with the use of agile, participatory methods and in dynamic scenarios became evident. Each university in charge of training managers has been allowed to use its own methods and methodologies which, consequently, personalize the training of managers according to the characteristics of the territory. In general, the programs analyzed lack updating in entrepreneurship and business topics, and a competency-based approach. They are dominated by formal and face-to-face spaces with less autonomy for learning.

Based on the above results, a Simple Multidimensional Scaling (Figure 2) was carried out to compare the academic programs of continuing training for the improvement of managers in the province of Sancti Spíritus, in terms of the required business opportunity management competencies. Thus, it was possible to identify relationships and patterns among the programs that were not evident at first sight in the previous Table 1, facilitating the comparative analysis.



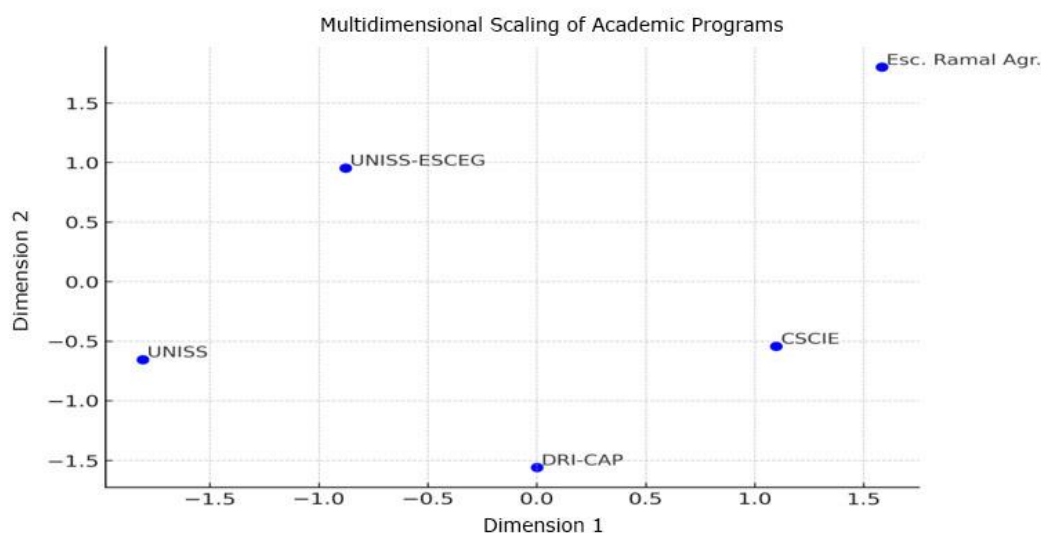
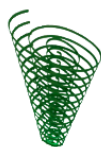


Figure 2. Simple Multidimensional Scaling of Academic Programs.

Source: own elaboration.

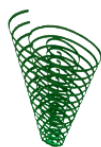
Programs that share similar characteristics (UNISS and UNISS-ESCEG, the closest in terms of modality and focus) appear close in the graphic.

The programs with greater differences (such as the Agriculture Branch School compared to UNISS, which varied in focus and modality) appear further apart.

The graphical expression of the Simple Multidimensional Scaling of the analyzed programs shows that the differences given by the dissimilarity between their analysis criteria are notorious and could require a greater alignment of the actors of the territory in the formation of entrepreneurship in businesses whose common goal is sustainable development.

It should not be left out of the discussion that educational institutions have to become facilitators of learning. Academic activity in entrepreneurship and business training should be conceived as a system in Cuban education from an early age, and its implementation should be perfected in the SDGs (ONU, 2023). In this paradigm shift, methodologies such as service learning, project-based learning, research-based learning, and inter- and transdisciplinary learning are important (Martínez-Usarralde, 2021).

- Reflections on the management development process as part of continuous training in Cuba. The continuous training of managers in Cuba is regulated by Decree Law No. 13: System of Work with the Cadres and Reserves of the State and the Government (Consejo de Estado, 2020), aligned with the country's cadres policy. However, limitations are observed in its approach,



prioritizing political and ethical indicators over business competencies, despite the emphasis on the Guidelines of the economic and social policy of the Party and the Revolution (PCC, 2016). Incorporating entrepreneurship-oriented programs in the training of managers represents a challenge, because the Cuban educational system needs to move towards a competency-based approach. This requires developing entrepreneurial attitudes, skills and abilities essential for specific business functions and to respond to the demands of specialization of the business sector. Currently, the training process privileges the number of cadres passed per category, relegating content and practical skills, which limits preparation in key competencies, such as the management of business opportunities, and hinders the implementation of innovative and effective entrepreneurial training.

Entrepreneurship training for managers can be considered an emerging solution to sustainable development, as it addresses unresolved global problems and transcends the goals of the 2030 Agenda (ONU, 2015). Although it is neither a new issue nor exclusive to Cuba, its implementation requires specific approaches due to the particularities of the managerial level.

A key challenge is the lack of harmony between the practical needs of companies and the timing of the upgrading process, which requires agility, proactivity and a design adjusted to the real demands of the job. In addition, the politicized approach generates tensions between the mandate to learn on demand and the intrinsic motivation for learning.

Entrepreneurship training, with a systemic and problem-oriented approach, faces challenges such as the development of productive linkages, exports, foreign investment, online commerce, digital marketing, business intelligence and financial self-management. These areas are essential to boost the economy and promote sustainable development.

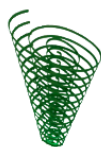
Therefore, integrating lifelong learning, competency-based training and entrepreneurship in business opportunity management into more robust academic programs is a viable emerging solution that can strengthen the role of Higher Education in sustainable development.

Practical implications of the study

1. Redesign of academic programs:

- Incorporate agile and flexible modalities (such as online content capsules).
- Transition to a competency-based approach according to the Entrecomp model, considering levels of progression (basic to expert).
- Prioritize practical skills such as opportunity identification, creativity, teamwork, and effective communication.





2. Strengthening of the entrepreneurial ecosystem:

- Promote collaboration networks between academia, business and government.
- Promote business incubators and informal training spaces that connect theory with real problems.

3. Modernization of corporate structures:

- Decentralize decision-making and make negotiating teams more flexible.
- Integrate digital tools and artificial intelligence systems to optimize opportunities management.

Limitations

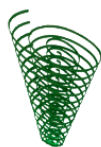
Despite the significant contributions, this study has limitations that could condition its scope. On the one hand, the sample analyzed is representative only of the province of Sancti Spiritus, which could limit the generalization of the findings to a national level. Also, the bibliographic review, although broad, is influenced by the scarcity of Cuban scientific literature on entrepreneurship in business opportunity management.

Finally, the proposals face structural and cultural restrictions in the Cuban business system, such as centralization of decisions and organizational rigidity, which transcend the individual competencies of managers and require a systemic change. Therefore, it is recommended to complement this analysis with comparative and longitudinal studies that address other provinces and strategic sectors of the country.

Conclusions

1. The analysis of Cuba's Foreign Investment Opportunities Portfolio 2014-2023 evidenced a gap in the participation of the state-owned business sector in Sancti Spíritus, suggesting the need for differentiated strategies to enhance its contribution to the management of business opportunities.
2. The formation of competencies in entrepreneurship identified as a determining factor the limited entrepreneurial participation of the province of Sancti Spíritus. Strengthening these processes could be a key axis to reverse the situation and promote greater integration in the development of business opportunities.
3. The bibliographic study made it possible to identify gaps in entrepreneurship training and to propose a set of essential competencies for the management of business opportunities in the Cuban context, aimed at strengthening key managerial skills.
4. The analysis of existing academic programs revealed the need for curricular updating and strategic alignment among training institutions, with the purpose of integrating competency-





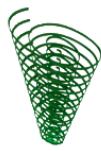
based approaches and expanding the coverage of topics related to entrepreneurship and business.

5. Entrepreneurship education should be consolidated as a priority in the continuous training of managers, as it represents an agile path that responds to the demands of sustainable development.

References

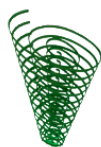
- Agboola, O. (2004). Efficacy of role-playing pedagogy in training leaders: some reflections. *Journal of management development*, 23(4), 355-371. <https://www.emerald.com/insight/content/doi/10.1108/02621710410529802/full/html>
- Bacigalupo, M., Kampylis, P., Punie, Y. & Van den Brande, G. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Publication Office of the European Union. <https://doi.org/10.2791/593884>
- Bravo, E., Dini, M. & Rueda, M. (2020). *La contribución de las asociaciones empresariales al desarrollo de las políticas productivas: elementos para la elaboración de un marco analítico*. Comisión Económica para América Latina y el Caribe (CEPAL). <https://repositorio.cepal.org/server/api/core/bitstreams/76ef247c-0b2f-4178-82c8-e636e63ca924/content>
- Cabana-Villca, R., Cortes-Castillo, I., Plaza-Pasten, D., Castillo-Vergara, M. & Álvarez-Marín, A. (2013). Análisis de Las Capacidades Emprendedoras Potenciales y Efectivas en Alumnos de Centros de Educación Superior. *Journal of technology management & innovation*, 8(1), 65-75. <https://dx.doi.org/10.4067/S0718-27242013000100007>
- Campana, H., & Chamorro, Y. G. (2022). Educación para el emprendimiento en una sociedad emergente. *Revista Venezolana de Gerencia*, 27(99), 1249-1263. <https://doi.org/10.52080/rvgluz.27.99.25>
- Carpio, A., Salas, N., Rodríguez, V., Castellano, L., Romero, O. & Schulz, R.K. (2024). Habilidades directivas en emprendimientos privados: contribución a la formación de equipos de alto rendimiento. *Pedagogía Y Sociedad*, 27(71), 207-224. <https://revistas.uniss.edu.cu/index.php/pedagogia-y-sociedad/article/view/1867>
- Carrillo, J., Hualde, A. & Villacencio, D. (2024). *Dilemas de la Innovación en México: dinámicas sectoriales, territoriales e institucionales*. El Colegio de la Frontera Norte. https://www.researchgate.net/publication/379148032_Dilemas_de_la_innovacion_en_Mexico





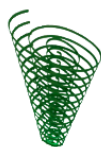
- Celeita, Y & Cocunubo, J. (2022). *Identificar las principales instituciones que conforman la estructura del sistema financiero internacional y sus funciones*. Fundación Universitaria del Área Andina. <https://digitk.areandina.edu.co/server/api/core/bitstreams/26603495-a4af-4133-9213-6239d8a7492e/content>
- Cobo, C. (2012). *Competencias para empresarios emprendedores: contexto europeo*. Fundación Omar Dengo - IDRC - OIT/CINTERFOR. https://www.oitcinterfor.org/sites/default/files/file_publicacion/comp_empre_cobo.pdf
- Comité Central del Partido Comunista de Cuba. (2016). *Lineamientos de la política económica y social del Partido y la Revolución para el período 2016-2021*. <http://www.cubadebate.cu/especiales/2016/09/13/vea-el-texto-integro-de-la-actualizacion-de-los-lineamientos-para-el-periodo-2016-2021-pdf/>
- Comité Central del Partido Comunista de Cuba. (2021). *Lineamientos de la Política Económica y Social del Partido y la Revolución*. Empresa de Artes Gráficas Federico Engels. https://siteal.iiep.unesco.org/sites/default/files/sit_accion_files/cuba_conceptos_y_lineamientos_2021_2026.pdf
- Consejo de Estado. (2020, 19 de marzo). Decreto Ley No. 13. Sistema de Trabajo con los Cuadros del Estado y del Gobierno. *Gaceta Oficial No. 30*. <https://www.gacetaoficial.gob.cu/es/decreto-ley-13-de-2020-de-consejo-de-estado>
- Díaz, G. P., González, I., & Amado, M. I. (2022). Emprendimiento en Colombia, tendencias y perspectivas. Una aproximación desde el contador público. *REVISTA INNOVA ITFIP*, 10(1), 97–120. <https://doi.org/10.54198/innova10.07>
- Fayolle, A., Gailly, B. & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European industrial training*, 30(9), 701-720. <https://doi.org/10.1108/03090590610715022>
- Fernández, R. G. (2020). Problemáticas Actuales del Sistema Educativo Superior: Análisis desde los Estilos de Aprendizaje. *Ajayu*, 18(1), 78-101. <https://www.redalyc.org/journal/4615/461562776004/html/>
- Global Entrepreneurship Monitor. (2022). *GEM 2021/2022 Global Report: Opportunity Amid Disruption*. <https://www.gemconsortium.org/report/gem-20212022-global-report-opportunity-amid-disruption>





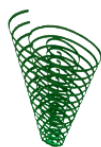
- Jiménez, G. (2012). Entrepreneurship in Chile. In E.R. Brenes & Haar, J. (Eds.). *The future of entrepreneurship in Latin America* (pp. 106-138). Palgrave Macmillan UK.
https://doi.org/10.1057/9781137003324_4
- Kantis, H., Federico, J., Ibarra, S., Gonzalo, M., Menéndez, C. & Álvarez, P. (2019). *Condiciones sistémicas para el emprendimiento en América Latina 2019. Emprendimiento y digitalización: una agenda común de posibilidades y desafíos*. Rafaela: Asociación Civil Red Pymes Mercosur. <https://prodem.unqs.edu.ar/wp-content/uploads/2019/11/Informe-PRODEM-2019-VF-28.11.pdf>
- Kelley, D. J., Bosma, N. & Amorós, J. E. (2010). *Global Entrepreneurship Monitor. 2010 Global Report*. <https://entreprenorskapsforum.se/wp-content/uploads/2011/02/GEM-2010-Global-Report.pdf>
- Kirby, D. A. (2006). Creating entrepreneurial universities in the UK: Applying entrepreneurship theory to practice. *The Journal of Technology Transfer*, 31, 599-603.
<https://doi.org/10.1007/s10961-006-9061-4>
- Martínez-Usarralde, M. J. (2021). Inclusión educativa comparada en UNESCO y OCDE desde la cartografía social. *Educación XX1*, 24(1), 93-115.
<https://www.redalyc.org/journal/706/70666127004/html/>
- Ministerio de Comercio Exterior y la Inversión Extranjera. (2021). Inversión en Cuba. MINCEX. <https://inviertaencuba.mincex.gob.cu/es/>
- Ministerio de Comercio Exterior y la Inversión Extranjera. (2025). Mapa de exportaciones. MINCEX. <https://mapaexportaciones.mincex.gob.cu/>
- Monzón, J. L. & Torres-Ortega, J. A. (2021). Emprendimiento social en la formación profesional: el caso del País Vasco. *Revesco. Revista de Estudios Cooperativos*, 137, 1-18.
<https://doi.org/10.5209/reve.73862>
- Morales, H. L. (2023). Emprendimiento en la Educación Media Vocacional: una revisión sistemática. *LATAM Revista Latinoamericana de Ciencias Sociales y Humanidades*, 4(1), 950-974. <https://doi.org/10.56712/latam.v4i1.309>
- Moriano, J. A., Palací, F. J. & Morales, J. F. (2006). Adaptación y validación en España de la escala de Autoeficacia Emprendedora. *Revista de Psicología Social*, 21(1), 51-64.
<https://doi.org/10.1174/021347406775322223>





- Moyano, G. A. & Marín, P. F. (2024). La perdurabilidad empresarial de los emprendimientos sociales: revisión sistemática y perspectivas de investigación. *Tendencias*, 25(1), 269-295. <https://doi.org/10.22267/rtend.242501.249>
- Muñoz, J. A., Cardona, J. C., Galviz, D. F. & Rico, J. J. (2018). Pensamiento estratégico: una herramienta de competitividad organizacional. En Y. Chirinos Araque et al. (Eds.). *Tendencias en la Investigación Universitaria. Una visión desde Latinoamérica (Vol. VIII, pp. 175-187)*. Universidad Politécnica Territorial de Falcón "Alonso Gamero". <https://dialnet.unirioja.es/servlet/articulo?codigo=7786397>
- Organización de las Naciones Unidas. (2015). *Transformar nuestro mundo: La Agenda 2030 para el Desarrollo Sostenible*. https://unctad.org/system/files/official-document/ares70d1_es.pdf
- Organización de las Naciones Unidas. (2023). *Global Sustainable Development Report (GSDR) 2023*. https://sdgs.un.org/sites/default/files/2023-09/FINAL%20GSDR%202023-Digital%20-110923_1.pdf
- Parada, J. E., Aguillón, M. A. & Zambrano, S. M. (2023). Emprendimiento y educación: un enfoque desde el pensamiento complejo. *Revista Venezolana de Gerencia*, 28(9), 757-776. <https://doi.org/10.52080/rvqluz.28.e9.47>
- Rodríguez-Vahos, A., Aparicio, S. & Urbano, D. (2024). Business acceleration program as city sowers: assessing public funding's impact on new ventures in an emerging economy. *Journal of Entrepreneurship in Emerging Economies*, 17(7), 1-16. <https://www.emerald.com/insight/content/doi/10.1108/JEEE-08-2023-0333/full/html>
- Salas, N., García, D. A., Romero, O., & Kiran, R. (2021). Marketing for business opportunities management on foreign investment and productive enchainments. In M.I. Sánchez-Hernández et al. (Eds.). *Social Innovation and Entrepreneurship in the Fourth Sector: Sustainable Best-Practices from Across the World* (pp. 299-331). Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-030-75714-4_15
- Salas, N., Romero, O., Carpio, A., Kiran, R.K. & López, C. D. (2020). Formación de competencias emprendedoras en la gestión de oportunidades de negocios de inversión extranjera en Cuba. En G. Castillo (Ed.). *Tendencias en la Investigación Universitaria. Una Visión desde Latinoamérica* (pp.174-191). Fondo Editorial Universitario Servando Garcés. https://www.researchgate.net/publication/352358974_Formacion_de_competencias_em





[prendedoras en la gestion de oportunidades de negocios de inversion extranjera en Cuba](#)

Tremillo, L.F. (2011). Las competencias profesionales: una perspectiva crítica, habilidades educativas y saberes docentes de la pedagogía transformadora. En A. Jaik Dipp y A Barraza Macías (Eds.). Competencias y Educación. Miradas múltiples de una relación (pp. 240-272). Instituto Universitario Anglo Español A. C., Red Durango de Investigadores Educativos A.C. http://redie.org.mx/posts/competencias_y_educacion.pdf

Conflict of interest

The corresponding author of the article declares the originality of the manuscript, without editorial commitment with another journal. There are no plagiarism, conflicts of interest, or ethical conflicts; the journal is released from any ethical and/or legal commitment.

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