

GENERIC SKILLS. EXPERIENCES OF ANALYSIS AND MEASUREMENT OF THE SUPREME INTANGIBLE IN MANAGERS OF PUBLIC AND BUSINESS ADMINISTRATION

COMPETENCIAS GENÉRICAS. EXPERIENCIAS DE ANÁLISIS Y MEDICIÓN DEL INTANGIBLE SUPREMO EN DIRECTIVOS DE LA ADMINISTRACIÓN PÚBLICA Y EMPRESARIAL

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Abstract

Improving competency-based management and the performance of public and business administration managers, constitutes a permanent task for updating the Cuban economic and social model. The current theoretical-methodological limitations for the measurement of competence as an organizational intangible, demands the competition of the academy to accompany with viable proposals that guide management practices and decisions, from data governance supported by new technologies. In this sense, the article highlights the experiences of analysis and measurement of managerial skills in the public and business administration diploma developed by the University of Ciego de Ávila. It incorporates to the

methodology of design and evaluation of competences endorsed by the Superior University of Cadres of the State and the Government (SUCSG), the analysis of the subjective dimension of the competence, the calculation of a current competence index of the position and an index of priority for new performances. Among the techniques used, the analysis of official documents, the free association of words and group work stand out. Statistically processed with the help of the free software UCINET and the prospective analysis of MICMAC. The results reveal a poor social perception of managerial skills in those involved and the applicability of the measurement proposed from a strategic and prospective approach.

Keywords: directive competences, managers/leaders, measurement, competence index, social perception

Resumen

Perfeccionar la gestión basada en competencias y el desempeño de los gestores de la administración pública y empresarial, constituye una tarea permanente para la actualización del modelo económico y social cubano. Las actuales limitaciones teórico-metodológicas para la medición de la competencia como intangible organizacional, demanda el concurso de la academia para acompañar con propuestas viables que orienten las prácticas de gestión y las decisiones, desde una gobernanza de datos soportada en las nuevas tecnologías. En este sentido el artículo destaca las experiencias de análisis y medición de las competencias directivas en el diplomado de administración pública y empresarial desarrollado por la Universidad de Ciego de Ávila. Incorpora a la metodología de diseño y evaluación de competencias avalada por la Escuela Superior de Cuadros del Estado y el Gobierno (ESCEG), el análisis de la dimensión subjetiva de la competencia, el cálculo de un índice de competencia actual del cargo y un índice de prioridad para nuevos desempeños. Entre las técnicas empleadas destaca el análisis de documentos oficiales, la asociación libre de palabras y el trabajo en grupo. Procesa estadísticamente con ayuda del software libre UCINET y el análisis prospectivo del MICMAC. Los resultados develan una pobre percepción social de las competencias directivas en los implicados y la aplicabilidad de la propuesta de medición desde un enfoque estratégico y prospectivo.

Palabras clave: competencias directivas, gestores/líderes, medición, índice de competencia, percepción social

Introduction

4.0 environments, characterized by technological development, digitalization and automation of processes in all areas of socioeconomic life, give a new dynamic to public and business management. Consequently, the decisional processes of managers/leaders become more intelligent and faster, when they migrate from traditional intuitive models towards data-based governance.¹⁻⁵

Having data mining as decision support demands the development of robust and integrated information and storage systems,⁵⁻¹⁰ which is not always achieved in the practice of Cuban public and business management. In this context, information systems that support decisions at the tactical and operational levels in the face of structured problems predominate, with fewer being committed to strategic decisions

in the face of unstructured and complex problems, particularly when organizational intangible variables are involved.¹¹⁻¹⁴

The theoretical and methodological limitations for measuring the intangible and establishing correlations with the traditional economic-financial-productive result, is one of the causes and conditions that explain this situation. However, in recent decades, the scientific community's recognition of the role of the former over the latter is evident.^{13,15-24}

The theoretical and methodological limitations for measuring the intangible and establishing correlations with the traditional economic-financial-productive result, is one of the causes and conditions that explain this situation. However, in recent decades, the scientific community's recognition of the role of the former over the latter is evident.^{2,3,25} In Cuba, this requirement is visible, taking into account the development achieved by the productive forces. Cuban public and business management faces the challenge of advancing in the conquest of these competencies, having barely achieved the identification of their predecessors, linked to 2.0 and 3.0 environments respectively.

It is urgent for Cuban organizations to overcome the traditional orientation towards the fulfillment of plans and tasks,²⁶ to position the competence of managers/leaders and groups/followers as a key factor of development and competitiveness. Also, develop measurement and analysis models of this intangible, from organizational architecture and data governance approaches, to guide decisions and performance evaluation processes.

In recent years, the country's top leadership and the Cuban academy have been emphasizing this need for change, which must be initiated by managers/leaders.²⁷ The directorate of cadres of the state and the Cuban government (DCEG), together with the directorate of preparation and improvement of cadres (DPSC) of the Ministry of Higher Education (MES) and the Higher School of Cadres of the State and Government (ESCEG), They carry out systematic guidance and training work in this regard.

However, these actions are not always accompanied by socialization and agile application in public and business administration. Despite the transformations undertaken in the legal regulatory framework and the capacities formed, management practice demonstrates that the processes of measuring and analyzing performance based on competencies face theoretical and methodological challenges to achieve less intuitive approaches.

Recently, the ESCEG has called for a new edition of the Diploma in Public and Business Administration (DAPyE), replicated throughout the country through higher education institutions. Its objective is to update content taught during the more than twenty-five (25) editions during the last twelve (12) years, since the constitution of this institution in 2011.

On this occasion, the preparation seeks to strengthen the approach of integrated management systems based on labor competencies. The managers/leaders begin with a work day dedicated to the topic of generic competencies, ratifying the interest in positioning this tool in the philosophy of public and business managers. In this sense, universities in the territories have been asked to develop their own proposals and methodologies, considering experiences and good practices developed by the ESCEG.⁸

This framework is conducive to the preparation of this article, which is interested in socializing the experiences of analysis and measurement of managerial competencies from a strategic and prospective approach, developed by public and business management graduates in the territory of Ciego de Ávila.

This framework is conducive to the preparation of this article.²⁸ with particular emphasis on the third stage in its steps 12 (self-assessment), 13 (evaluation) and 14 (improvement) respectively, incorporating assessments and interpretations that favor measurement and performance evaluation decisions.

The article considers two moments, the first dedicated to the methodological foundations of the proposal and the second, to the results of application in the generic skills workshop developed within the framework of the public and business management diploma course in Ciego de Ávila.

Methodological design

Following the ESCEG methodological model, it is proposed to incorporate the analysis of the subjective dimension of competence into the third stage. Also, the calculation of a current competence index and the priority index for each competence, using a strategic and prospective approach, to guide changes in a new performance period.



Figure 1. Contributions to the ESCEG methodology
Source:²⁸ with new methods for competency assessment

Subjective dimension

Incorporating the subjective dimension into the evaluative moment allows integrating the socio-psychological interpretation and repositioning the subject in the traditional and criticized instrumental logic attributed to organizational processes during the last decades, where job competence finds a unique positioning as an intangible of development.^{29,30, 31, 32}

Addressing competence as an expression of human capacity,^{33,34,35} as psychological formations linked to the executing sphere of personality,^{36,37} demands a methodology that manages to integrate the acted moment (behavioral expression) and the thought and felt moment (subjective expression). The latter, understood not as a finished production resulting from a labor externality, but as an emerging, instituted

and instituting potential, capable of producing and attributing new meanings to labor practices. The understanding of subjectivity from a cultural-historical approach,^{38,39} positions this subjective dimension in the methodologies assumed for contemporary studies of complex social and organizational phenomena. To measure the subjective dimension of competence, the study of two phenomena of the social and humanistic sciences is proposed: perception and social representation,⁴⁰

The potential of both phenomena to condense shared meanings, ways of feeling and thinking in the organizational sphere, positions them with an advantage over other psychological configurations in the study of the organizational subjectivity of managers/leaders and groups/followers.^{38,39,40, 41} Taking into account the particularities of these subjective phenomena and the groups of subjects involved in the studies, methodological clarifications are established. Explorations of social representation can be used in groups that systematically share space, time, and interests in decision-making.

For those groups that do not co-participate in joint decision-making, since they perform functions as managers/leaders in different organizations and levels of public and business management, as happens with the group of graduates in this research, studies of social perception. This methodological precision is based on the nature of the links. The links established by the former with respect to the analyzed object become more significant and provide greater possibilities for structuring social representations with respect to the latter.

As empirical tools for this moment, the same ones that have been developed and positioned for studies of social representations can be used.^{40,42} To access the ways of thinking and feeling competition, in this work a simplified methodological route has been used through the association free of words, a psychoanalytic tool widely used in studies of perception and social representation, due to the potential it shows to access shared meanings by evading social defenses.^{38,39,40,41,42}

The variant of free association used does not establish limits before the stimulus phrase: “managerial competencies.” To capture the semantic dimension, a consciously elaborated argumentation of the meaning of each evoked term is requested at the closure of the association, guiding the subsequent interpretation of the data.

Statistical processing combines the Vergès method⁴³ and the benefits of the NetDraw platform of the UCINET free software to illustrate networks.^{44,45,46,47} In this way, the structure of meanings that supports the social perception of managerial competence is accessed. Identifying the elements of greatest centrality, with impact on the production of meanings and orientation of the behavior of the managers/leaders studied.

Competency index.

In recent years, several methodological and procedural proposals of the Cuban academy,^{48,49,51,52,53,54} correlate self-assessment and evaluation by competencies with the determination of performance indicators/indices, in close relationship with the strategic objectives and goals of the organization.

With the intention of facilitating a simplified procedure for calculating the competence index, considering the described requirements, the public and business management diplomas in Ciego de Ávila deploy the following algorithm:

Step 1: Using a scale where the value one (1) is the minimum, the value three (3) is medium and the value five (5) is the maximum possible, evaluate the level of importance attributed to the generic competencies of the position in the compliance with strategic objectives and goals.

Step2: Applying the same scale, they evaluate the level of application of the competencies in the current performance of the position.

Step 3: Identify the current competence index of the position by applying the calculation basis:

$$IC_A = VA * VI / VE_{m\acute{a}x}^2$$

Where:

IC_A: current competence index of the position

VA: Average value of application of the competencies of the position

VI: Average value of strategic importance attributed to the competencies of the position

VE_{máx}²: Power of the maximum scale value used.

This procedure has antecedents in research on the degree of maturity of the precepts of a successful management philosophy⁵⁵ in Cuban organizations.

Following Cuesta⁵⁶, once the indicator/index is identified, it is possible to establish a calculation basis to estimate its variation between periods:

$$\Delta IC_A = [(IC_{Ap2} - IC_{Ap1}) / IC_{Ap1}] * 100$$

Where:

Δ IC_A: variation or dynamics of the position's competence index (in %).

IC_{Ap2}: competition index in the period being compared or planned period.

IC_{Ap1}: competence index in the base/reference period or actual behavior.

The calculation of the variation or dynamics of the position's competence index facilitates performance data mining, which contributes to evaluative decisions focused on professional growth.

Priority index

Once the competencies of the position have been identified and the current performance has been measured, it is possible to provide feedback to the evaluate on those competencies of the position that should be prioritized in the next period, taking as a reference the level of maturity achieved so far. Applying the aforementioned procedure,⁵⁵ managers/leaders identify the priority index in attention to competencies (IPC) through the expression:

$$IP_C = (VE_{m\acute{a}x} - VA) * VI / (VE_{m\acute{a}x}^2 - VE_{m\acute{a}x}) * 100$$

The CPIs closest to the value 100% represent the competencies that the manager/leader must prioritize or attend to with greater intentionality for the next performance period, since they are related to the lowest degree of application or level of maturity in the current performance.

This interpretation can be enriched through analysis and prospective techniques. Following Cuesta,^{56,57} the action of the intangible on the result of the activity is synergistic; no knowledge, skill or value by itself guarantees competent performance. Every work activity, regardless of the degree of complexity, implies a set of competencies (basic and general) that must act together. This explains that in the Cuban

regulatory reference for integrated human talent management systems⁵⁸, labor competence is defined as a synergistic set of knowledge, skills, values, motivations and performance conditions.

Taking into account this methodological consideration, public and business management graduates form a matrix of direct influences, which facilitates the structural analysis of the set of competencies of the position and the prospective interpretation of its positioning, according to performance scenarios with the use of the MICMAC method.^{59,60} Prospective analysis guides managers/leaders in identifying those competencies that they wish to develop according to possible scenarios.

A total of 16 managers/leaders are involved in the exercise, with five (5) representing the business sector and the rest from the public administration.

Results and discussion

Analysis of the subjective dimension

The free association of words before the stimulus phrase “managerial competencies” offers a cloud with a total of 42 evocations. The average value of evocations per subject was 3.25 and the average repetition frequency was 1.23. Statistical processing and the NetDraw platform of the UCINET software allow access to the system of relationships between meanings, which supports the structure of social perception co-constructed by these managers/leaders

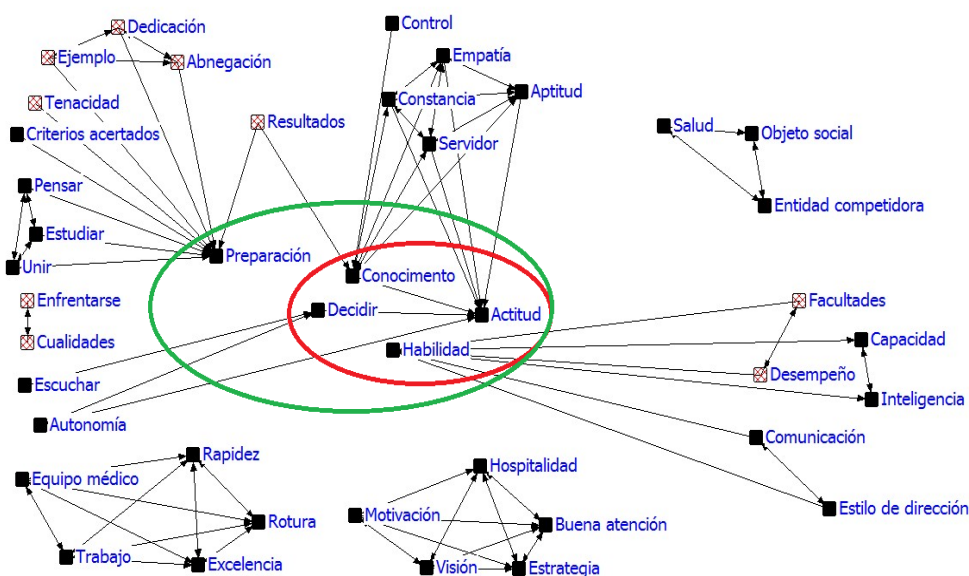


Figure 2. Graph of relationships between meanings associated with managerial competence
Source: Self/ made after UCINET software

In the figure, the red line delimits the central terms and the green the closest periphery to this nuclear region. Outside the lines, the clusters that support these terms of greater significance. The terms identified with black squares were mentioned by representatives of the public administration and those not by businessmen.

The structure allows a nuclear cluster to be identified with the terms “knowledge”, “attitude”, “skill” and “decide”. The first three, with the greatest link and degree of significance, delimit the most stable nucleus while the meaning “decide” represents the centrality with the least stability. In the closest periphery, the term “preparation” offers support to the core region of social perception of managerial competencies in these graduates. The descriptive statistics reflect poor centrality and density in the network of meanings.

The descriptive statistics reflect poor centrality and density in the network of meanings.

Table 1. Descriptive statistics of the network

		1	2	3	4
		OutDegree	InDegree	NrmOutDeg	NrmInDeg
		-----	-----	-----	-----
1	Mean	2.857	2.857	6.969	6.969
2	Std Dev	1.264	1.959	3.084	4.777
3	Sum	120.000	120.000	292.683	292.683
4	Variance	1.599	3.837	9.510	22.824
5	SSQ	410.000	504.000	2439.024	2998.216
6	MCSSQ	67.143	161.143	399.422	958.613
7	Euc Norm	20.248	22.450	49.386	54.756
8	Minimum	1.000	0.000	2.439	0.000
9	Maximum	5.000	9.000	12.195	21.951
10	N of Obs	42.000	42.000	42.000	42.000

Network Centralization (Outdegree) = 5.354%

Network Centralization (Indegree) = 15.348%

Source: Self/ made after UCINET software

This result suggests a weak structure, not compatible with a management practice that systematically stimulates the production of meanings about managerial competencies. Despite this, the social perception co-constructed in the organizational spaces of these managers/leaders prioritizes knowledge, know-how and values, attributing less significance to motivational aspects and work conditions, which allows us to deduce that these senses predominate in the subjective production that takes place in their organizational groups when thinking about competition.

None of the hierarchical meanings in the social perception of public managers were evoked by the businessmen. The terms of the latter are located on the most distant periphery and suggest a greater attachment to personal qualities and values when thinking about competition. The dispersion of meanings, with several groupings in the most distant periphery without link to centrality, is another observable characteristic that is related to the heterogeneity of these managers/leaders and the short time functioning as a group around a common task.

From the semantic analysis, a tendency is also deduced in businessmen to understand competition from organizational results, the latter being understood as the fulfillment of defined plans, goals and tasks. The

predominance of this task orientation over attention to production relations is a product of the management philosophy already described by some authors in research on the Cuban business sector.^{26,37,61,62,63,64}

In the representatives of public administration, greater significance is seen in the relational aspects and socio-psychological variables of management activity, without them predominating over the approach described above in business semantics.

From the interpretive result the following can be summarized:

- When starting the public and business administration diploma, the social perception of the managers/leaders involved offers a poor production of subjective meanings to sustain a management practice based on competencies in their organizations
- There is a differentiation between the production of meanings of public and business administration managers. The former achieve a perception that prioritizes the “knowing”, “knowing how to do” and “knowing how to be” dimensions of the competition, while the latter interpret it fundamentally from “knowing how to be” (personal qualities and values). Result that suggests greater familiarity of the former with respect to the latter. In both cases, motivation and performance conditions were of little significance when thinking about competition.
- Among the multiplicity of factors that act as conditioning, the instrumental technical approach attributed to competence stands out, compatible with an organizational culture focused on the fulfillment of plans and tasks, without adequate attention to the relational aspects and sociopsychological variables of the activity. of management, the latter with greater recognition in public servants.

The analysis of the subjective dimension reveals the need to insist on the preparation and improvement of cadres with respect to job skills and the opportunities it offers as a modern management tool.

Competition index calculation

With the objective of operationalizing the supreme intangible for public and business managers, it is requested to apply the procedure and calculation basis, taking as reference certain position profiles in six (6) subgroups.

Consequently, six profiles of managers/leaders are analyzed. The subgroups attribute a value of importance (VI) and application (VA) - on scales from one (1) to five (5) - to the competencies identified in the profile or qualifier of the position. The importance value is attributed assuming as a reference the relationship of the position with the strategic objectives of the entity, the latter previously consulted by the corresponding subgroup. The application value is attributed by relating the performance of the position holder and the results of the area he directs.

Table 2. Summary of the calculation of the competence index of the positions

Profile Analyzed	VI	VA	ICA
Commercial Director at “Banco de Crédito y Comercio”.	8,6	9,2	3,17
Commercial Director at “Empresa de Aseguramiento” (EPASE)	8,6	9	3,1
Vice director in “Dirección Provincial de Economía y Planificación”.	9,2	7,4	2,73
Vicedirector Legacy in “Dirección Municipal de Vivienda”	6,4	6,4	1,64
Production Chief at “Unión de Construcciones Militares”	7	5,6	1,57
Commercial Director at “Empresa Lácteos Ciego de Ávila”	6,2	4,4	1,1

Source: Self /Made

The result shows two groups of charges. The first with “average” competition indices and the second with indices between “low” and “very low”. None of the positions evaluated achieve a “high” (value 4) or “very high” (value 5) current competence index. The calculated level of competence shows a relative correspondence with the results of studies on the level of application of the precepts of a successful management philosophy in Cuban organizations^{55,61,62}.

Without devaluing methodological considerations that any measurement of intangibles entails^{24,57}, the possibility of establishing records of the position's competence index offers data mining of particular relevance for performance evaluation processes. Contribution is extended to all positions in the organization.

This calculation procedure achieves higher levels of precision, as it is incorporated from participatory approaches, which integrate the evaluated person and the moments of self-assessment and evaluation of the performance of the methodology.

Calculation of the competency priority index (CPI)

Competency-based evaluation processes require guiding the evaluatee based on the competencies to be prioritized in a next performance period. In this sense, the procedure for calculating the priority index is suggested.

The subgroups calculate this index (CPI), considering the competencies described in the analyzed position profiles and those values attributed to the level of importance and application. To illustrate the result here, the work developed with the two profiles with the highest current competence index is taken as a reference, among those analyzed and summarized in **Table 2**.

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Table 3. Calculation of the priority index in two of the positions analyzed.

Position: Branch director at bank (BANDEC)

Competencias	IP _C (%)
Knowledge of the actividad (CA)	25
Autho-preparation (AP)	20
Solves problems from the base (SPB)	30
Implements Internal Control (CI)	0
Responsability (R)	0
Capacity of leadership (CD)	20
Staff linker (AGP)	30
Perssonal Authocontrol (ACP)	20
Conflict Mediator	15
Político/Ideological Training (PPI)	20
Reserves training (TRC)	20
Team/Work Empathy (ETE)	15

Position: Commercial Director in EPASE

Competencias	IP _C (%)
Capacity of establishing priorities (CEP)	0
Team Work (TE)	40
Identifying marketing opportunities (IOM)	0
Relationship with providers (RP)	0
Manage without expecting awards (DSC)	15
Sensibility problems (SP)	25
Diversification of the social object (DOS)	0
Satisfies internal needs (SNMI)	20
Político/Ideological Training (PPI)	0
Empathy (E)	0

Source: Self made

As can be deduced, the competencies that reach a priority value of zero (0) are related to those that reach the maximum level of application (value five on the scale) in the evaluation of the current period. Otherwise, the highest values correspond to those competencies with lower levels of maturity or application in current performance.

As evident in these cases, when the levels of application of each competence manage to equal or exceed the average value of the scale (three points), the priority indices do not exceed 50%. However, the IPC continues to establish guiding guidelines for improving performance in a new period.

In both profiles, relational competencies (bottom-up problem solving, personnel unification, and teamwork) take on the highest priority for the new performance period. Result that suggests preparation and improvement needs in this sense.

This analysis is enriched by the processing of the direct influence matrices created by these subgroups. By using the MICMAC method, the structural analysis of the position's set of competencies offers a prospective interpretation of its positioning, according to previously designed performance scenarios.

To illustrate an example, the influence matrix of the profile of the branch director position at Banco de Crédito y Comercio (BANDEC) is processed.

Table 4. Matrix of direct influences between competencies of the analyzed position

	1: CA	2: AP	3: SPB	4: CI	5: R	6: CD	7: AGP	8: ACP	9: MSC	10: PPI	11: TRC	12: ETE
1: CA	0	3	2	2	0	3	0	0	3	0	1	1
2: AP	3	0	3	3	1	2	0	0	3	2	1	1
3: SPB	3	3	0	3	1	3	0	2	2	1	2	1
4: CI	3	3	2	0	1	2	0	0	2	0	1	0
5: R	3	3	0	1	0	3	1	2	1	2	3	1
6: CD	3	3	2	0	3	0	1	1	3	2	2	3
7: AGP	0	0	0	0	1	1	0	1	2	0	2	3
8: ACP	2	2	2	1	2	1	1	0	3	0	2	2
9: MSC	3	3	2	2	1	3	2	3	0	3	2	3
10: PPI	0	2	1	0	2	2	0	0	3	0	3	2
11: TRC	1	1	2	1	3	2	2	2	2	3	0	1
12: ETE	1	1	1	0	1	3	3	2	3	2	1	0

Legend :

0 : No influence
 1 : Weak
 2 : Half
 3 : Strong
 P : Potencial

© UPSOR-EPITA-MICMAC

Fuente: MICMAC

The processing of this matrix of interactions through the MICMAC allows access to Cartesian plans that combine the dependence (abscissa axis) and the influence (ordinate axis) of the competencies, delimiting four fundamental quadrants.

In the upper left quadrant, the MICMAC locates the most influential competencies in current performance, also called motor competencies because of the course they influence current performance.

In the upper right quadrant, locate those key competencies or also called link competencies in future evolution, that is, those that, independently of being influenced by the system, manage to influence until they achieve positioning and weight in potential performance levels.

The lower left quadrant locates the most inert, resistant or stable competencies over time, with less possibility of change in the face of new performance demands. Hence, they share the definition of autonomous competencies, being the least influenceable within the system of competencies analyzed.

Lastly, but not least, in the lower right quadrant are placed the competencies that are most dependent or sensitive to changes in performance.



Figure 3. Plane of direct influences/dependencies
Source: MICMAC

From the plane of direct influences/dependencies, it is inferred that “problem solving from the base” (SPB) and “responsibility” (R), in that order, constitute driving competencies for the current performance of the position. Being “mediation and conflict resolution” (MSC), “management capacity” (CD), “self-preparation” (AP), together with “work with reserves and quarries” (TRC), the key competencies in future evolution. “Activity knowledge” (AC) is a dependent competence and among those with greater autonomy with less possibility of influence or change, are “empathy and teamwork” (ETE), “personal self-control” (ACP), “ideological political preparation” (PPI), “internal control” (IC) and the ability to “bring together personnel” (AGP).

It follows that the key competencies in future evolution deserve prioritized attention for the new performance period, regardless of showing a lower priority index than other competencies classified as autonomous and dependent. This being an important contribution of the prospective method to the interpretation and orientation of performance in the evaluation processes of the position.

This analysis can be complemented with the interpretation of the displacement plan offered by the MICMAC. This result visualizes the mobility of the competencies of the position analyzed in a medium and long-term future scenario. It offers a result of direct/indirect/potential influences/dependencies, which regularly escape our traditional interpretative capacity.

In the position analyzed, the most striking thing turned out to be the displacement of the personal self-control competence (ACP) from the level of autonomous skills to the level of motor skills. Furthermore, the approximation of the competence “problem solving from the base” to the level of key competences where the competences “mediation and conflict resolution” (MSC), “management capacity” (CD), “self-preparation” (AP) are reaffirmed.) and “work with reserves and quarries” (TRC). These last two have less weight than the first.

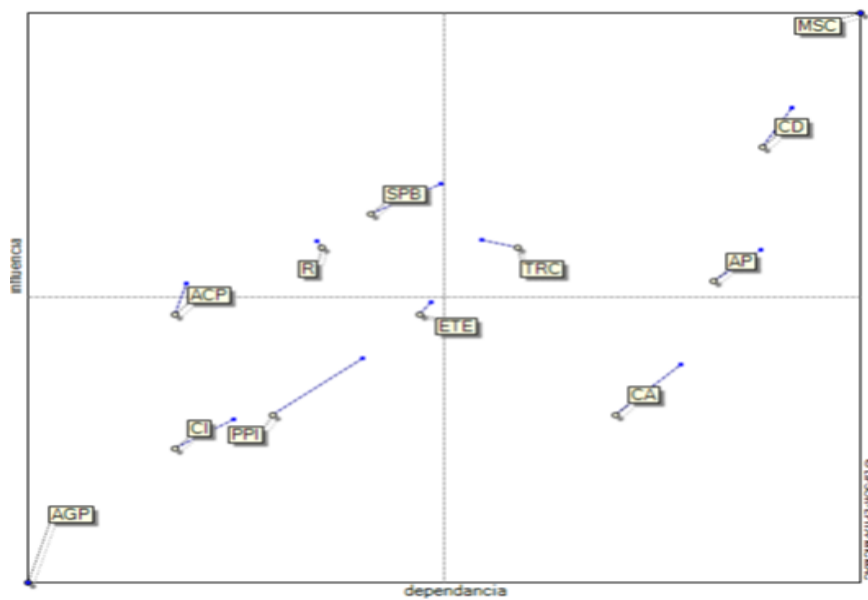


Figure 4. Displacement plane: direct/indirect/potential indirect
Source: MICMAC

So that the performance evaluation processes based on competencies manage to identify the key competencies to work on for the next period when they combine the calculation of the priority index with the prospective analysis of direct, indirect and potential influences/dependencies.

The role that relational competencies play in the future is relevant to the position analyzed, suggesting a review of the preparation and improvement plans of the position holders in this sense, to develop capabilities that allow them to respond to the demands of 4.0 environments.

The prospective analysis can incorporate other benefits of the MICMAC, such as the graphs of direct, indirect and potential influences, as well as the classification of competencies according to their influences comparing certain periods. All tools that enhance the interpretation of the competencies to prioritize in new performance periods, guiding evaluation and training decisions of managers/leaders. Prospective analysis supports and expands the vision of evaluators and evaluated.

Conclusions

Given the need to deepen the preparation and improvement of public and business administration cadres in topics on the identification, measurement and evaluation of managerial competencies, a workshop class is developed within the public and business administration diploma course in Ciego de Ávila that allows:

- Identify, at the beginning of the diploma, a social perception of limited production of meanings about managerial competencies, which suggests a poor competency-based management culture in organizations and unfavorable subjective conditions to advance at an accelerated pace in the implementation of this modern tool. management.
- Familiarize graduates with the methodology for the design and evaluation of management competencies developed by the ESCEG.

- Develop skills for measuring the level of performance of a position, based on determining the current competence index and assessing the importance of having data mining of the supreme intangible to guide the evaluation processes in the organization. - Identify prioritized competencies for new performance periods based on a calculation basis of the priority index by competencies and the analysis of prospective techniques.

The incorporation of the study of the subjective dimension of the competencies, the calculation of the current competency index of the position and the competencies to prioritize for new periods of performance, from a strategic and prospective approach, strengthen the ESCEG's methodological proposal for the design and evaluation of management competencies in Cuban public and business administration organizations.

The strategic, prospective and participatory approach of the proposal contributes to the improvement of the performance of evaluators and evaluated, to a decision-making based on less intuitive competencies and more aligned with data governance in organizations.

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Conflict of interests

The authors declare that they have no conflicts of interest.

Authors' contribution

- Yuri Fernández Capote: Theoretical-methodological conceptualization, formulation of the manuscript, review and final editing of the manuscript.
- Vivian Espinosa Rodríguez: Review and final edition of the manuscript.