A Conceptual Approach to Competency Project Management of Mini-Companies in Economists

Acercamiento conceptual a la competencia gestionar proyectos microempresariales en el economista

David Wilfrido Moreira Vera¹ http://doi.org/0000-0002-7020-4178

Evelio F. Machado Ramírez²* http://doi.org/0000-0002-1538-2887

Jessica Mariela Zambrano Cedeño³ http://doi.org/0000-0003-1370-5934

¹Manuel Félix López, Higher Polytechnic School of Agriculture of Manabi, province of Manabi, Ecuador

²Enrique Jose Varona Center for Educational Sciences Studies, *Ignacio Agramonte* University of Camagüey, Cuba

³Eloy Alfaro Laic University of Manabi, Bahia de Caraquez extension, Province of Manabi, Ecuador

*Correspondence: evelio.machado@reduc.edu.cu

ABSTRACT

Aim: To assess the theoretical treatment of acquisition and development of competency project management of mini-companies in economists.

Methods and techniques: Theoretical research methods were used to provide the rationale that helps reveal the gap existing in this area of knowledge.

Main results: Besides recognizing the priority of the Ecuadoran government to encourage mini-company project filing, emphasis was made on that it is also a responsibility of universities during professional education, so that economists can provide counseling, and be in charge of professional training. Accordingly, the recent literature was reviewed to assess the state of the art regarding this competency.

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Conclusions: The complex character of competency-based education is explained in

order to include competency project management of mini-companies in the curriculum of

education in economics.

Key words: project-based learning, project managing, mini-company.

RESUMEN

Objetivo: Valorar el tratamiento teórico de la formación y desarrollo de la competencia

gestionar proyectos microempresariales.

Métodos y técnicas: Fueron utilizados los del nivel teórico de la investigación para

proveer de los fundamentos que facilitan poner de manifiesto la brecha existente en ese

campo de estudios.

Principales resultados: Además de reconocer la prioridad del gobierno ecuatoriano

para incentivar la presentación de proyectos de microempresa, se hace énfasis en que

ello es también una responsabilidad de las universidades, para la formación de

profesionales que puedan asesorar y dirigir su conformación; así, se revisó la literatura

actualizada para valorar el estado de la ciencia respecto a la competencia objeto de

atención.

Conclusiones: Se fundamenta el carácter complejo del desarrollo de competencias

para incluir la correspondiente a gestionar proyectos microempresariales, como parte

del currículo de formación de los economistas. Palabras claves: aprendizaje por

proyectos, gestionar proyectos; microempresa

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INTRODUCTION

The development of mini-companies in Ecuador has been marked by a broad diversity

of initiatives taken by several different actors. However, despite the growing demand of

support and development, as mini companies expand their importance within the

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country's economy, programs to encourage this sector have shown a lack of conception, implementation, and running. This responsibility affects both public and private institutions, international cooperation, and unions engaged in promoting this sector. Accordingly, it is important for universities to create didactic and pedagogical alternatives so that graduates of related studies are capable of managing viable projects to favor the country's development.

The term mini-company has been subject to diverse interpretations; for instance, in association to the concepts of underdevelopment, poverty, and the informal sector. Some have explained the creation and existence of mini-companies as a result of the incapacity of a country to offer formal employment, and as an element of subsistence, in which the reality of that dynamic is not reflected.

Resulting from that relationship, which seems to rely on unfortunate reasoning about universal cause-effect, a tendency has been observed in some cases to label small-sized companies as mini-companies. This term may lead to the knowledge of something similar to a company, though it is not actually so; the ones in charge of running the company resemble what a business person could be, though they are not so, because they are mini-business people. This kind or reasoning has made some countries pay little attention to smaller companies, so bank institutions, in many cases, avoid taking financial risks, and therefore, refuse to fund smaller investment projects.

Hence, based on that appreciation, the purpose of this study is to open the mind to a more institutional and social dimension of competencies; that is, reflections and debates on models or systems created in different countries during the process of political, administrative, and operational establishment of this type of approach, particularly in terms of mini-company project management, which has not been dealt with in the literature. Therefore, it has not been part of the conception of a competency in this specific area; rather, studies abound in relation to process management in education, aimed to coordinating, implementing, and evaluating educational innovation projects, which articulate human and material resources efficiently, in order to transform and improve pedagogical practice.

The essential research methods used were theoretical, which enabled a close examination of what state-of-the-art science has produced in relation to this issue, all of

which contributes to a conceptual synthesis that favors the design of student training strategies in economic-related degrees, or others, to face the reality of labor environments as managers and advisors, with the workers of these mini-companies. Therefore, this is just an essentially didactic and pedagogical glimpse of university student education, not necessarily within the perspective of management.

DEVELOPMENT

The business environment is ever more complex and variable, more dynamic because of the existence of a strong underlying inclination to change, and the lack of certainty, since the predictability of many of the productive indicators under this scope is lower. Hence, the transit is from a stable environment to an increasingly more dynamic and turbulent one, both in the macro and micro-contexts.

In competitive and competent environments like today's, society needs professionals capable of facing the most diverse demands of everyday life, so the ways and means to achieve them can be articulated. And, consequently, the teaching-learning process (TLP) in universities should assimilate these realities to redefine and transform their processes in keeping with the new requirements of economic development.

Nevertheless, the search of responses that allow for improved results in professional education must be done using new theories and practices, such as the case of the developing professional competencies, as a favorable idea to the main concept of the proposal of this paper. If professional success is achieved through a distinctive quality of a competency, or a group of them, which are specific and inimitably, within the lapse of professional education, then it will be possible to say that the transformations demanded by the current world could be made to the interior of the societies where these graduates will perform their profession (Machado and Montes de Oca, 2020a).

The fact is that since very early in this century, identification to constant changes in society, politics, economy, technology, education, and labor, did not emerge by coincidence. Accordingly, its particularities have been influenced by globalization as an emerging conception, as well as the obligation to assume life styles and thinking offered by the mass media, a weakening of authority, the important role of information

technology, and communications as a starting point to produce wealth and power, social isolation, obsession over efficiency and efficacy of production processes, and the change from a technological society to a society of knowledge based on the generation of an economic theory that places knowledge as the main axis for the creation of wealth, where the elementary tool is knowledge; the explicit desire of making use of knowledge to create much more should rely on a superior effort of process systematization and organization.

Based on the previous, there is a need to train competent professionals in the economic sciences in order to select, update, and use knowledge in a particular environment, and to learn from different contexts throughout life. That way, graduates will acquire the potential of what they incorporate consciously for creative application of the knowledge adopted to new situations.

In education, it is possible to find information about the concept of competency, in works, research, articles, institutional practice, and memoirs from meetings, reunions, conferences, and the like. Hence, it can be said that the competency-centered didactic-pedagogical approach is being used largely by higher educational institutions internationally (Machado and Montes de Oca, 2014, 2016; Rubio, Puig, García, and Palos, 2015; Tobón, 2015; Tobón, González, Salvador, and Vásquez, 2015, among many others).

Because of it, countless definitions have appeared, which, in most cases, have misinterpreted the true dimension of the term competency, since in many cases, it has been regarded as a skill, dexterity, or capacity. It has also been considered a simple cluster of skills, knowledge, values, or aptitudes, without looking into the real complexity it manifests, beyond ideal, though optimum, performance (Machado and Montes de Oca, 2020a, b). Consequently, the concept of Machado and Montes de Oca (2020b) will be assumed in this paper:

An intellective synthesis of knowledge, skills, and values expressed in practice in a motivated, reflective, and socialized manner, in keeping with the priorities and needs of the context in which they are formed and developed. It is integrated to communication in pertinent completion, the utilization of technology, self-

management of knowledge, and environmental awareness, all of which produces optimum performance in the solution of particular assignments of the socio-professional environment. (p.418)

A conclusion can be drawn from these ideas: the concept of competency refers to a phenomenon with multiple dimensions for which no integrating theory exists, and therefore, the remaining questions are even more pertinent than the proposals.

Nevertheless, from contemporary theoretical multiplicity, and according to the definition presented, it is possible to generalize that the internal structure of a competency is made of the integration of a set of cognitive, valuable, emotive, and processable resources that make a person act properly and responsibly; then this person should be able to solve complex tasks or problems optimally, which can be met in education by a set of established criteria or standards that determine socially-established, motivated, and constructed competencies.

Competency acquisition and development within the context of higher education, as regarded now, may open ways of materialization, but only on the condition of going beyond theory and proper competency-centered analysis, because in no case it can minimize or disregard present-day discussions on university curriculum design and their conceptual system. Otherwise, it would be entering the realm of abstraction.

In short, competency refers to efforts on different dimensions, such as,

- The perspective to perform intelligently –where judgment is a substantial part– in face
 of complex contextualized problems that allow for acceptable solutions.
- The existence of meta knowledge or meta cognition, as an essential aspect in processes of regulation and self-regulation of knowledge, so they widen and enrich the repertoires of thought and action, depending on the reflection and evaluation of practice.
- The importance of scientific-research training as undergraduates going through different disciplines and/or subjects in the curriculum, and the interdisciplinary and transdisciplinary relationships, especially environmentally sustainable and respectful.
- The value of communication, and consequently, teamwork (collaborative, cooperative, and interactive) for knowledge management (Guerra, Machado,

Espíndola, and Farit, 2020), all of it enhanced by the utilization of different technologies and resources. Thus, discussing and sharing purposes, reflecting, coordinating actions, conducting dialogue, experimenting, and socializing, develops the feeling of belonging based on motivated commitments that define a responsible professional staff having ethical consciousness.

• The indispensable, within these constraints, of socially-motivated conducts would be impossible without actions directed to develop professional competencies.

Competency mini-company project management: importance for graduates with an economic background or related studies

The concept of mini-company refers essentially to lowly capitalized economic facilities that operate in the market of risk investment. Based on a financing perspective, they are qualified as family economic units in the Ecuadoran setting, with funding needs for labor capital.

Today, that market, constituted by mini and small companies, is characterized by the lack of working capital, which self-limits their development, facing harsh barriers to access quick and speedy credit from the formal financing system. Consequently, this type of market, within the reference context, finds it hard to get funding from formal banking intermediaries, which is translated into frequent recurrence to the informal credit system (non-regulated). Besides, it has surfaced as a result of weaknesses in their management, and the lack of a still more interpretative and scientific projection, as well as the absence of properly trained personnel to lead small entrepreneurs satisfactorily. Generally, two elements are thought of as defining and constraining the possibilities of growth:

- The conditions and type of market of goods and services it is inserted.
- The managing capacity of the promoter.

Other factors, however, are not included, which ultimately, are the main reason for this type of organization, in the form of social and environmental factors, which are often disregarded.

Since 1999, the National Mini-Company Plan in Ecuador (Government of Ecuador, 1999) stated the importance of the creation of mini-companies, which today, comprise a

significant percent of the GNP. Nevertheless, this setting is characterized by a broad diversity of initiatives taken by multiple actors; though the demand of supporting services and development grows on the day, as mini-companies spread their importance in the economy of a country, the programs that promote this sector face conception, implementation, and running issues. This responsibility affects both public and private institutions, international cooperation, and unions engaged in promoting this sector.

Therefore, it is convenient to start by defining the term project, in order to later conceptualize project management as a competency, and because it is a term, which is commonly used so it can embrace different meanings, so it is not always used with the same sense or proper accuracy. This is done with the purpose of avoiding misinterpretations when a reference platform is required.

Today, there are industrial, business, research, technical, and computing projects. Depending on the case, they can be projects to develop new products, companies, marketing plans, and others. This diversity only shows the relation of the project to a behavior assumed to accomplish a goal. Depending on this goal, the project specializes, and will need support from another term that can clarify it or define it; this particular case refers to mini-company project management. Moreover, the human potential of modeling is linked to the occasional existence of a theory of projects where there is a correlation between *praxis* and the experience of management.

This rationale seeks for reference frames to ponder on the experience of projects and about projects as objects of study. At the same time, it enables support to place them in all their varieties, which permits their study as a science within their broad scope of action. Hence, it is clear that a project can be defined in many ways; nevertheless, in all the cases, the fact that it is an experience, and that it leaves a print in the author's self-experience, should not be emphasized.

There are projects of all kinds, which makes management a highly complex competency, though it depends on the vision of the project in use, thus producing different visions of what is understood as project management.

From a formal perspective, project management is visualized as the belief that it is easier to control and regulate resources when a goal stands in the middle, rather than when the goal itself is the purpose. Thus, the ultimate explanation for this is as planning,

organizing, running, and controling processes of resources during a set period of time, to fulfill specific goals, by using formal and informal techniques, instruments, methods, and heuristic processes run by the manager, in order to motivate and lead the team toward an end, which in this particular case could be the family of the micro-company entrepreneur.

Based on this idea, it is possible to reach the conclusion that project management offers professionals a set of work tools that facilitate coping with it, anticipating problems, improving future actions, and acting adequately in face of events of uncertainty that might emerge, but focused on the manager as an adviser.

Now, it is possible to add that project management should be understood as an integration of knowledge arranged as information on instruments and practices placed in the hands of people who must run a group of resources, with an optimized view, not visualizing the ideal, and the activity performed in the middle of restrictions and contingencies, to achieve pre-established goals in a plan.

As a result, it can be concluded that project management is nothing more than an implicitly motivated, cooperative-collaborative, communicative process within the conversational space pertaining to the project. The space in which projects are managed become a reflective entity itself that communicates with the micro-company entrepreneur professionally to improve the solution of something, and the solution process, simply by obtaining a variety of opinions.

Therefore, it is possible to infer that project management, as a professional competency, is constituted as part of an integrated process of knowledge, skills, attitudes, and values which are intrinsically motivated in a community of cooperated, collaborative, discursive, reflective, and communicative practices that generate their own model of solution, their innovation system, allowing for solution —socially conditioned, motivated, and sustainable— of a problem, which is economically possible, cost-effective, environmentally friendly, and technically effective and efficacious. In short, it is innovation derived from the complex conceptual relation among work, learning, and innovation.

Now, project management as a professional competency should also be regarded from a systemic approach made of different subsystems, components, and organizational entities, which are coordinated according to an idea of organization to accomplish a goal.

It is a fact that the complexity of present-day situations -related to micro-company project management-, either technological or social, has led to more complex project design actions attached to subjectivity of participants who are distributed along the project life cycle.

Then, if a structure of project management competency is designed, it can be said that in general terms, a system has a conceptual environment (mini-business, in this particular case), because of its relation to the environment, with a structure of components that shape and provide physical, material, and concrete forms. Based on the same conditions, the components and their interactions use and share a conceptual system in order to accomplish their goals.

From this perspective, it can be added that the developing system of competency minicompany project management, in keeping with the definition of competency given, is initially located in:

- A context that defines the operating environment of project management, and that of development process of competency, in particular, which along with other components of the system, influence the practical context of the system project management. It also forces the establishment of performance limits in management practice to which its dynamics is circumscribed.
- A process that structures competency mini-company project management, showing the organization of management system components, or the network of its managing processes.
- A piece of content that identifies the domain of specific information used to manage
 a specific project. Simultaneously, it refers to the content handled by various
 components of the management system, which belong to the management process,
 and whose contents allow for transformation of inputs into outputs, which are
 convenient for management and design.
- Implementation, must be the way in which the mini-company project management process will continue or continues to learn to subsist and become sustainable in the

context. It has to do with the dynamic aspect of the project, since it is an evolving system that makes the management system evolve and have a direction.

Another fundamental concept in the realm of competency mini-company project management is humanism, as a self-concept observed in people. Every human will be better if they are recognized in other people's dignity. A humanist understands life and their peers, which involves respect of the internal freedom of humans themselves, to think, feel, and believe. That is, the manager is encouraged to have a palpable existence, and become part of the world around. Through work, as the essence and core, as a practice dignifying human condition, it can turn into the ultimate need in life, the source of social and spiritual wealth, and a force in the world.

The aspiration of wellbeing, in that sense, it to provide future university professionals in the area of economic sciences, and other akin degrees with a comprehensive understanding of reducing the impacts that can be produced within the mini-company environment, and consequently, social, economic, and technological transformations, promoting the advancement of projects, the development of technology, and a change of conceptions with the participation in such management. It must go from a liberal and individualistic practice to an institutional and trans-professional practice, becoming a demand to harmonize the application of scientific rigor with a human drive and shared responsibility among every participating professional at different moments of project management of this type, hand in hand with micro-company entrepreneurs.

The professional practice related to micro-company project management is not foreign to these considerations; through its historical process, it has inherited a philosophy of responsibility of human improvement that supports it, as the meaning of its practice. It also demands a vocational project that does not end by choosing a university degree, but as part of a whole commitment that responds to a series of contextualized motivations to achieve a satisfactory level of development in humans, both individually and collectively.

Mini-company project management, as a vocation, should aim to social well-being, in concert with other disciplines; its essence is to achieve sustainable development, its professional commitment is to aid people so that they can obtain, preserve, and reestablish their small companies in a globalized society like the Ecuadoran.

Hence, the social image of mini-company project management since the beginnings of the activity has had more implications of humanistic value, as a quality that, from a simple technological competency, which is primordial in its historical process, involves a vocation that requires a higher degree of conviction to commit reasonably to the mission of humanism that favors management.

The wisdom in choosing any activity is essential for motivations that cope the senses and the purpose of an effort, as well as acceptance of the responsibility it brings, and the obligations posed (indispensable to achieve a significant level of personal satisfaction by being competent to conduct efficient activities).

On the contrary, failure to comply with mini-company project management brings about tedious and overwhelming work, derived from an emotive distortion that causes uncertainty of determinations by managers, and in the fulfillment of essential duties, whose results may deteriorate the behavior of people in detriment of the ethical conduct that should be implemented in those cases.

The present-day reality of mini-company project management requires clear responsibilities that engulf all the demands from society urgently. Undoubtedly, every humanistic aspiration must follow a purpose of individual and collective perseverance to recognize the urgency of development in this epoch.

Every professional of the economy who helps manage a mini-company project with the engagement of interested agents, represents a potential of competencies, efficiency, and humanism translated into acts of will that require no prescription, indication, or gratification to offer a more humane vision, thus demonstrating greater training to understand the problematic of each mini-company entrepreneur, or those willing to be, developing the necessary sensitivity that allows them to reduce or mitigate problems caused by the lack of sustainable project implementation.

Under such wealth of values, trainees in economics must have a respectful attitude toward human dignity in a significant manner, as well as respect for all the rights every person and organization (mini-company) are entitled to.

Ideally, the purpose of mini-company project management, as a competency, should be to try to achieve harmony among a series of mental, physical, and attitudinal resources, with special emphasis on personal and collective satisfaction, so that the outcome can be optimum. Then, in the process of developing a particular competency, the participants in mini-company project management are supposed to play their part, with the required freedom to make contributions when deemed necessary, depending on the changes or new needs experienced in the context of performance.

One last aspect that cannot be ignored lies in the didactic rationale for training in minicompany project management competency. It is well-known that since the last century, quite a few philosophers defined humans as the beings that project; that is, the person capable of directing their behavior to future thoughts on a single idea. Hence, when referring to this competency, it means, ultimately, a quality of human beings, not a properly instrumental action. From that idea, new diverse approaches on education based on project actions emerge, along with their choice, and the possibility to undertake them.

To achieve a didactic contextualization according to university TLP, so that it can contribute to the development of a competency, the so called project-based learning has been traditionally used since the last century, which is the case and present interest, though it was originally associated to pragmatic learning theories, essentially. In that sense, though project-based learning has points in common with competency project management, they are not necessarily the same. The former is a teaching aid that can be very useful to achieve the latter.

However, from the historic-cultural perspective of Vygotsky *et al.* (1979) the analysis of ways that can be used for skill acquisition and training of competency mini-company project management, this method is revealed as a way that favors reasoning, leads to a performance dynamics, calls for student creative capacity and research. In this case, students in the economic-related degrees, so these procedures deal with the manner in which processes should be implemented for specific project management, which facilitates the ways and modes of organizing students' cognitive activities, or as regulators of activity that links faculty and students through the proximal zone of development, which is directed to meet goals. Hence, project-based learning is the sequence of student-teacher activities directed to accomplish a mission.

In this idea, another component of the mini-company project management system can be found; it materializes in the process of developing a professional competency. The design of mini-company projects helps consolidate the teaching-learning process to achieve that purpose, since students can learn by doing and reflecting on a particular situation. There are also implicit thinking processes that enable the organization, planning, implementation, and control of actions, and the necessary knowledge management to implement the project. This is done under the leadership and organization of educators, thus becoming a professional experience that causes social improvements in students, seen as a change of attitudes, apprehension, and personal and intellectual growth derived from their relations, communication, and interaction with others.

Hence, all the above reveals the essential breach dealt with in this article, which is given between the demands of the Ecuadoran society to train economists that solve present-day problems in the acquisition, and training of professional competency mini-company project management, that needs specific formation for proper development.

CONCLUSIONS

The complex character of acquisition and training of professional competency minicompany project management is explained on a liminal basis, according to different conceptualizations that try to group elements of task, professional excellency as development and adaptation to the complex and global environment, in which professional performance is developed.

So far, the university is unable to train its own professionals based on a didactic perspective in that sense, so it contributes to the fulfillment of social development purposes. Additionally, the literature does not include the concept of mini-company project management, a competency that needs training as part of the needs of students in the economic and related studies, all of which contributes to their professionalization.

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The authors declare that this manuscript is original, and has not been submitted to another journal. We are responsible for the content published in this paper, and certify the existence of no plagiarism, or interest or ethical conflicts.

Authorship statement:

David Wilfrido Moreira Vera. Conceptualization (leader), formal analysis, redaction – original draft.

Evelio F. Machado Ramírez. Conceptualization (support), research, methodology, redaction and proof-reading, visualization.

Jessica Mariela Zambrano Cedeño. Conceptualization (support), project administration.