

***The role of competency management in improving enterprise innovation
- The case of some productive enterprises in the state of Tlemcen, Algeria-***

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Abstract:

This study aims to demonstrate the role of competency management in improving innovation in the organization. The researchers used a questionnaire and processed it using the spss v21 program.

The results showed several key points, the most important of which is that employees in organizations are distinguished by innovation, competency management has an impact on the organization's innovation.

The study made important recommendations, including the need for institutions to pay attention to the management of human competencies and knowledge, as it is the basis of competitive advantage as a strategic approach to improving enterprise innovation.

Keywords: Human competencies, Competitive Advantage, Competency Management, Innovation, Enterprise.

Jel Classification Codes : M12; O31

1- Introduction :

The environment today is characterized by many changes and developments in all economic fields, especially with the emergence of globalization, the revolution of information and communication technology, and the intensification of competition. In order to ensure survival, continuity and growth, institutions are working to increase innovation in order to reach high levels that enable them to be distinguished. This trend has led to relying on highly knowledgeable human competencies in the organization, as well as the development of the human resources function as it has become working on managing competence and knowledge in order to improve the performance of the organization as a whole.

- Problematic

From it, we formulate the following problem: What is the role of competency management in improving the innovation of the enterprise?

- Study hypotheses

- H0: There is not effect of competency management on improving enterprise innovation.
- H1: There is an effect of competency management on improving enterprise innovation.

- Study objectives:

- Clarify concepts related to competencies and innovation.
- Highlighting the importance of competency management in light of competition.
- Identifying the role of competency management in improving enterprise innovation - the case of some productive enterprises in the Wilayat of Tlemcen–

- The importance of studying:

The role of competency management in improving enterprise innovation.

- Topics of Study

To answer these questions, we address the following topics:

- 1-Theoretical Framework.
- 2- Previous studies
- 3-The role of competency management in improving enterprise innovation - the case of some productive enterprises in the state of Tlemcen– Algeria.

- Study Methodology

A questionnaire consisting of 23 questions has been developed, divided into two axes: competency management and innovation

The human spatial boundaries included 37 workers from some production establishments in Tlemcen are: **Giplait Sonelgaz, Naftal**

Time Limits **2018**

2-Theoretical Framework

2-1- Defining competencies.

This concept originated in 1988, where competence is defined as the extent to which a person is able to demonstrate the knowledge and skills to provide a specific service or product, according to the required standards, which describe work tasks.

Thus, it is the knowledge, behaviors and skills required for any particular job according to the standards of that industry. (Khudair, 2013, p. 79)

One of the most important definitions of the concept of competency, through which it is possible to draw an approximate picture that highlights the most important features of this concept: (Al-Habib, Al-Jilali, 2009, pg. 112/113)

A- Definition of the French Association for Industrial Standards (AFNOR)

Competence is the use of capabilities in a professional situation in order to reach the optimal performance of a job or activity.

This definition links competence to the purpose of its use without specifying the content of capabilities.

B- Researchers Daniel Held & Jean Marc Riss define competence as “the ability to carry out the professional activities expected of the human resource within the framework of the role assigned to it in the institution or in society, and it can be said that it is the sum of theoretical knowledge, scientific knowledge and behavioral knowledge used in a specific context. ”.

This definition places competency at a meeting point between human resources and their competencies on the one hand, and organizational structures and activities to be accomplished on the other hand, and thus distinguishes between the individual and organizational dimensions in order to integrate them into what the researchers call The Capacity to Act.

C- The consultative meetings of the working groups held under the auspices of the National Council of French Employers MEDEF from April to December 1997, it was decided to adopt the following definition:

“Professional competence is a combination of knowledge, skills, experiences and behaviors that are practiced within a specific framework, and are observed through field work, which gives it the status of acceptance, and then it is up to the institution to determine, evaluate, accept and develop it”.

D- Philippe Zarifian proposed a definition that seeks to integrate different dimensions and collect multiple formulations:

"Competency is the human resource taking the initiative and holding it responsible in the various professional situations it faces".

2-2- Competency characteristics:

Competencies are characterized by a set of characteristics that can be summarized as follows: (Abdul Malik, Sarah, 2014, p130/131)

Competency with a purpose: where different knowledge is employed in order to achieve a specific goal during the implementation of a specific activity.

Competence is acquired: there is no competent person by instinct, but competency is acquired as a result of learning from several ways.

Competency is an institution: the achievement of specific objectives requires coordination between competency resources.

-Competency is linked to the activity: there is no competency unless its resources (theoretical knowledge, practical knowledge and behaviors) are used in the implementation of the activities, that is, the competency is practiced in a practical way in the field reality.

2-3- Types of competencies:

A - Individual competencies: are a combination of a set of knowledge, skills and abilities in the context that allow to reach the expected level of performance. (Cécile, 2013, p10).-

B - Collective competencies: They are built with the will of human resources and their individual competencies, and expand through organizational routines. Collective competencies have existence and meaning “when information is exchanged, skills are articulated, goals and strategies are shared.” (Guillaume Detchenique et al, 2013 , p37)

C- Strategic competencies: a set of skills and technologies that contribute in an explanatory manner to the added value of the final product.

D- Organizational competencies and management competencies: define the extent of the organization's response to the changes surrounding it.

E- Pivotal core competency: It is a set of high skills, tangible or intangible assets of a special nature and high-level technologies, which in total form the basis of the institution’s capabilities to competitiveness, and Larregle defines it as: “those skills resulting from the combination and overlap of a set of enterprise activities Where these collective competencies allow the creation of new resources for the organization, they do not compensating resources, but rather allowing them to be developed and accumulated (Mohamed Lakhdar, 2016, p. 336).

2-3- Dimensions of Competency:

The following basic dimensions can be considered: (Guillaume Detchenique and others, 2013, p37).

Scientific knowledge: theoretical competencies.

Practical knowledge: applied competencies

Behavioral knowledge: social competencies.

2-5- Managing human competencies.

Human resource management can be defined as competencies as “planning, organizing, directing and controlling the competencies of the human element in the organization, in order to ensure compatibility with the competencies of the required job and the development of its competencies on

an ongoing basis to achieve outstanding performance for him and the organization.” (Rachid Menasriya, 2012, p. 194).

Competency management includes the following elements: (Bohaneh Kawi, 2008, p. 243).

A- Planning competencies: by estimating future needs, and comparing them with what is offered in the institution, and here a competency gap may form based on the number to be appointed, and the areas that need that number.

b- Acquisition of competencies: by attracting new human resources or belonging to the same institution, as well as by purchasing consulting services or cooperating with other institutions.

C- Competency development, which refers to the learning process that develops knowledge, skills and trends, as well as training and continuous development processes, and each process has its advantages and steps in order to achieve effective development of competencies.

D- Using and evaluating competencies: the obtained competencies are employed, and here the results of training and acquiring skills and learning appear, i.e. determining the benefit achieved from the training programs, which leads to achieving the competencies used, which will guide the competency planning stage.

The competency formation stage: It goes through sequential stages that start with obtaining the competencies that are the outcome of the accumulated experience, then comes the discovery of capabilities, and then the formation process in which the accumulated experience is transferred to produce knowledge and skills exploited in performance.

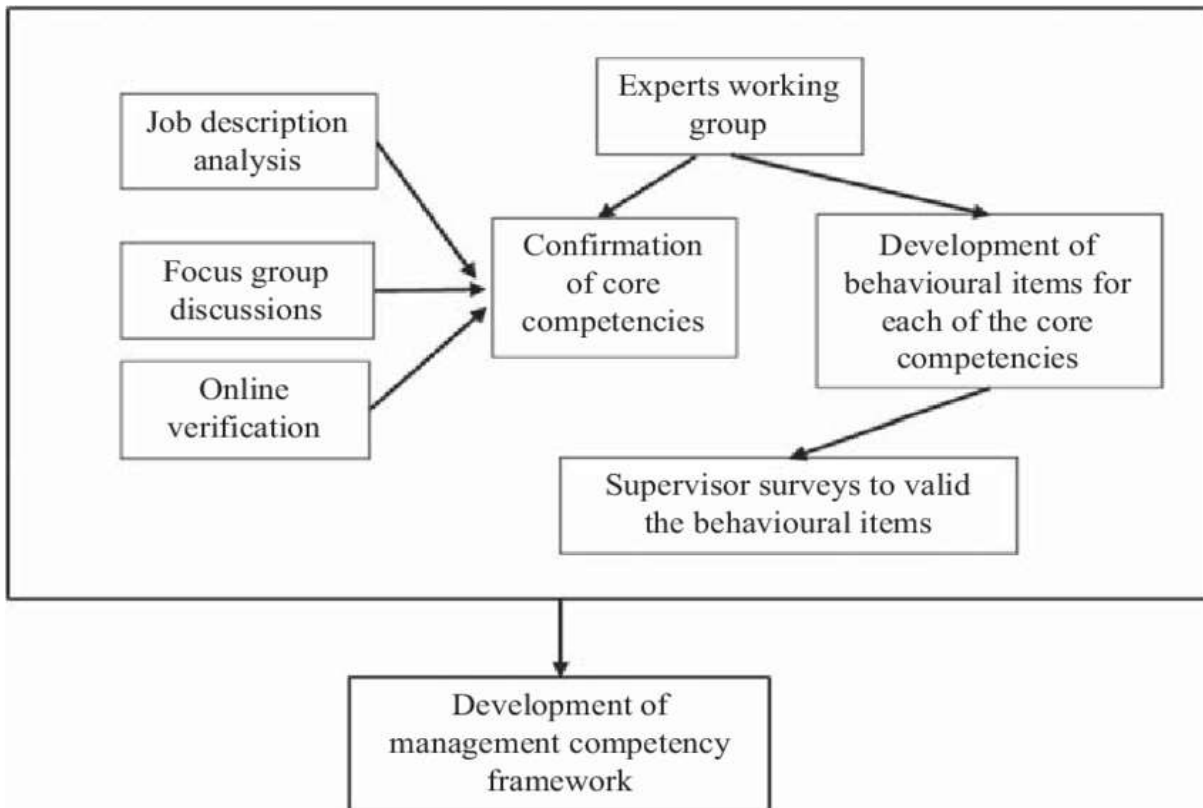
The impact of human competency management on achieving outstanding performance

In the economy of the twenty-first century, the competency of the human resource has become the key to the distinctive competency of the organization. The Human Resource Department is responsible for the task of building the individual and collective competencies needed to achieve sustainable value.

Here lies the role of human resources management in transforming these competencies into practices that contribute to achieving better performance and making the organization more competitive.

The importance of competency lies if it is considered an essential component of performance, in addition to motivation and work environment. It is also one of the peculiarities of the individual when he moves resources. (Rachid Menasriya, 2012, p. 194).

Figure (1): Diagram of the competency identification and management competency framework development process



Source: Zhanming Liang, Peter F. Howard, Sandra Leggat, Timothy Bartram, (2018), <https://doi.org/10.1108/JHOM-06-2017-0120>

2-6- Innovation: can be defined as: “a combination of abilities, preparations and personal characteristics that, if an appropriate administrative environment is found, can promote mental processes to lead to original and useful products, whether in relation to the previous experiences of the human resource or the experiences of the institution, society or the world, if the results are of the level of creative breakthroughs. In one of the fields of human life. (Amina &Ali Abdullah, 2015, p181).

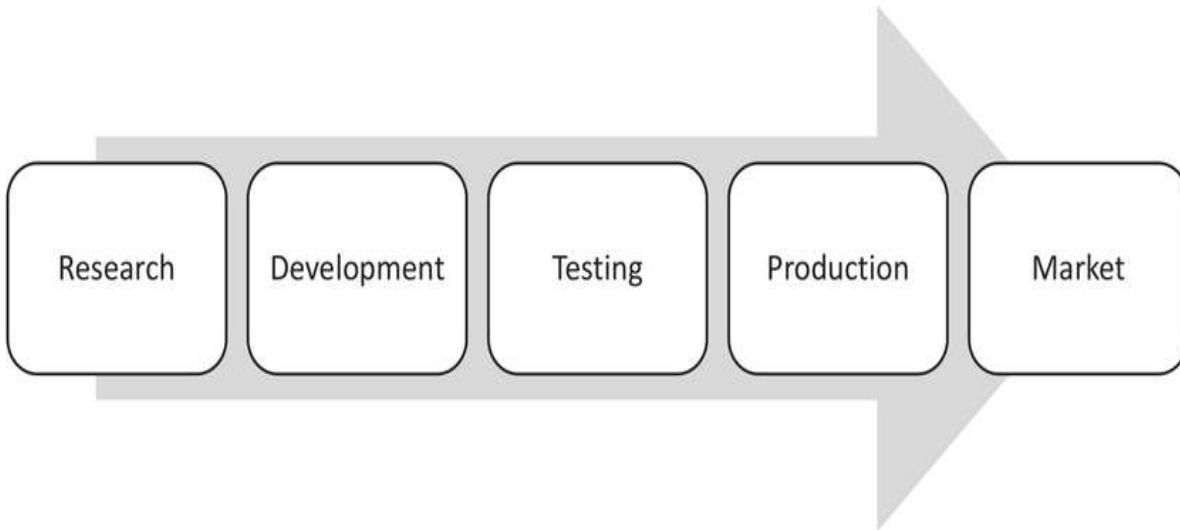
2-7-Types of innovation

There are those who classified innovation into two types: Jones: (Akef , 2011, p55)

-Radical innovation : It is to reach a new method or approach that differs completely and completely from the previous innovations, so that it works to achieve a competitive advantage and a qualitative leap in the market. It is characterized by a total difference from what came of the previous ones.

-Gradual innovation: It is the arrival of a new product in part through continuous improvements and additions that are made to the traded products.

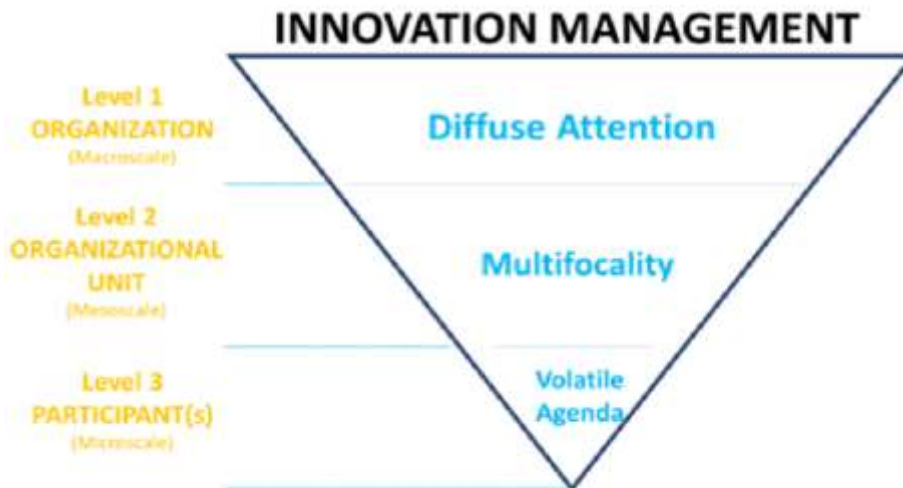
Figure (2): Innovation process.



Source: Filip Šproch, Jan Nevima, 2021, p 113.

2-8-Innovation Management: The process of creating and implementing a business design surrounding a creative idea, with the goal of transforming an invention into an innovation, and ultimately to achieving sustained competitive advantage, leading to growth and profit, in the marketplace. (Reddy , Vijayachandra , 2014, p20)

Figure (3): Three-level Structure of Innovation Management



Source: Fran Morente , Xavier Ferràs (2017), p651

2-6-Competency management and development

Though innovation is a much sought after approach towards the creation and implementation of new technologies, it is often found that organizations lack a thorough enough understanding of its underlying concepts and, hence, are unaware of the true innovations happening all around them. (Allison and others 2015, p550)

2-7 -The role of competency management in innovation and development:

It is represented as follows: (Ali Al-Anzi, 2013, p 280).

-Dissemination and expansion of a knowledge culture that is reflected in the values of human resources in exchanging knowledge and increasing their creativity and competitiveness.

-Deepening the competencies of the institutions and their core capabilities that are not imitable, and the radical or additional innovations in products and services, which the institution aims to provide a new positive competitive field.

Knowledge management helps in improving the creative and competitive capabilities of organizations by collecting new ideas and solutions and emphasizing that these capabilities are common to the various human resources in the organization.

Contribute to the diversification of competitive strategies through the ideas generated by unique creative solutions.

Organizer of the various knowledge and the course of the emotions arising during its mobilization in the light of the expected performance. (Christophe & Sanjay, 2009, p2).

3- LITERATURE REVIEW:

3-1- Katarzyna SZCZEPAŃSKA-WOSZCZYNA, Zdzisława DACKO-PIKIEWICZ (2014), MANAGERIAL COMPETENCIES AND INNOVATIONS IN THE COMPANY – THE CASE OF ENTERPRISES IN POLAND .

The research has identified key competencies of managers in the context of implementing innovation in the company as well as differences resulting from the level of management in the organization. The research has helped to identify discrepancies between the current level of competencies needed to achieve organizational objectives, and the expected level ensuring maximum competency during their implementation.

3-2- Alina Lavrynenko, Natalia Shmatko, Dirk Meissner, (2018) "Managing skills for open innovation: the case of biotechnology.

The purpose of this paper is to explore the composition of skills in biotechnology from the perspective of employers and its relation to open innovation processes in the sector. It provides conclusions for HR management practice.

3-3- Małgorzata ZAKRZEWSKA, Szymon JAROSZ, Mariusz SOŁTYSIK(2020), THE CORE OF MANAGERIAL COMPETENCES IN MANAGING INNOVATION PROJECTS.

The purpose of this paper is to systematise the concept of innovation based on a literature review and present the importance of the human element, such as key managerial competences, in the process of managing innovation projects, according to IPMA Individual Competence Baseline v. 4.0

3-4- Angga Dwiputra Solihin, Deden Abdul Wahab Syaroni (2020), Effect of Manager Competency on Innovation in Small and Medium Enterprises

This research was conducted to determine the relationship between managers' competency towards innovation in small and medium enterprises. The unit of analysis in this study was small and

medium businesses in Bandung Regency. The results of this study are expected to have a positive impact on managers' competency towards innovation in small and medium enterprises.

4- RESULTS AND DISCUSSION

4-1-Study tools

The questionnaire consisted of 23 questions distributed on 2 axis are : Innovation , competency management

4-2- Reliability and Validity

Table (1): Observation processing summary

		N	%
Observations	Valid	37	100,0
	Excluded ^a	0	,0
	Total	37	100,0

Source: Prepared by researchers based on SPSS.V21

Table (2): Reliability Statistics

Alpha Cronbach	Number of elements
,889	23

Source: Prepared by researchers based on SPSS.V21

A test of the degree of the "Reliability Analysis" tool was carried out by calculating the value of the "Cronbachs-Alpha" coefficient. It reached 88.9% and the validity ratio reached 94.2%. This indicates that the questionnaire has a good coefficient validity and reliability adapted to the needs of the research.

Table (3): The gender of the sample.

	Effectifs	Pourcentage	Cumulative percentage
male	20	54,1	54,1
female	17	45,9	100,0
Total	37	100,0	

Source: Prepared by researchers based on SPSS.V21

From the table, we notice that there is a similar ratio between the *gender* in the studied sample, it is close to 54.1% for males and 45.9% for females

4-3- Descriptive statistics

We use the five-point Likert scale, which included the following degrees of use: (1) strongly disagree, (2) disagree, (3) somewhat agree, (4) not agree, and (5) strongly disagree.

Table (4): Descriptive statistics

Descriptive statistics						
	N	Mean	Standard deviation	Variance	Min	Max
The organization possesses the competencies that enable it to achieve excellence and respond quickly to changes in the environment.	37	2,65	1,086	1,179	1	5
The competencies present in the organization are closely linked with business strategies and market needs	37	2,68	,915	,836	1	4
Human resources possess qualifications and knowledge that allow them to accomplish the tasks assigned to them	37	2,38	,953	,908	1	5
Human resources are characterized by the ability to deal with and use information.	37	2,19	,701	,491	1	4
The institution owns unique human resources that make the difference	37	2,76	,830	,689	1	4
The organization contains high-level talents that enable it to excel.	37	2,95	1,026	1,053	1	5

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The institution determines the necessary competencies that enable it to achieve excellence.	37	2,81	,877	,769	2	5
The organization works on developing and maintaining competencies.	37	2,92	,829	,688	2	4
The Foundation organizes periodic meetings and seminars to present experiences and expertise in order to reach effective decisions.	37	3,03	,833	,694	2	5
The institution is interested in its human resources to provide ideas and suggestions.	37	3,08	,795	,632	2	4
The institution has means and methods that help in the good use and application of knowledge.	37	2,65	,789	,623	1	4
The organization works to attract and develop talents at various administrative levels	37	3,05	,848	,719	2	4
Talent is evaluated and its effectiveness in achieving the organization's goals	37	2,86	,787	,620	2	4
I have the ability to present new ideas and solutions to work methods.	37	2,35	,824	,679	1	4
I have the ability to suggest quick solutions to face work problems in different circumstances.	37	2,41	,865	,748	1	5
I have the ability to provide new ideas for business development easily and automatically	37	2,38	,794	,631	1	4

I have the ability to understand and explain the relationship between the results and the causes that led to them.	37	2,27	,871	,758	1	5
New ideas gain importance and acceptance in the organization.	37	2,81	1,244	1,547	1	5
I develop plans and solutions to face work problems that may occur.	37	2,43	,899	,808	1	4
The administration adopts a policy of improvement by attracting human resources with creative orientations.	37	3,16	,800	,640	2	5
The Foundation cooperates and communicates with universities and research centers as an important source for increasing creativity.	37	3,54	,869	,755	2	5
The Foundation has means for expressing opinion and dialogue such as the Foundation's magazine, a register or the Complaints and Suggestions box.	37	2,78	1,058	1,119	1	4
The Foundation works on developing and consolidating a culture of creativity.	37	3,30	,939	,881	2	5
innovation	37	2,7432	,53205	,283	1,50	3,70
competency management	37	2,7692	,49155	,242	1,69	3,77

Source: Prepared by researchers based on SPSS.V21

Mean of axe Innovation 2,742, came at an average rate in institutions and the largest percentage in this axis 3.54 The Foundation cooperates and communicates with universities and research centers as an important source for increasing creativity.

Mean of axe Competency management 2.769 came in average rates in institutions, and the largest percentage in this axis was 3.08.

The institution is interested in its human resources to provide ideas and suggestions.

4-4- The impact of competency management on improving enterprise innovation

H0: There is no effect of competency management on improving the enterprise innovation.

H1: There is an effect of competency management on improving enterprise innovation

Table (5): ANOVA

Model	Sum of Squares	Ddl	Mean of squares	F	Sig.
1 Regression	6,520	1	6,520	62,166	,000 ^b
Residue	3,671	35	,105		
Total	10,191	36			

Source: Prepared by researchers based on SPSS.V21

Multiple Regression test is used to test the mentioned hypothesis. above table shows that F= 62.166 is significant at 0.05 level.

Table (6): Coefficients^a

Model	Non standardized coefficients		Standardized coefficients	t	Sig.
	A	standard error	Bêta		
1 (Constant)	,346	,309		1,120	,270
competency management	,866	,110	,800	7,885	,000

Source: Prepared by researchers based on SPSS.V21

Through the table we note that (Sig) of competency management is below (0.05)

We accept the alternative hypothesis that there is an effect of competency management on improving the enterprise innovation .

5- CONCLUSION

- This study showed:

- The most importance of managing corporate competencies.
- Innovation is essential to the success of an organization.
- Employees in organizations are distinguished by innovation.
- Managing competencies has an impact on the innovation of the organization.

- Recommendations:

- Relying on modern technology based on a strong internet.
- The need to benefit from human competencies and capabilities as real and permanent capital that works to achieve sustainable development.
- Work to build competencies as an effective investment for the institution.
- Focusing on education and development in all areas of the organization.

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