Influence of Organizational Culture on Competitive Intelligence Practice: A Conceptual Framework

Jihene Chebbi Ghannay and Zeineb Ben Ammar Mamlouk

***Abstract*—The competitive pressure in business environment has increased tremendously especially in the knowledge age. As a result, companies must focus their actions in activities such as collecting, filtering, and dissemination information about market, about competitors and their actions. Those are part of competitive intelligence practice (CI). Nowadays, CI represents one of the most important pieces in strategic management of organizations in order to sustain and enhance competitive advantage over competitors. A major facilitator of CI according to the literature is an appropriate organizational culture (OC). The issue of appropriate OC for successful CI is the main theme of this paper. The incentive review of previous study is explored a serious gap in the literature of relationship among OC and CI practice success. Subsequently, this study will try to fill the gap from the perspective of OC and CI. This study is proposed conceptual framework. The proposed conceptual framework is considered a contribution towards the enrichment of the relevant literature. Moreover, this study as a stepping stone for further research of finding importance OC towards enhance successful CI practice.**

***Index Terms*—Competitive intelligence, competitive intelligence process, competing value framework, organizational culture.**

I. Introduction

Nowadays, organizations are struggling to survive in today's competitive business world. The need for these firms to become and remain creative, innovative and competitive in such dynamic circumstances is understandable. It is, however, a fact that competitiveness is not a natural property of an organization. Becoming and remaining competitive requires a conscious and continuous design for competitive advantage [1]. CI has long been recognized as a strategic management tool and is one of the fastest growing fields in the business world. CI is rapidly becoming major technique for achieving competitive advantage. The usefulness of CI is to gather the required knowledge to create opportunity in the market. In fact, knowledge is increasingly playing a fundamental role as a survival element in organization, at the same time it greatly relies on people and the influence of their collective characteristics in the form of organizational culture (OC).

Several authors have pointed out different features influencing CI practices [2]-[5]. However, only a small group has carried out specific research on this subject and constructed specific framework [6]-[9]. OC is one among these factors affecting CI practice as it can be either a hindrance or an enabler to successful CI implementation. Because of its importance and implications for individual and organizations, a great deal of attention has been given to the OC and related studies. Theoretical arguments support the idea that OC is related organization performance. Besides, OC is an essential building block to creating a "knowledge friendly culture" which leads to positive outcomes such as more innovation [10]. Hence, for a company to utilize its CI efforts successfully, an appropriate OC must exist. While decision-makers should determine what intelligence is required, information gathering should be on everyone's mind.

Despite the claims for a link between OC and CI, few studies have actually examined the existence as well as the nature of this relationship. This research is intended to investigate the role OC plays in the success of CI process. It has come to fill the gap in literature since previous research that examined CI success has focused on other features such as organization size, features of the sector…The following sections reviews related literature and proposes a theoretical framework that explains which OC type, measured using the CVF, supports CI successful implementation.

II. Overview of Competitive Intelligence

CI is a methodology for managing strategic information in order to create actionable knowledge [6], [11], [12]. IT helps strategists to understand the forces that influence the business environment and, more importantly, to develop appropriate plans to compete successfully [13]. The concept of CI is a very vague, numerous definitions on CI available on literature are imprecise and inclusive, and the expression is often used integrally with other related concepts such as a business intelligence and competitor intelligence. CI can be defined as knowledge and foreknowledge about the external operating environment. The ultimate goal of each intelligence process is to facilitate decision-making that leads to action [14]. According to The Society for Competitive Intelligence Professionals (SCIP) [15] CI is "A systematic and ethical program for gathering, analyzing, and managing external information that can affect your company's plans, decisions, and operations. Put it another way, CI is the process of enhancing marketplace competitiveness through a greater-yet unequivocally ethical-understanding of a firm's competitors and the competitive environment".

Priporas [16] mentions, that CI can be considered as both product and a process. The product is data on the industry's competitors that is used as the foundation for action. The process is the methodical acquisition, analysis and evaluation of data for competitive advantage over decisions can derive. The utilization of such knowledge is known as CI.

Manuscript received November 10, 2014; revised January 21, 2015.

Jihene Chebbi Ghanany is with the ESCT, Manouba University, La Manouba. She is also with Research Lab - LARIME, ESSECT, Tunis University, Tunisia (e-mail: jihene.ghannay@yahoo.fr).

Zeineb Ben Ammar Mamlouk is with Research Lab - LARIME, ESSECT, Tunis University, Tunis, Tunisia (e-mail: zbenammar@yahoo.fr).

Intelligence works best when viewed as a process comprising a number of activities [17], [18]. Expert CI practitioners refer to a cyclic process called the CI process or cycle consisting of various steps or constructs that should follow on another without any of the steps of actions being overlooked. From previous studies, there appears to be support for distinct stages in the CI process. Key constructs or stages that emerge in the literature are as follows:

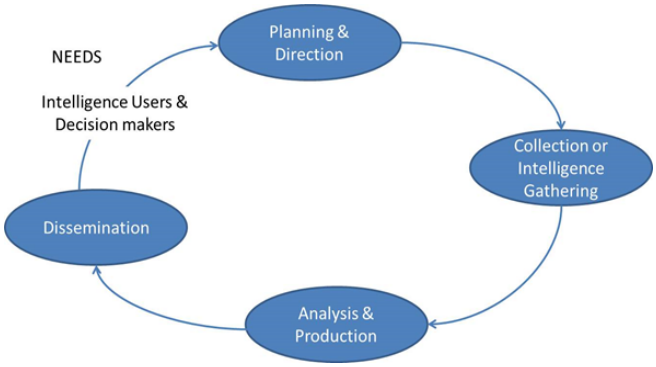

Fig. 1. The intelligence cycle, adapted from [19].

Planning and direction: Many researchers and authors have highlighted the importance of this first step in the CI process [17], [18], [20]. Cl is not about collecting all information but focusing on issues of highest importance to senior management [21]-[23]. It is also about a wider focus than only on competitors to include facets such as suppliers, customers, the regulatory environment...

Collection or intelligence gathering: It is during this phase that information is collected from a variety of sources for examination during the CI process. Collection involves accessing a variety of different sources (primary and secondary). These can be internal such as company employees [24] or external to the company. Herring [22] argues that human sources in general deliver more timely and unique information. However, published data is important for analysis and for cross checking the human reporting. The key to successful CI is to focus on what information is important and relevant and know where to find it [19].

Analysis and production: Many practitioners believe that this is where "true" intelligence is created, that is, converting information into "actionable intelligence" on which strategic and tactical decisions may be made [17], [22], [25]-[27]. According to Kahaner [17] and Rouach and Santi [18] this is the core activity of the CI process. An interpretation of information is made based on the key intelligence needs of the user.

Dissemination: Once the analysis is completed, the intelligence unit must ensure that the results of the CI process or project are communicated to those with the authority and responsibility to act on the findings. If intelligence is not delivered no intelligence was created. Kahaner [17] says: "It's the time when you present your logical arguments based on your analysis of raw data. It's a time to defend logic, to put up or shut up. It's the time when most competitive intelligence projects fail.

Sawka [19], state that the complete intelligence procedure is a complex process with a number of feedback circles. Furthermore, each element in the process must exist to generate and run an intelligence program and to cumulatively produce actionable intelligence. However, by establishing and applying these elements of the cycle, the program can perform all the important intelligence operations.

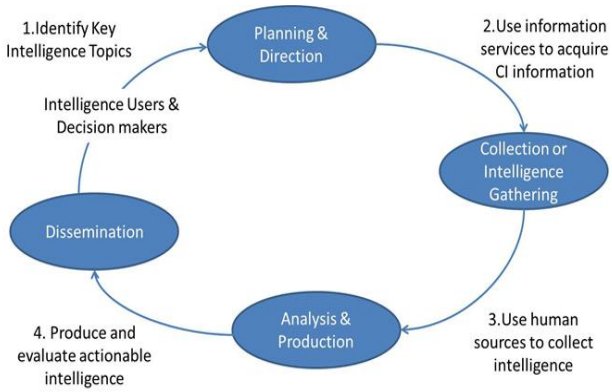

Fig. 2. The cycle's processes and operations, adapted from [19].

III. Theoretical Background of Organizational Culture

Culture is a multi-dimensional concept that can be applied to firms, industries, or nations. A review of existing literature yields an array of definitions of culture. Smircich [28] mentions that the concept of culture has been borrowed from anthropology, where there are more than 160 definitions (Kroeber and kluckhohn, 1952) [29] one of the most widely accepted definition is proposed by Schein[30] who defines OC as "A pattern of shared basic assumptions that the group learned as it solved its problems that has worked well enough to be considered valid and is passed on to new members as the correct way to perceive, think, and feel in relation to those problems".

The review of approaches to understanding OC shows considerable differences in the methodologies used to measure the phenomenon. The difference in approaches reflects the lack of agreement that exists in defining organizational culture. Whereas process-oriented approaches tends to focus on ascertaining underlying principles that may explain interconnecting patterns of behavioral manifestations, the classificatory models only describes the culture of a firm, using a verity of criteria or dimensions. However, despite this absence of a common view, there is strong agreement on the powerful and pervasive role of culture in organizational life.

Researches and theorists have tried to develop and design conceptual frameworks models or measurement tools to identify specific OC. Some examples of these models are:

Deal and Kennedy [31] identified four generic types of cultures to describe organizational culture, namely the tough-guy/macho culture, the work-hard/play-hard culture, the bet-your company culture and the process culture.

Handy [32] described organizational culture by using four types of classification, namely power, role, task and person cultures.

Schein [30] used three levels to explain organizational culture, namely artifacts, values and basic underlying assumptions.

Denison's organizational culture model [33] is based on four cultural traits involvement, consistency, adaptability, and mission that have been shown in the literature to have an influence on organizational performance.

Hampden-Turner [34] used four types of culture to describe organizational culture, namely role, power, task and atomistic cultures.

Hofstede [35] highlighted that cultures differ based on five dimensions, namely power distance, individualism/collectivism, uncertainty avoidance, masculinity/femininity and confusion dynamism.

O' Reilly, Chatman and Caldwell [36] presented seven primary characteristics to describe organizational culture, namely innovation and risk-taking, attention to detail, outcome orientation, people orientation, team orientation aggressiveness and stability.

The above-mentioned typologies of organizational culture provide broad overviews of the variations that exist between theorists in their description of this concept. Quinn and Cameron [37] present a theoretical model named Competing Value Framework (CVF) for the purpose of diagnosing OC which is adopted in this study.

The CVF is based on empirical analysis of the values individuals within an organization hold about its performance and the manner in which functions and may be used to construct an organization profile [37].

Cameron and Quinn [37] developed the CVF which describes differing OC based on two axes forming four quadrants. The vertical axis represents the organizations flexibility or central control in dealing with issues. Organizations scoring high on control are at the bottom of the axis and tend to have many documented procedures and processes which must be followed. Less regimented organizations are located higher on the vertical axis of control. The horizontal axis describes the focus of the organization and whether this focus is internal or external to the organization [38]. Firms focusing externally tend to be concerned with the market, new customers, and competitors. Organizations that focus internally are concerned with the morale of employees and how work is accomplished. Existing customers also are important as the firm focuses on processes rather than new business. The four discrete cultures defined and measured by the Competing Values Framework are clan, adhocracy, hierarchy, and market and are illustrated in the Fig. 3.

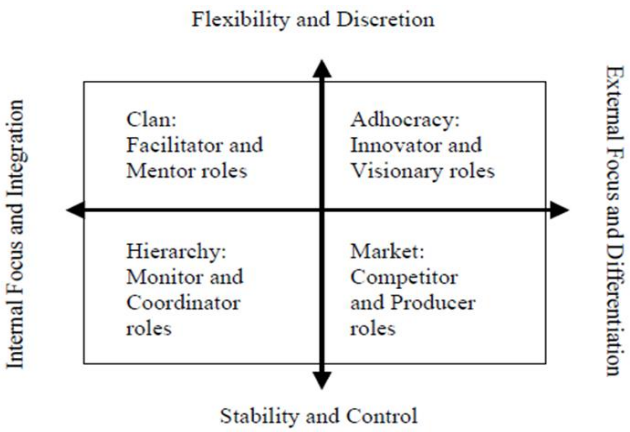

Fig. 3. The competing value framework (Cameron and Quinn, 1999).

A. The Clan Culture

The clan culture is full of shared value and common goals, an atmosphere of collectivity and mutual help, and an emphasis on comportment and employee evolvement. Leaders are seen as mentors, and concern for people, both employee and customers, is high. An emphasis is placed on team work and loyalty and tradition hold the organization together.

B. The Hierarchy Culture

The hierarchy culture is described as having formalized, structured work environments. A major emphasis is placed on coordination on efforts with the achievement of efficiency as a central focus. The management of employee is procedures driven, and predictability is valued. This concept can be treated to the image of "bureaucracy" in Weber's [39] early works on modern organization management.

C. The Adhocracy Culture

The adhocracy Culture seeks flexibility and focus on its external environment; degree of flexibility and individuality. It is supported by an open system that promotes the willingness to act. In organizations predominated by an adhocracy culture a risk taking is acceptable. Cameron and Quinn characterize the organization as dynamic, entrepreneurial, and creative place to work. Innovation and experimentation are valued, and employees are encouraged to act with individual initiative.

D. The Market Culture

The market culture focuses on the transactions with the environment outside the organization instead of on the internal management. Organization goal is to earn profits through market competition. A major characteristic is a hard-driving competitive organization environment. Managers are demanding, and a major organizational goal is winning in competitive marketplace.

IV. Relationship between CI and OC

The importance of CI for organization has been widely recognized and acknowledged in management review. In general CI is assumed to create value for organizations by applying their accumulated knowledge to their products and services outputs. However, successful knowledge creation, sharing and utilization that lead to innovations depend on organizational culture [40] and how it facilitates or hinders this process [41]. The OC influences attitudes related to several CI activities. It is concerned with values, believes, behavior patterns, rules, structures, stories and spaces in an organization [7], [42] which guide the behavior of the organization's members. A supporting OC helps motivate employees to understand the benefits from CI practice. Successful process of CI and knowledge sharing in an organization needs appropriate mental and cultural situations. One of the most important empowerments of CI is an open culture of an organization that encourages people to exchange ideas and culture that does not have partnership encouragement, trust, knowledge sharing, acquisition and creativity, cannot help on the development and practice of a successful CI project. A successful project of CI needs effective and comprehensive changes in behavior and organizational culture, this means that we need an atmosphere for knowledge distribution. Whereas most of knowledge processes are volunteers and knowledge is

personal so an organization needs to develop the culture of motivation, collectivism, variability, belonging, empowerment, acquisition and trust.

According to DeLong [43], a culture's support for knowledge retention can be determined by the levels of trust in the organization, which is often reflected in a shared sense of purpose. CI can be enhanced if there is a knowledge-sharing culture in the organization versus people suppressing their knowledge. However, if the culture does not encourage people to share what they know, then they will retain the knowledge to themselves. Thus, having high levels of trust in the organization should help nurture and increase CI practice.

V. Conceptual Framework Proposal

By integrating the different factors identified in the literature review, and taking into consideration that these factors have been acknowledged through previous research, this study consolidates the mentioned factors into innovative model of OC and CI. Fig. 4 shows the conceptual model.

In this research, a relationship is assumed between the type of organizational culture and CI process. Subsidiary hypothesis are:

H0: There is a relationship between the OC that exist in the organization and CI.

H1: Clan culture positively influences CI process implementation

H2: Adhocracy culture is positively related to CI process implementation

H3: Market culture is positively related to CI process implementation

H4: Hierarchy culture is positively related to CI process implementation.

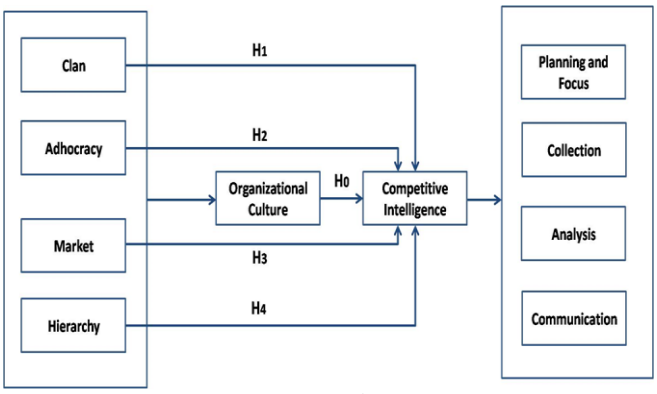

Fig. 4. Conceptual framework.

VI. Conclusion

This research attempted to fill up the gap in the literature, by examining the role of culture in the OC successful implementation of CI systems, as previous research has examined other factors that affect the implementation of CI. Based on the idea that creating an organizational culture that encourages information and knowledge sharing, would help in creating the change needed to gain the benefits intended from the implementation of CI projects, a theoretical framework was developed. The theoretical framework explains that OC plays a critical role in the successful implementation of CI. It suggests that for CI to flourish in a company and for the discipline to be implemented and used optimally, there has to be an appropriate organization awareness of CI and a culture of competitiveness. A survey will be designed to validate the proposed theoretical framework, to test the hypothesis and to draw conclusions.

References

[1] E. B. Dean. (1995). The perspective of competitive advantage. [Online]. Available: http://www.mijuno.larc.nasa.gov/dfc/why.html.

[2] A. Saayman *et al*., "Competitive intelligence: Construct exploration, validation and equivalence," *Aslib Proceeding: New Information Perspectives*, vol. 60, no. 1, pp. 62-70, 2008.

[3] P. L. Dishman and J. L. Calof, "Competitive intelligence: A multiphasic precedent to marketing strategy," *European Journal of Marketing*, vol. 42, no. 7-8, pp. 766-785, 2008.

[4] S. Wright and J. L. Calof, "The quest for competitive, business and marketing intelligence: A country comparison of current practice," *European Journal of Marketing*, vol. 40, pp. 5-6, 2006.

[5] J. L. Calof and P. L. Dishman, "The intelligence process: Front-end to strategic planning," Working Paper, University of Ottawa, 2002.

[6] C. W. Choo, *Information Management for the Intelligent Organization: The Art of Scanning Environment*, Medford, NJ: Information Today, 2002.

[7] C. W. Choo, *The Knowing Organization: How Organization Use Information to Construct Meaning, Create Knowledge and Make Decision*, Oxford: Oxford University Press, 2006.

[8] B. Jaworki, "Generating competitive intelligence in organizations," *Journal of Market-Focused Management*, vol. 3, no 2, pp. 279-307, 2002.

[9] Z. Corria and T. D. Wilson, "Factors influencing environmental scanning in the organizational context," *Information Research*, vol. 7, no. 5, pp. 792-804, 2001.

[10] S. Tseng, "The correlation between organizational culture and knowledge conversion on corporate performance," *Journal of Knowledge Management*, vol. 14, no. 2, pp. 269-284, 2010.

[11] R. Brody, "Issues in defining competitive intelligence: An exploration," *Journal of Competitive Intelligence and Management*, vol. 4, no. 3, pp. 3-16, 2008.

[12] P. Bergeron and C. A. Hill, "Competitive intelligence," *Annual Review of Information Science and Technology*, vol. 36, pp. 353-390, 2002.

[13] J. C. Ghannay and Z. B. Mamlouk, "Critical success factors of competitive intelligence implementation: A conceptual framework," *Volume Book*: *Economics and Strategic Management of Business Process* (ESMB), vol. 4, pp. 41-46, 2013.

[14] J. C. Ghannay and Z. B. Mamlouk, "Synergy between competitive intelligence and knowledge management—A key for Competitive Advantage," *Journal of Intelligence Studies in Business*, vol. 2, pp. 23-34, 2012.

[15] Society of Competitive Intelligence Professionals (SCIP). (2008). [Online]. Available: http://www.scip.org

[16] C. V. Priporas, L. Gatsoris, and V. Zacharis, "Competitive intelligence activity," *Evidence from Greece, Marketing Intelligence and Planning*, vol. 23, no. 7, pp. 659-669, 2005.

[17] L. Kahaner, *Competitive Intelligence: How to Gather, Analyse and Use Information to Move Your Business to the Top*, New York: Simon and Schuster, 1997.

[18] D. Rouach and P. Santi, "Competitive intelligence adds value: 5 intelligence attitudes," *European Management Journal*, vol. 19, no. 5, 2001.

[19] K. Sawka and B. Hohhof, "Starting a competitive intelligent function," *Competitive Intelligence Foundation*, Alexandria, 2008.

[20] W. B. Ashton and G. S. Stacey, "Technical intelligence in business: Understanding technology threats and opportunities," *International Journal of Technology Management*, vol. 10, no. 1, pp.79–104, 1995.

[21] R. L. Daft, J. Sormune, and D. Parks, "Chief executives scanning, environmental characteristics and company performance: An empirical study," *Strategic Management Journal*, vol. 9, pp. 123-139, 1988.

[22] J. Herring, "What is intelligence analysis?" *Competitive Intelligence Magazine*, vol. 1, vo. 2, pp. 13-16, 1998.

[23] B. Gilad, "The role of organized competitive intelligence in corporate strategy," *Journal of World Business*, vol. 24, no. 4, pp. 29-36, 1989.

[24] B. Collins, *Better Business Intelligence: How to Learn More About Your Competitors, Letchworth*, 1997.

[25] B. Gilad and T. Gilad, *A Systems Approach To Business Intelligenc*e, Business Horizons, 1985.

[26] T. Gilad and B. Gilad, "Business intelligence–The quiet revolution," *Sloan Management Review*, vol. 27, no. 4, pp. 53–60, 1986.

[27] J. F. Calof and J. Miller, "The status of CI across the globe," in *Proc. the 12th Annual Conference of the Society of Competitive Intelligence Professionnels, SCIP*, Virginia, pp. 213-223, 1997.

[28] L. Smircich, "Concepts of culture and organizational analysis," *Administrative Science Quarterly*, vol. 28, no. 3, pp. 339-358, 1983.

[29] A. L. Kroeber and C. Kluckhohn, *Culture: A Critical Review of Concepts and Definitions*, New York: Vintage Books, 1952.

[30] E. Shein, *Organizational Culture and Leadership: A Dynamic View*, San Fransisco: Jossey Bass Publication, 1985.

[31] T. E. Deal and A. A. Kennedy, *Corporate Cultures. The Rites and Rituals of Corporate Life*, Adison Wesley Reading, MA, 1982.

[32] C. Handy, *Understanding Organizations*, New York: Oxford University Press, 1983.

[33] D. Denison. (2000). *Organizational Culture: Can it Be A Key Lever for Driving Organizational Chaneg*? [Online]. Available: http://www.denisonconsulting.com.

[34] C. Hampden-Turner, "Corporate culture for competitive edge," *Economist*, London, 1990.

[35] G. Hofstede, *Culture and Organizations: Software of the Mind*, Berkshire, England: McGraw-Hill, 1991.

[36] C. A. O'Reilly, J. A. Chatman, and D. F. Caldwell, "People and organizational culture: A profile comparison approach to person-organization fit," *Academy of Management Journal*, vol. 34, pp. 487-516, 1991.

[37] K. S. Cameron and R. E. Quinn, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, Reading, MA: Addison-Wesley, 1999.

[38] A. A. Berrio, "An organization culture assessment using the competing value framework: A profile of Ohio State University Extension," *Extension Journal*, vol. 41, no. 2, 2003.

[39] M. Weber, *The Theory of Social and Economic Organization*, (Translated by AM Henderson & Talcott Parsons), NY: The Free Press, 1947.

[40] L. Chen-Kuo, B. Tan, and C. Jun-Zhi, "The impact of organizational culture and learning on innovation performance," *Int. J. Innovation and Learning*, vol. 5, no. 4, pp. 413–428, 2008.

[41] M M. Ajmal and P. Helo, "Organizational culture and knowledge management: an empirical study in Finnish project-based companies," *Int. J. Innovation and Learning*, vol. 7, no. 3, 2010.

[42] C. W. P Choo, B. Bergeron, B. Detlor, and L. Heaton, "Information culture and information use: an exploratory study of three organizations," *Journal of the American Society for Information Science and Technology*,vol. 59, no. 5, pp. 792-804, 2008.

[43] D. DeLong, *Lost Knowledge: Confronting the Threat of an Aging Workforce*, Oxford University Press, 2004.

Jihene Chebbi Ghannay was born in Tozeur, Tunisia, on May 17, 1978. She received the BSc degree in the management of SMEs and the MSc degree in organisation and information systems from "Institut Supérieur de Comptabilité et d'Adminstration des Entreprises" (ISCAE) Tunisia (2001) and (2008). She is currently a PhD candidate in management at Ecole Supérieure de Commerce de Tunis (ESCT). Since 2010, she has been a researcher at Research Lab - LARIME, ESSEC Tunisia. Her main research interest includes competitive intelligence, organizational culture and knowledge management.

Zeineb Ben Ammar Mamlouk is the founding director of the "l'Ecole Supérieur des Sciences Economiques et de Commerce de Tunis (ESSECT)" in 1998 and the former president of the University of Tunis El Manar (2004-2008). Professor Ben Ammar Mamlouk is the director of the Research Lab - LARIME. She has extensive teaching experience (since 1978) and research in human resources management and business intelligence. She has carried out activities in the National School of Administration, including as a visiting professor. In addition to organizing seminars, she conducted several missions to the Ministry of Health as well as the National Informatics Centre.