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Towards the development of an integrative model of organizational Change, Innovativeness and Organizational learning (CIAO model) Case of Tunisian Service enterprises

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Abstract

The object of this research is to study the link between the organizational change and the innovativeness through the organizational learning. It is a question of showing that the organizational change can be considered as an opportunity to stimulate the innovativeness if it is supported by a process of organizational learning.

Our results show that the technological dimension of the organizational change is the most important for the development of the innovativeness as far as it contributes to the orientation to innovation and to the development of the practical capacity to implant and to generate an innovation. The role of team work as practice of learning was also emphasized.

In spite of the importance of the human dimension of the organizational change, its role in innovativeness is limited. only the organizational dimension of change has an effect on all practices of organizational learning and can stimulate innovativeness with its three dimensions mentioned here.

Keywords: Organizational change, innovativeness, organizational learning, learning

Introduction

The importance of organizational change has been repeatedly emphasized in the literature. Organizational theories, especially the theory of dynamic capacity, consider it as a source of competitive advantage. In our research, organizational change is a central element treated, in the same time as the determinant of competitiveness and also, an opportunity to discover and to take advantage of new opportunities that may occur. In other words, we can say that the organization must adapt its activity to changes according to its context as quickly as possible in order to acquire and maintain a competitive advantage (Tsoukas and Chia 2002).

For Mazzanti et al. (2006), one of the main consequences of this continuous change is innovation which becomes a crucial factor for the performance and survival of the organization. In the same framework, Bown et al. (2009) consider that a successful introduction of new products is the essence of the life of organizations. This brings us to our second concept which is innovation.

Here, the generation of innovation implies a better receptivity of change and ability to meet new challenges (Hurt et al., 1977, Garcia et al., 2003) to get a competitive advantage.

Based on our literature review, related to the organizational change and innovation, organizational learning process is always considered as a condition for the success of change and the generation of innovation (Jay, 2013). In our research, we are looking for an optimal combination and complementary between these concepts.

This means that the importance given to the success of organizational change and innovation as the ultimate competitive advantage leads us to rethink the process of organizational change management to make it as an occasion for innovation. So, organizational change leads with innovation if an organizational learning process will facilitate the knowledge management process (Szpitter, 2014)

Based on these findings, the object of our research is to propose and establish a new conception of organizational change always perceived as a "threat" to be a new behavioural orientation of the organizations which presupposes that, in order to be simply reactive, the organization, must be proactive and must integrate the exchange and the progress.

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I. Organizational change and Learning:

Several authors such as Antonioli et al. (2008.); Tomer (2001) and Wilkinson (2000) demonstrated that, actually, we are looking for a flat organization because this type of organization is a learning organization able to be more reactive to external change (Mazzanti et al., 2006).

Kotter (1996), demonstrate that most of organizations studied did not survive beyond the first stage of change. In the same idea, Wheatley and Kellner-Rodgers (1996) conclude major cases of change, efforts to works fail to achieve desired outcomes and sometimes produce negative effects. These failures are due to many factors, but the major problem remains resistance to change as the dilemma of any change process (Kets and Vries, 2001).

According to these authors, human factor is very important for the success of organizational change, he is in the same time, "the actor and the object". In this sense, he must conceive the change and implement it. Faced with this difficult and complex situation, the change manager must learn to accept the change before implementing it. It is an important phase of awareness that must be done at the cognitive level; this last one is directly related to knowledge management.

Here, organizational learning can contribute to achieve this goal because directly related to the process of knowledge acquisition and development (Argyris and Shon, 1978).

II. Organizational learning and innovativeness:

The difficulty of measuring innovation (Lam, 2005) makes its understanding more difficult and therefore its implementation more complicated.

Added to this, the meaning of innovation on the literature is not specified and we can't delimited its use (Bloom et al., 2016). Based on this, it is more appropriate for us to focus on determinants of innovation rather than innovation itself.

In this field, the notion of innovativeness is assimilated to a first condition to innovate for the success of organization in the modern economy (Yitmen, 2007; Hatchuel and Weil, 2002), it represents a stimulus to innovate by preparing a fertile ground for its development and its implantation.

Hurley and Hult (1998) emphasize the importance of innovation and organizational learning for organizational development through the definition of a competitive advantage. This complementarity between innovativeness and organizational learning has been highlighted by Slater and Narver, (1995). For these authors, the higher level of organizational learning (OL) means a greater level of innovativeness.

The conception of organizational learning that we adopt here, is a process of accumulation of knowledge and also the creation of collective knowledge (Argyris and Shon, 1978).

III. The development of the model CIAO:

The conception we have adopted of organizational change as a set of dynamic capacities on the organization allows us to assume that these capacities include the organizational ability to learn and innovate. This finding is a consensus on which learning and innovation constitute a theoretical outcome associated with the capacity for organizational change (Judge and Detelin, 2005).

Barail and Gagnon (2004) note that organizational change is not a simple project that requires only the time and effort for its implementation.

For them, making a change need the consolidation of organizational learning capacities and also a commitment to learning. Argyris and Shon (1997) contributed to the consolidation of these findings through the implementation of an intervention model that can help organizations to create change and innovation through what they call the organizational learning system model.

The main idea of our research is: the implementation of organizational change need the developing of specific learning abilities that will generate knowledge, source of innovation specifically innovativeness as an antecedent for innovation.

III.1 - Change and innovativeness

Innovativeness is an initiation to innovation that allows the organization to diversify and adapt new product or process as a response to the need of market and technological change (Nonaka and Yamanouchi, 1989) this allow us to suppose that organizational change can therefore constitute an antecedent to innovativeness.

Hurt et al. (1977) have divided innovation into two perspectives: the first is a behavioural approach that manifests itself through the level of innovation adoption by the organization, and the second refers to the degree of acceptance related to the organizational change on an organizational approach.

By focusing on the study of the innovation process, some researchers succeeded in establishing a correspondence between the level and the speed of successful innovation, this depends on many factors such as the importance of management strategy, the decentralized structure and the sensitivity to the external environment (Miller and Friesen, 1982).

Calantone et al. (2002) present two complementary perspectives of organizational innovativeness: the degree of adoption of innovations by the organization and the willingness to change.

Hypothesis 1: The organizational change positively influences innovativeness

Additional references, in this way, show that this relation exists with an indirect effect. Here, organizational learning is considered the main important element which determines the continuity of a positive effect between change and innovativeness. This idea is supported by the concept of assistance through the generation of knowledge able to facilitate the acceptance of change and the generation of additional efforts in order to generate solution to the problem causes by this one. If change is integrated, a new way must be defined to restore balance.

III.2 - Learning organizational change

At this level of analysis, organizational learning represents any change in organizational models in order to maintain or increase performance (Cyert and March, 1963).

This one can contribute to the assistance of the organizational change process and its success. It is also considered as a dynamic process of knowledge within organizations that involves the interaction of individual and collective (group, organizational, and inter-organizational) levels of analysis and leads to achieving organizations' goals (Irina and al., 2015).

We can admit that learning is change as demonstrated by Berends and Lammers (2006).

Garvin (1993) insists on the complementarity between learning and change. He adds that when there is no change, there is no learning because we don't need it. There is no dynamic or need of assistance.

In the another side, learning can effect change because everyone is able to learn according to his ability to manage knowledge, and so he can adapts to change and stimulates changes in its environment (Lioa et al., 2008).

Learning can only take place when we detect and correct errors (Argyris and Shon, 1978). This error, apply for solution and occur when situation is under estimation. In general this dissatisfaction is related to the change for a better condition.

Hypothesis 2. Organizational change positively influences organizational learning

This idea was shared by Nonaka and Takeuchi (1995) and Senge (1990), who defined the learning organization according to a perspective of organizational change and continuous innovation.

Lick (2006) considers that learning is absolutely fundamental for change. He adds that the definition of learning as a process of knowledge creation requires assistance to serve change. Senge (1990) supports that by learning we recreate what we are and we can improve our know how. For this author, learning redefines our perception of the world and also enriches our capacity for creation, which is the first ultimate step for innovation.

In this state of analyse, we will try to establish the link between learning and innovativeness through knowledge creation and the process of sharing knowledge.

III.3 - Organizational learning and innovativeness

Alegre and Chiva (2008) view innovation as a process of individual and collective learning with the aim of solving problems by the development of new methods. They add

that innovation seems to be linked directly to learning abilities to develop, distribute and use of new knowledge. This last observation was shared by several authors such as Lyles (2014).

These abilities must be defined at the behavioural level according to beliefs and values for the developing of potential for innovation (Jerz-Gomez et al., 2005). So, organizational learning necessarily means addition and innovation (Argyris and Shon, 1978; Slater and Narver, 1995).

Calantone et al. (2002) confirms that a significant and positive link between organizational learning, innovation and organizational performance exist. Nonaka and Takeuchi (1995) consider that organizational change and innovation is depend if an organizational process of learning is defined, whatever its level, the most important here was an internal and continuous development of knowledge that will be the essence of innovation.

Organizational learning, also, supports creativity (Sanchez and Mahoney, 1991), inspires new knowledge and ideas (Dishman and Pearson 2003) and increases the knowledge generation (Damanpour, 1991), all of these factors stimulate innovation according to the analyse presented in the beginning of this research.

Nybakk et al. (2009) present a new approach that they call proactive learning, enabling the organization to be more innovative through the identification of new markets and opportunities.

Hypothesis 3: Organisational learning positively influences innovativeness.

Hult et al. (2004) demonstrate that when an organization wants to be innovative, it will first have to integrate an orientation towards organizational learning. A developed learning process means a higher degree of responsiveness to innovations.

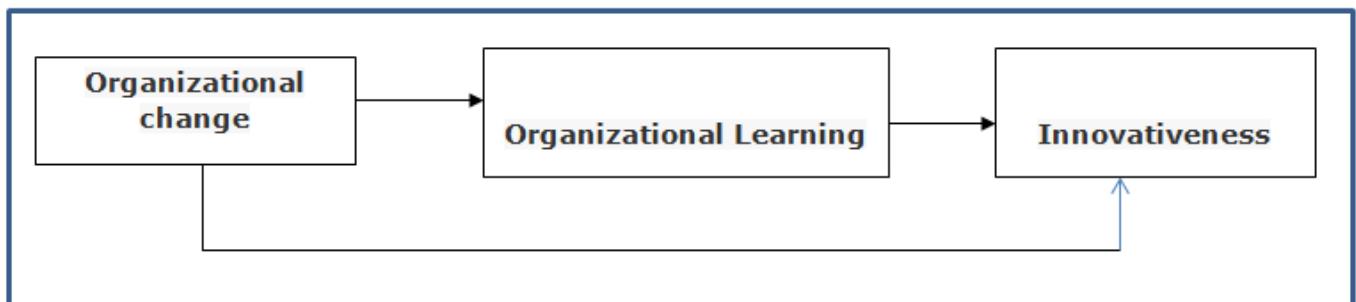


Fig 1: The theoretical framework of research and hypotheses

Hypothesis adopted are related to the mediating effect of organizational learning which must be tested in this model of research. The next section of this study will be allocated to the methodology admitted for the test of mediating effect. A presentation of dimensions for every variable and items related to each one is, also, integrated in this part.

VI. Methodology

The quantitative approach of data collection is adopted here. A questionnaire was developed and administered to 232 high technology services companies. Items used will be detailed in the table 1.

Table 1: List of items

Variables	Nombres Of items	Alpha	Authors
Human dimension	5	0.78	Autissier et Moutot (2003, p. 165) Mintzberg et Westley (1992, p. 41)
Technical dimension	5		
Organizational dimension	7		Autissier et Moutot (2003, p. 165) Mintzberg et Westley (1992, p. 41)

Training	5	0.8	Pédon et shmidt (2002)
Team work	5		
Work definition	5		
Management style	5		
Openess	11	0.72	Hurt et Teigen (1997)
Capacity to innovate	6		Hurt et Teigen (1997)
Orientation towards innovation	8		Hurt et Teigen (1997)

Structural equations model is used for hypothesis test. This methodology requires two levels: exploratory and confirmatory. The first stage was carried out by SPSS 16.0 in order to verify the multidimensionality of constructs and in the second step; we used LISREL 8.51 to confirm this composition and its degree of fit.

In order to measure organizational change, we have referred to the different organizational dimensions proposed by Mintzberg and Westley (1992) added to these proposed by Autissier and Moutot (2003). At all, eight elements of organizational change are identified and adopted: structure, management, behaviours, skills, culture, tools, performance criteria and rules. As a multidimensional variable, organizational change was treated by three dimensions: organizational, human and technological dimension.

Innovativeness was measured by the PORGI scale based on three dimensions of innovativeness as mentioned on the literature review: openness to new ideas and practices,

capacity to innovate, and organization's orientation towards innovation (Schwabsky et al., 2004).

Perceived Organizational Innovativeness Scale (PORGI) was developed by Hurt and Teigen (1997). This measurement scale has a high degree of reliability and the original version of the PORGI scale is written in English.

Organizational learning is considered here as a latent and multidimensional variable which depend on some practices. Bourgeon and Tarondeau (2000), consider that the organizational learning process is based on the degree of adoption of practices which facilitate its development. To identify these practices and be able to measure this last one, we have adopted the same approach of Jérez-Gomez et al. (2005). Four elements were identified: training, team work, work definition and leadership.

Our hypothesis related to the mediating effect of organizational learning is now represented by nine hypothesis defined at the different level of analyse presented below.

Table 2: Hypothesis of mediating effect

Mediation
H1. The training has a mediating effect between organizational change in its human dimension and the orientation towards innovation
H2. The training has a mediating effect between organizational change in its human dimension and the opening to new ideas and practices
H3. The training has a mediating effect between organizational change in its organizational dimension and the capacity to implement and generate an innovation
H4. The teamwork has a mediating effect between organizational change in organizational dimensions and the capacity to implement and generate an innovation
H5. The leadership has a mediating effect between organizational change in its organizational dimension and the capacity to implement and generate an innovation
H6. The training has a mediating effect between organizational change in its technological dimension and the openness towards new ideas and practices
H7. The training has a mediating effect between organizational change in its technological dimension and the capacity to implement and generate innovation
H8. The team work has a mediating effect between organizational change in technological and the openness towards new ideas and practices
H9. The team work has a mediating effect between organizational change in technological dimension and the capacity to implement and generate an innovation

According to Wacheux and Roussel (2001), the mediating effect must be treated at four steps after proceeding to the exploratory approach and the confirmatory one.

The confirmatory analyze is established at the first and second level. For each hypothesis all of steps were conducted. Measure model for each variable and the fit was also measured.

V. Results

In this part, we will try to summarise results for each step. In the first time the multidimensionality of construct will be treated according to the exploratory approach, then, we have to examine the fit of measure model related to each variable as recommended by Wacheux and Roussel (2001). At the end, results related to the mediating effect will be presented for each hypothesis but only the last step of this process of meditating test effect.

Table 3: Exploratory analyze of organizational change

Dimension	variance	Contribution
Human dimension	4,862	40,51 %
Technical dimension	1,033	8,6%
Organizational dimension	1,676	13,96 %

Result presented in the table 3, show that the human change is the most important element of organizational change with 40% of total variance explained.

The technical dimensions contribute by 8% on total variance explained, this suppose more details because we know in general that this dimension is important and easy to operate by adopting the new technology and use it.

The second part of this analyze is related to the organizational learning and its pratices.

Table 4: Exploratory analyze of organizational learning

Dimension	variance	Contribution
Team working	4.55	26.77%
Leadership	1.74	10.23%
Working definition	1.37	8.10%
Training	1.19	7.05%

In this table we can see that organizational learning can be defined in two different groups, the first is based on team working and leadership. The second is composed of working definition and training. So, according to our result, team working is the most practice used to facilitate learning and adopted according to leadership.

In spite of its importance, training is considered as an option for learning. It contribution is only 7% of total variance explained. This means that the training is not influent on learning and that team working constitute a basic element which able to define and to elaborate an organizational learning.

Finally the principal component analysis with varimax rotation is used to determine the composition of organizational innovativeness (table 5).

Table 5: Exploratory analyze of organizational innovativeness

Dimension	variance	Contribution
Oponess to new ideas	7.78	31.14%
Orientation to innovation	3.18	12.73%
Capacity to innovate	1.53	6.12%

Here it is the question to verify if items used to measure this variable can be grouped on three axes as defined on the literature review. The analysis yielded 3 factors as explained in the first part of this research.

As table 5 indicates, the openness to new ideas explained 31% of the variance. Then it's the orientation to innovation which explain 12 % of total variance here.

The second step for the hypothesis test was the test of fit for each variable of model. Results confirm that items adopted after the exploratory approach fit with the principal variable which have to measure.

Table 6: Model fit of variables

Indices	Value			Key value
<i>Absolute fit indices</i>				
	Organizational change	Organizational learning	organizational innovativeness	
GFI	0.98	0.95	0.98	> 0.9
AGFI	0.94	0.90	0.91	> 0.9
RMR	0.07	0.047	0.061	≤ 0
RMSEA	0.04	0.061	0.078	< 0.8
<i>Incremental fit indices</i>				
	Organizational change	Organizational learning	Organizational innovativeness	Key value
NFI	0.98	0.91	0.88	> 0.9
NNFI	0.99	0.92	0.89	> 0.9
CFI	0.99	0.95	0.92	> 0.9
<i>Incremental fit indices</i>				
	Organizational change	Organizational learning	Organizational innovativeness	Key value
chi 2 / ddl	1.54	1.86	3.11	High as 5.0 / Low as 2.0
PNFI	0.52	0.56	0.66	High
PGFI	0.41	0.50	0.57	High

Finlay, the hypothesis test of the mediating effect of organizational learning, as practices, between the organizational change and organizational innovativeness. In this stage, four steps was conducted. Table 9 translate

results for hypothesis defined here. Three hypothesis are rejected and two of them present a total effect.

Table 9: Results hypotheses test of mediating effect

Result	Hypothesis
Rejected	H1. The training has a mediating effect between organizational change in its human dimension and the orientation towards innovation
Accepted (total effect)	H2. The training has a mediating effect between organizational change in its human dimension and the opening to new ideas and practices
Accepted	H3. The training has a mediating effect between organizational change in its organizational dimension and the capacity to implement and generate an innovation
accepted	H4. The teamwork has a mediating effect between organizational change in organizational dimensions and the capacity to implement and generate an innovation
Accepted (total effect)	H5. The leadership has a mediating effect between organizational change in its organizational dimension and the practical to implement and generate an innovation

Rejected	H6. The training has a mediating effect between organizational change in its technological dimension and the openness towards new ideas and practices
Accepted	H7. The training has a mediating effect between organizational change in its technological dimension and the capacity to implement and generate innovation
Accepted	H8. The team work has a mediating effect between organizational change in technological and the openness towards new ideas and practices
Rejected	H9. The team work has a mediating effect between organizational change in technological dimension and the capacity to implement and generate an innovation

The relation between dimensions of organizational change and innovativeness shows that:

- The human dimension of change is associated with openness to new ideas.
- The organizational dimension of change is directly associated with the practical ability to implement innovation.
- The technological dimension of change influences openness to new ideas and practices that the practical ability to implement an innovation.
- The results obtained and presented in this research show that the implementation of a successful human change calls for the definition of a training process based essentially on staff rotation, learning by experience, procedures and skills in the individual and collective level.

The mediating effect of leadership between organizational dimension of change and capacity to generate an innovation is high. Based on this result, we can confirm the importance of leadership for organizational change and we add that the capacity to generate innovation is admitted if the leadership will be able to establish the one best way for change.

Technical change, in spite of its importance, we can't find an ideal relationship or association with any dimension on a specific way. But this last one is depend of all variables in the same time with a medium effect.

Orientation towards innovation is one of variables adopted here and very difficult to understand and to estimate due to its cultural approach.

Figure 2 provide a general idea about different links between variables at the different steps of analyse.

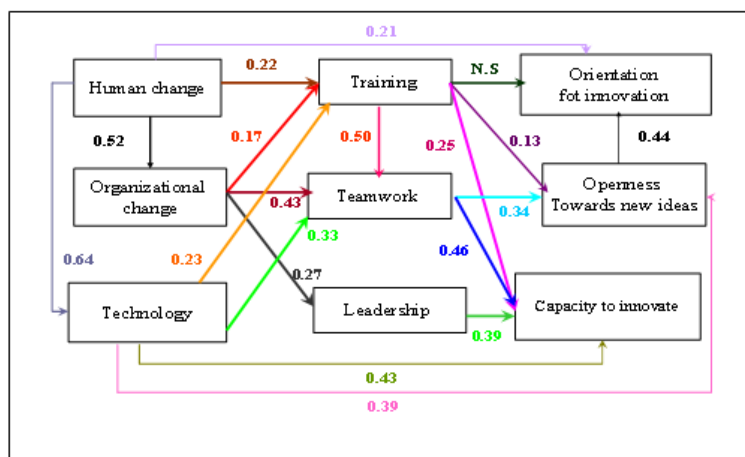


Fig 2: Illustrative model of relationships between variables.

Conclusion

The validation of our hypotheses defines a "critical path" that can serve the interests of any Tunisian manager during the implementation of change by enabling them to better understand the process and to manage it based on a specific way. This work can be considered as an operationalization of the concept of the learning organization. In other words, our results confirm that the development of organizational learning, especially training, can serve both organizational change and innovation.

References

1. Alegre, J. et Chiva, R. (2008). Assessing the impact of organizational learning capability on product innovation performance: An empirical test. *Technovation*, 28, (6):315-326
2. Antonioli, D., Mazzanti, M., Pini, P., Tortia, E., (2008). Working conditions determinants: the role of

innovations and industrial relations, evidence for a local production», *Economia Politica*, 1(21): 11–31.

3. Argyris, C. et Schon, D. (1996). *Organizational Learning II : Theory, Methods, and Practice*. Addison-Wesley, Reading, MA
4. Argyris, C. et Shon, D. (1978). *Organizational learning: A theory of Action Perspective*. Addison-Wesley, Reading, MA
5. Autissier, D. et Moutot, J.M. (2003). *Pratiques de la conduite du changement : Comment passer du discours à l'action?*. Paris, Dunod.
6. Bareil, C., J. Gagnon (2004). *Que savons-nous des préoccupations et de l'appropriation des participants à une communauté virtuelle de pratique*. cahier de recherche du Centre d'étude en transformation des organisations, Montréal, HEC Montréal.
7. Berends, J.J., Lammers, I.S. (2006). *Contrasting dynamics of organizational learning : a process theory*

- perspective. Coventry: University of Warwick.
8. Bloom N.; Mirko D. J. and Van R. (2016). Trade Induced Technical Change? The Impact of Chinese Imports on Innovation, IT and Productivity. *Revue of Economic Studies*.83 (1): 87-117.
 9. Bourgeon, L. et J.-C. Tarondeau (2000). L'apprentissage dans les organisations transversales : le cas de l'organisation des projets de R&D. In B. Quélin and J.-L. Arrègle (Eds.), *Le management stratégique des compétences*, Paris: Ellipse, 287-346.
 10. Bowen FE, Rostami, M. et Steel, P. (2009). A meta-analysis of the relationships between organizational performance and innovation. *Journal of Business Research*. 63:1179-1185
 11. Calantone, Roger J., Cavusgil, S. Tomer et Zhao, Yushan. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*. 31(6): 515-524
 12. Cyert, R.M., March, J.G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
 13. Damanpour, F., (1991). Organizational innovation: a meta-analysis of effects of determinants and moderators. *Academy of Management Journal*. 34(3):555–590.
 14. Dishman, P. et T. Pearson (2003). Assessing intelligence as learning within an industrial marketing group: a pilot study. *Industrial Marketing Management*. 32(7): 615-620.
 15. Garcia, R., Calantone, R., Levine, R., (2003). The role of knowledge in resource allocation to exploration versus exploitation in technologically oriented organizations. *Decision Sciences*. 34(2):323–349.
 16. Garvin D. A. (1993). Building a learning organization», *Harvard Business Review*. 71:78-91
 17. Hatchuel A., Weil B., (2002). A New Approach of Innovative Design : an introduction to C-K theory », *International conference on Engineering Design ICED 03*, Stockholm, august 19-21, 15 pages.
 18. Hult, G. T. M., Hurley, R. F., et Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*. 33(5): 429–438
 19. Hurley, R. F., et Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*.62: 42–54.
 20. Hurt, T.H., Joseph, K., Cook, C.D. (1977). Scales for the measurement of innovativeness. *Human Communication Research*. 4(1): 58–65.
 21. Hurt, T.H., Teigen, C. W. (1977). The Development of a Measure of Perceived Organizational Innovativeness », *Commun Year*. 1: 377-385
 22. Irina V, Nowak P., Cseh M. (2015). The Meaning of Organizational Learning: A Meta-Paradigm Perspective. *Human Resource Development Review*. 14(3)
 23. Jay. J., (2013). Navigating Paradox as a Mechanism of Change and Innovation in Hybrid Organizations. *Academy of management Journal* 56 (1): 137-159
 24. Jérez – Gomez, Céspedes-Lorente, J. et Valle-Cabrera, V., (2005). Organizational learning and compensation strategies: evidence from the Spanish chemical industry. *Human Resource Management*.44: 279-299
 25. Judge W. Q. et Detelin E. (2005). Organizational capacity for change and environmental performance: an empirical assessment of Bulgarian firms », *Journal of Business Research*. 58(7) : 893-901
 26. Kets de Vries, M.F.R. (2001). *Struggling with the Demon: Perspectives on Individual and Organizational Irrationality*. Psychosocial Press, Madison, CT,
 27. Kotter, J. (1996). *Leading change*. Boston, Massachusetts, Harvard Business School Press, 192 pages
 28. Lam, A., (2005). Organizational innovation. In: Fagerberg, J., Mowery, D.C., Nelson, R.R. (Eds.), *The Oxford Handbook of Innovation*. Oxford University Press, Oxford: 115–147.
 29. Lick D. W. (2006), « A new perspective on organizational learning: Creating learning teams », *Evaluation and Program Planning*. 29(1) : 88–96
 30. Liao S.H ; Fei W.C et Liu C.T (2008). Relationships between knowledge inertia, organizational learning and organization innovation. *Technovation*. 28(4): 183-195
 31. Lyles M. A. (2014). Organizational Learning, knowledge creation, problem formulation and innovation in messy problems. *European Management Journal* 32(1):132–136
 32. Mazzanti M., Pini, P., Tortia E., (2006). Organizational innovations, human resources and firm performance : The Emilia Romagna food sector. *The Journal of Socio-Economics*. 35(1): 123-141
 33. Miller, D. et Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strategic Management Journal*. 3: 1-25.
 34. Nonaka, I. et Takeuchi, T. (1995). *The Knowledge creating company*. New York, Oxford University Press
 35. Nonaka, I. et Yamanouchi, T. (1989). Managing innovation as a self-renewing process. *Journal of Business Venturing*. 4(5): 299-315.
 36. Nybakk E., Crespell, P., Hansen. E et Lunnan, A. (2009). Antecedents to forest owner innovativeness: An investigation of the non-timber forest products and services sector. *Forest Ecology and Management*. 257 (2):608–618
 37. Sanchez R. et J.T. Mahoney (1996). Modularity, Flexibility, and Knowledge Management in Product and Organisation Design. *Strategic Management Journal*. 17: 63-76.
 38. Schwabsky N., Vigoda-Gadot, E., Shoham, A. Et Ruvio, A., (2004). Towards a performance orientation measurement Grid: the impact of innovativeness and organizational Learning on organizational performance in the public sector. *Annual Conference of the European Group of Public Administration*, Ljubljana, Slovenia: 1-27.
 39. Slater, S. F., et Narver, J. C. (1994, 1995). Market orientation and the learning organization. *Journal of Marketing*. 59(3): 63–74.
 40. Szpitter A. A. (2014). Management and Business Administration : la gestion des connaissances dans le processus d'innovation de produit. *Central Europe*. 22(3) :122–134
 41. Tomer, J. (2001). Understanding high-performance work systems: the joint contribution of economics and human resource management. *Journal of Socio-Economics*. 30 (1): 63–73.

42. Tsoukas, H., et Chia, R. (2002). On organizational becoming: Rethinking organizational change », *Organization Science*. 13: 567-582.
43. Wacheux F. and Roussel P. (2001). *Management des ressources humaines : methodes de recherche en sciences humaines et sociales*. ed. Deboek
44. Wheatley, M.J., et Kellner-Rogers (1996). *A Simpler Way* », Berrett-Koehler Publishers, San Francisco, CA
45. Wilkinson, F., (2000). *Human Resources Management and Business Objective and Strategies in Small and Medium Sized Business*. Working Paper no. 184, ESRC Centre for Business Research, University of Cambridge, Mimeo.
46. Yitmen I. (2007). *The challenge of change for innovation in construction: A North Cyprus perspective*. *Building and Environment*. 42 (3) 1319–1328