# *Knowledge Sharing as a Strategic Approach to Develop Collective Competencies in Businesses; a Case Study of Condor Electronics Company in Algeria*

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**Abstract**:

This research paper aims to investigate the role of knowledge sharing as a strategic and planned process to develop the collective competencies in businesses. In order to achieve the research objective, a case study was conducted at CONDOR ELECTRONICS Company in Bordj Bou Arrerid, using a range of data collection tools and the questionnaire survey as principal tool in research; which was distributed among 120 respondents, based on a randomly sample, using the descriptive statistics and the multiple linear regression model to test the validity of research hypotheses.

The research results showed that knowledge sharing is positively related to collective competence while tacit knowledge sharing is the most contributor at developing the collective competence components ( common reference, shared language, collective memory and subjective engagement).

**Key words:** Knowledge Sharing, EK (explicit knowledge), TK (tacit knowledge), Collective Competencies, Company.

**Jel Classification Codes:** M1-12;

**الملخص:**

تهدف هذه الورقة البحثية إلى البحث في دور تشارك المعرفة كعملية إستراتيجية ومخططة لتطوير الكفاءات الجماعية في منظمات الأعمال. من أجل تحقيق هدف البحث، تم القيام بدراسة حالة على شركة كوندور في برج بوعريريج، باستخدام مجموعة من أدوات جمع البيانات والاستبيان كأداة رئيسية في البحث الذي تم توزيعه على 120 مبحوثا بناءا على عينة عشوائية باستخدام الإحصاء الوصفي ونموذج الانحدار الخطي المتعدد لاختبار صحة فرضيات البحث.

أظهرت نتائج البحث أن تشارك المعرفة يرتبط ارتباطا إيجابيا بالكفاءات الجماعية، حيث يعد تشارك المعرفة الضمنية هو المساهم الأكبر في تطوير مكونات الكفاءة الجماعية (المرجعية المشتركة، واللغة المشتركة، والذاكرة الجماعية، والالتزام الذاتي).

**الكلمات المفتاحية:** تشارك المعرفة، المعرفة الصريحة، المعرفة الضمنية، الكفاءات الجماعية

**تصنيف JEL:** M1-12;

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## 1. Introduction:

In knowledge based economy, Knowledge is become a key factor of growth and value creation, with a high potential to bring a decisive competitive advantage (Imed Boughzala, Jean-Louis Ermine, 2006; 23). Accordingly, Human resources are considered to be the most valuable asset for any company and their main source of knowledge and innovative Competencies; which explains the businesses' progressive attention for human resources management as well as knowledge management.

In addition, Human resources management and knowledge management within any organization have often been asserted as challengeable practices for developing the necessary competencies, and creating a competitive advantage. Moreover, Competencies development is crucial for any business success since it has an important impact on its organizational performance;

Furthermore, businesses' success does not only depend on the individual competencies; on what knowledge, experience and expertise they hold, but it depends more on the collective competencies; on what common knowledge they share and what new knowledge they collectively create.

Principally, Knowledge sharing has become the most important processes of knowledge management; which include knowledge transfer and knowledge exchange between individual and groups and thereby create a new knowledge trough collective work, cooperation, mutual trust and social interaction.

At workplace, knowledge sharing has proven its capability to transfer the individual knowledge into an organizational knowledge, the way in which the human resources create and maintain a mutual interactive relationships that guarantee their continuous learning and develop their collective competencies, moreover, enabling businesses to attain and sustain their competitive advantage, based on creating and sharing common values that support knowledge donating rather than knowledge hoarding at workplace, which

respond to the requirement of high qualified performance where competencies development plays a critical role.

## 2. Literature review:

### 2-1 Knowledge sharing:

According to Wiig Knowledge is truths and beliefs, perspectives and concepts, judgments and expectations, methodologies and know how (Filieri Raffaele: 52).

Knowledge is information combined with understanding and capability; it lives in the minds of people. Knowledge guides action, whereas information and data can merely inform or confuse (Todd R. Groff and Thomas P. Jones, 2003: p 03).

Frequent attempts have been made to give a definitive classification of knowledge, whereas the classification of knowledge according to its nature is considered to be the most significant contribute where knowledge classified into two main types as follow:

- **Tacit knowledge:** This is rooted in actions, experience and involvement in specific context. (Murray E. Jennex, 2008: 163). This kind knowledge is extremely difficult to imitate and to transfer. Authors see tacit knowledge as personal, private knowledge as it is implicated in human activities (Claire R. McInerney, Ronald E. Day, 2007: 22).
- **Explicit knowledge:** Explicit knowledge is knowledge that can be codified into symbolic representations such as words and numbers. As such, it can be readily transferred among persons in formal, systematic ways. (Daniel L. Davenport, Clyde W. Holsapple, 2006: 811) which refers to articulated and generalized knowledge. (Murray E. Jennex, 2008: 163). This kind of knowledge is certainly easy to share and to communicate with others. While it resides in human minds (knowledge owners).

Organizations are interested in managing knowledge for several reasons, one reason is that core competencies are based on the skills and experience of the people who do the work and may

not exist in the physical form. Therefore, it is important that firms find ways to tap into this knowledge base in order to preserve and expand their core competencies (Norhaiza Binti Ishak et al, 2010), since knowledge resides in people's minds (Krista: 07).

Knowledge sharing is the sharing of one's own knowledge to other individuals; it is one of major organizational KMS processes. (Kamla A. Al-Busaidi et al, 2010: 03) while Knowledge resides in people's minds (Krista: 07).

Authors state that knowledge sharing occurs 'when people who share a common purpose and experience similar problems come together to exchange ideas and information'. Knowledge sharing is perceived as fostering individual and organizational learning, and also promoting employee cooperation (Angelos Alexopoulos, Kathy Monks, 2004: 04).

An exchange of knowledge between two individuals: one who communicates knowledge and one who assimilates it. In knowledge sharing, the focus is on human capital and the interaction of individuals (Carolyn M. Jacobson, 2009: 1634).

Helmstadter defines knowledge sharing in terms of "Voluntary interactions between human actors [through] a framework of shared value, such an interaction itself may be called sharing of knowledge" (Chay Y. Wah et al, 2009: 120-121).

Knowledge shared is either tacit or explicit knowledge. KS enabled individual knowledge either tacit or explicit to be shared with others in the organization in many forms (Noorazah M. Noor and Juhana Salim, 2011: 107).

KS is also concerned with encouraging individual and organizational learning and innovation, through collaboration .Effective collaboration also requires the capacity to adapt to a complex and rapidly changing environment. (Krista K. Baldini, 07) and jointly create new knowledge.

Hendriks suggested that KS implies a relationship between individual employees that posses the knowledge and the other that

acquires the knowledg (Chonticha Mathuramaytha, 2012: 286).

According to Al-Hawamdeh, knowledge sharing in a broader perspective refers to the communication of all types of knowledge; including explicit knowledge (information, know-how, know-who) and tacit knowledge (skills and competency) (Mohd B. Ismail, Zawiyah M. Yusof, 2009: 38).

Some of these conclusions reinforce the potential magnitude of knowledge sharing in organizational performance, represented by its competitiveness and success (Dulce V. Marques et al, 2008: p 166).

**2-2 Collective competence**

In recent years collective competence has arisen considerable interest by both researchers and businesses, Due to their potential role to create and sustain competitive advantage for any business.

In addition, the growing interest of business towards collective competencies in many cases translated in form of the implementation of competency-based management model which considers the participation of employees as a fundamental aspect to the implementation of the organizational strategy and the development of competitive advantage (Kelly W. R. S. Avelino et al, 2017: 208).

According to Hansson, collective competence is the phenomenon of a team or organization of people's ability to work toward a common task in a sufficient way (Fernanda Bonotto, Claudia C. Bitencourt).

The above definition explains the role of collective work as a required condition for building collective competencies at business.

Whereas, The conditions required for a group of individuals to work together effectively and form a collective of efficient work which leads to collective competence, involves; individual competence, consistency of interventions and the dynamics of the actors. (Michel Sonntag, David Oget, 2003).

Collective competence is situated within a network of complex interactions among individuals at the workplace (Sylvia Langlois, 2020: 71).

This definition shows how social interaction can contribute

effectively at the transformation of the individual competencies into collective ones at business.

The collective competence of the firm is located in working relationships between team members (Nick Boreham, 2004: 03).

Collective competence exists when there is cooperation and communication between individuals of a group or team member which generates collective knowledge and enables the effectiveness of collective work (Nicolas Duchamp, 2015: 12-13).

From the above definitions it appears that cooperation and the communication are other main components for creating collective competence in workplace based on knowledge sharing between the same teamwork members.

The authors emphasize the necessity to share a common language and effective communication tools based on cooperation and coordination which foster collaboration and contribute successfully at developing collective competencies in workplace.

**2-2-1 Collective competencies' indicators**:

Different literature exists on Collective Competencies in particular studies which examined the required indicators to measure and develop collective, as stated in a studies done by Boreham (2000-2004), in which he determined three normative principle to which a team or group of individual must conform as a collective level of competence.

The following table shows the three main components (Nick Boreham, 2004: 03):

- Making collective sense of events in the workplace;
- Developing and using a collective knowledge base;
- Developing a sense of interdependency.

Moreover, some studies adopt three main components for collective competence (Danielle C. Bélanger, 2010; 19):

- Cooperation;
- Collective memory;

- Common repository.

In addition, based on Boreham (2000-2004) enough studies stress the four followings attributes required to develop collective competence within organizations(Daniel Dufresne, Dominique P. Guillard, 03):

- Common reference;
- Shared language;
- Collective memory;
- Subjective engagement.

Therefore in this study, as distinct from above mentioned researches on the collective competencies' indicators; The common frame of reference, The shared language, The collective memory and Subjective engagement have been considered as sub-dependant variables with the purpose of understanding whether knowledge sharing is contributing at developing collective competence.

**2-3 Knowledge Sharing and Collective Competencies**

Since Knowledge Sharing is an important to organizations, to develop skills and competences, helps to increase value, and sustains competitive advantages. (Chonticha Mathuramaytha, 2012: 286), the present paper studies the relationship between knowledge sharing and the development of competencies.

According knowledge sharing is about capturing and sharing knowledge to achieve collectively the job. Thus, Collective competence exists when there is cooperation and communication between individuals of a group or team member which generates collective knowledge and enables the effectiveness of collective work (Nicolas DUCHAMP, 2015: 12-13).

Moreover, Knowledge sharing is perceived as fostering individual and organizational learning, and also promoting employee cooperation (Angelos Alexopoulos, Kathy Monks, 2004: 04), which facilitate the development of collective competencies.

Knowledge Sharing allows group members to synergise their

competences and to collectively produce actionable knowledge and competence (Catarina I. M. de Lucena, 2015: 35).

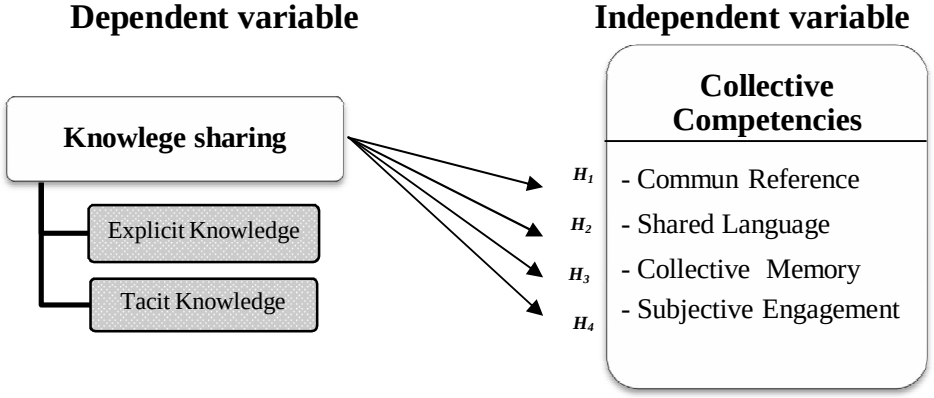
## 3. RESEARCH METHODLOGY

The present research paper used the descriptive approach based on the description and the analysis of research data and findings. Based on a case study which was conducted at CONDOR ELECTRONICS in Bordj Bou Arreridj.

### 3-1 Research Model

The following figure represents the research model which explains the relationship between the independent variable and the dependant variable.

**Fig N$^0$ (01)**: Research Model



## 3-2HYPOTHESES

Based on the research model, four main hypotheses are formulated to investigate the research phenomena, as follow:

**$H_1$:** There are a significant relationship between knowledge sharing (explicit knowledge, tacit knowledge) and common Reference at Condor Company;

**$H_2$:** There are a significant relationship between knowledge sharing and collective memory at Condor Company;

**$H_3$:** There are a significant relationship between knowledge sharing and subjective engagement at Condor Company;

**$H_4$:** There are a significant relationship between knowledge sharing and subjective engagement at Condor Company.

## 3-3Data Collection and Explanation of Scales

Data was principally collected using the likert five point scale questionnaire through a randomly sample, which was distributed among 120 respondents of Condor Electronics Company in Algeria. The collection of questionnaires accounts 90 of valid questionnaires which are reliable for analysis.

## 3-4 Data Analysis

The study used the quantitative method, where data codification, interpretation, and analysis were done using SPSS software, depending on multiple regression model to test the research hypotheses.

### 3-4-1 Regression Analysis

The present paper used the multiple linear regression analysis to test the research hypotheses.

**Table $N^0$ (01)** : multiple regression test (knowledge sharing and common reference)

| | Standardized Coefficient (Beta) | Sig (p-value) | Correlation value (R) | Adjusted $R^2$ |
|---|---|---|---|---|
| EKS | 0.098 | 0.061 | 0.836 | 0.699 |
| TKS | 0.891 | 0.000 | | |

**Source:** results of statistical analysis using SPSS

The present research paper used the multiple regression analysis to test the relationship between knowledge sharing as independent variable and common reference as a sub-dependent variable of collective competencies.

Results of multiple regression analysis showed that knowledge sharing is significantly correlated with collective competencies via common reference with a coefficient determination of R amounted to (0.836), more specifically tacit knowledge sharing explains about 70% of variation in collective reference of collective competencies (R Square=0.699) .

Results showed that only tacit knowledge sharing which is significantly correlated with collective reference (sig=0.00), while explicit knowledge sharing has no significant correlation with collective reference (sig=0.610) which is superior to the error coefficient of (0.05).

Observation of Beta (β) for tacit knowledge sharing which is amounted to (0.981) interprets the level to which knowledge sharing can predict the collective reference of collective competencies within the company.

Based on discussion above, the analysis proves and valid the first research hypothesis "There are a significant relationship between knowledge sharing (tacit knowledge) and common Reference at Condor Company".

**Table N$^0$ (02)** : multiple regression test (knowledge sharing and shared language)

| | Standardized Coefficient (Beta) | Sig (p-value) | constant | Correlation value (R) | Adjusted $R^2$ |
|---|---|---|---|---|---|
| EKS | 0.106 | 0.060 | 0.343 | 0.809 | 0.655 |
| TKS | 0.780 | 0.000 | | | |

**Source:** results of statistical analysis using SPSS

Multiple regression is used to test the relationship between knowledge sharing (tacit knowledge, explicit knowledge) as

independent variable and shared language as a sub-dependent variable of collective competencies.

Results of multiple regression analysis showed that knowledge sharing is significantly highly correlated with shared language with a determination coefficient of R amounted to (0.809), where tacit knowledge sharing explains about 65% of variation in shared language of collective competencies (R Square=0.655) .

Results showed that only tacit knowledge sharing which is significantly correlated with collective reference (sig=0.00), while explicit knowledge sharing has no significant correlation with shared language (sig=0.060) which is superior to the error coefficient of (0.05).

Observation of Beta (β) for tacit knowledge sharing which is amounted to (0.780) interprets the level to which knowledge sharing can predict the shared language of collective competencies within the company.

Based on discussion above, the analysis proves and valid the first research hypothesis “There are a significant relationship between knowledge sharing (tacit knowledge) and shared language at Condor Company”.

**Table N$^0$ (03)** : multiple regression test (knowledge sharing and collective memory)

| | Standardized Coefficient (Beta) | Sig (p-value) | Correlation value (R) | Constant | Adjusted $R^2$ |
|---|---|---|---|---|---|
| EKS | 0.220 | 0.009 | 0.492 | 0.782 | 0.242 |
| TKS | 0.413 | 0.000 | | | |

**Source:** results of statistical analysis using SPSS

Multiple regression is used to test the relationship between knowledge sharing (tacit knowledge, explicit knowledge) as independent variable and collective memory as a sub-dependent variable of collective competencies.

Results of multiple regression analysis showed that knowledge sharing is significantly correlated with shared language with a determination coefficient of R amounted to (0.492), where tacit knowledge sharing explains about 24.% of variation in collective memory of collective competencies (R Square=0.242) .

Results showed that both explicit knowledge sharing (sig=0.00) and tacit knowledge sharing (sig=0.00) are significantly correlated with collective memory, while which are inferior to the error coefficient of (0.05).

Observation of Beta (β) for tacit knowledge sharing and explicit knowledge sharing which are amounted respectively to (Beta =0.413 and Beta=0.220), interpret the level to which knowledge sharing can predict the collective memory of collective competencies within the company.

Based on discussion above, the analysis proves and valid the first research hypothesis "There are a significant relationship between knowledge sharing (tacit knowledge) and collective memory at Condor Company".

**Table N$^0$ (04)** : multiple regression test (knowledge sharing and subjective engagement)

| | Standardized Coefficient (Beta) | Sig (p-value) | Correlation value (R) | Constant | Adjusted $R^2$ |
|---|---|---|---|---|---|
| EKS | 0.331 | 0.000 | 0.359 | 2.108 | 0.129 |
| TKS | 0.104 | 0.241 | | | |

**Source:** results of statistical analysis using SPSS

Multiple regression analysis used to test the relationship between knowledge sharing (tacit knowledge, explicit knowledge) as independent variable and subjective engagement as a sub-dependent variable of collective competencies.

Results of multiple regression analysis showed that knowledge sharing is significantly correlated with shared language with a determination coefficient of R amounted to (0.359), where tacit

knowledge sharing explains about 13.% of variation in subjective engagement of collective competencies (R Square=0.129) .

Results showed that only explicit knowledge sharing (sig=0.00) is significantly correlated with subjective engagement, which is inferior to the error coefficient of (0.05). While tacit knowledge sharing has no significant correlation with subjective engagement (sig=0.104) which is superior to the error coefficient (0.05).

Observation of Beta (β) for explicit knowledge sharing which is amounted to (Beta=0.331), interprets the level to which knowledge sharing can predict the subjective engagement of collective competencies within the company.

Based on discussion above, the analysis proves and valid the first research hypothesis “There are a significant relationship between knowledge sharing (explicit knowledge) and subjective engagement at Condor Company”.

## 4. CONCLUSION

Knowledge sharing as a strategic and organizational process has proven its capability to transfer the individual knowledge to an organizational knowledge the way in which human resources can together create and maintain mutual and interactive relationships based on cooperation and collaboration that guarantee the continuity of organizational learning and the development of the sustainability of collective competencies.

Research paper found that knowledge sharing especially tacit knowledge sharing is positively contribute to the development of collective competencies’ components; common reference, shared language, collective memory, and subjective engagement.

Based on research findings knowledge sharing is an organizational process which has the potential to build collective competencies when it is planned, guided and supported by strategic actions.

The authors emphasize the necessity to encourage employees at workplace to share their knowledge especially the tacit one which

is crucial to the development of new collective competencies, moreover the need to plan the process of knowledge sharing in a way it responds to the requirement of developing collective competencies at workplace.

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