

# Information and Communication Technologies (ICT), At the Service of Knowledge Sharing in Organizations: Case of the Moroccan Banking Sector.

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## Abstract

Information and Communication Technologies (ICT) are invading all sectors. The economic sector is at the center of the technological revolution, which is in reality an organizational and managerial revolution. This paper examines the role of ICTs in knowledge sharing and seeks to assess the sharing culture among actors in the Moroccan banking sector. A multi-method approach was carried out: administering the questionnaire to a sample of ICT users and conducting semi-structured interviews with a dozen banking players. The results of the study show that ICT is a tool for sharing knowledge and the culture of sharing, which is considered strong among the actors, promotes this practice in Moroccan banks.

**Keywords:** *ICT, sharing, Knowledge, culture, Moroccan banking sector*

## 1. Introduction

In addition to their role of information, Information and Communication Technologies (ICT) constitute an indispensable and formidable support for the management and sharing of knowledge at organizations level. They help to identify process, safeguard, disseminate and share knowledge to all members of the organization and at all levels. In addition, ICTs promote the sharing of a large amount of information, at a lower cost and in a shorter time.

However, ICT alone cannot succeed in this knowledge-sharing practice in any given organization, without taking into account other highly determinative factors, such as the culture of cooperation, exchange, sharing and capitalization among the actors constituting the organization. In short, ICT as tools has an impact only if the practices of the actors concerned follow. It is in this logic that this paper fits. He is interested in examining, on the one hand, the role of ICTs in promoting and developing knowledge sharing in the Moroccan banking sector, and on the other hand, he seeks to assess the degree of sharing culture in the Moroccan banking players.

## 2. ICTs, tools for promoting and developing knowledge sharing in the organization.

The role of ICTs in sharing development is indisputable. Indeed, the progress made in the field, have allowed great opportunities for communication, coordination and cooperation between players even distant. In addition, ICTs offer a strong possibility of disseminating information, especially with the internet. ICT has therefore played a crucial role in the emancipation of Knowledge Management as a particular discipline.

It should be noted that knowledge management is an old discipline, and organizations have always been concerned with the management and administration of their knowledge, turning to training, coaching and caring about the constitution of archive organization, of documentary services, ... while ICTs have supported and given new energy to knowledge management. Thus, Mounoud.E and Dudezert.A (2008) state that "it is the development of information technologies (for the storage of information and the creation of databases) and of communication (for dissemination and the exchange of information) which marks the entry into an era of explicit knowledge management for the company" [1].

In addition, with their ability to expand space and accelerate time, ICTs are facilitators of communication, coordination and cooperation among often dispersed actors, and have contributed well to the development of Knowledge Management. The latter, whose ambition is to manage knowledge, strongly mobilizes the latter. The authors stress "the impression that knowledge management is confiscated by computer science" [2]. Better still, ICT, especially those called collaborative, such as intranet, groupware, workflow ... are tools for structuring a 'cycle of knowledge' including formalization, validation, storage and reuse. These technologies will provide a repository to the organization, which will allow it to gain a competitive advantage [3]. It is clear, therefore, that ICTs are essential tools that enable or even

develop the sharing of knowledge at the organizational level. These technologies then make it possible to align and accelerate the sharing of knowledge in time and space (Mohamed et al, 2006) [4].

However, the role of the culture available to the actors is considered crucial according to many authors. Indeed, the use of ICT, as tools, is not enough for a better sharing at the level of any organization (company, associations, banks ...). Other sociological factors, related to the attitudes and behaviors of the actors, remain determinant at this level, which also requires to have a culture of sharing, exchange, capitalization and mutual enrichment [5]. Mohamed and Al (2006) go so far as to say that current ICTs do not have the maturity to realize the potential of knowledge management, and that they are, in particular, unable to produce anything other than simple loop. Ipe (2003) recalls that knowledge sharing is a complex phenomenon that does not happen automatically, even with the introduction of more and more sophisticated ICTs [5].

In practice, the implementation of knowledge management programs often moves towards the implementation of Information Systems (IS), while the literature in these states that the development and transmission of knowledge depends also on the way in which individual behaviors evolve within the organization. In this context, Isaac and Josserand (2002) [6] consider that technical tools play a role in the success of knowledge management projects, but that a favorable organizational environment is also essential for this success. In addition, members of the organization must be encouraged to share their knowledge and to enter into logic of cooperation (McDermott, 1999) [7].

In sum, if ICTs are essential tools for sharing knowledge, the practices of the actors must necessarily follow: Culture of cooperation, sharing, capitalization, etc.

### 3. Problems and hypotheses of research

Over This article is intended as a contribution to answer the following main question:

**What is the role of ICT use in knowledge sharing in the Moroccan banking sector?**

Our basic hypothesis assumes that the use of ICTs greatly favors the sharing of knowledge between actors in the Moroccan banking sector. To this end, we formulate the following two hypotheses:

**H1: The use of ICTs promotes the sharing of knowledge between actors in the bank.**

**H2: The use of ICT is accompanied by a strong sharing culture among players in the bank.**

### 4. Research methodology: multi-method approach

The frame of reference of this research starts from the Technological Acceptance Model (TAM). This model explains the user's acceptance of the technology from two variables: The perceived utility and the perceived ease of use:

- Perceived usefulness is defined as the degree to which a person thinks that using an Information System (IS) improves their work performance;

- Ease of use refers to the degree to which a person thinks that the use of an Information System does not require effort [8].

The TAM seeks to provide a basis for tracking the impact of external factors on internal beliefs, attitudes and intentions of technology users. The choice of this model is justified by the nature of the work of banking HR, which is largely based on ICT. In addition, the TAM makes it possible to satisfy an HR-based approach, as far as it makes it possible to take into account the opinions, perceptions and motivations of the bank's professionals.

The targeted population by this study is the Moroccan banking sector. There are nineteen (19) approved credit bank institutions with a total of 6297 composed agencies, until the end of March 2017, according to the Bank Al-Maghreb Banking Supervision Department. To determine our sample, we chose the quota method. The latter is used to determine a sample on the basis of some statistical information on the survey population. Thus, while respecting the structure of the sector, we have targeted a number of banks of each type (central, regional branches, branches and agencies), and also an agreed number of people, as shown in the following table:

**Table 1:** Questionnaires administered, returned and response rates

Bank	Questionnaires administered		Questionnaires returned		Response Rate
	questionnaires administered	Questionnaires administered in%	questionnaires returned	Questionnaires returned in %	
Directions	40	12%	26	11%	65%
Agencies	305	88%	202	89%	66%
<b>Total</b>	<b>345</b>	<b>100%</b>	<b>228</b>	<b>100%</b>	<b>66%</b>

To collect data, it is interesting to use a multi-method approach, in order to answer the question correctly, by distributing a questionnaire on 345 banking actors and conducting semi-structured interviews, via an interview guide, with 40 people in the sector. A double work is thus performed: Data processing using the software SPSS, and transcription of the information resulting from the semi-directive interviews, in accordance with the synthesis summary.

## 5. Results and discussion

### 5.1. Characteristics of the chosen sample:

**-Gender:** 66.7% of respondents are men and 33.3% are women  
**-Age:** 79.5% of respondents are under 40 years old. It is then a young population, belonging to a generation called digital natives. The labor market is nowadays, invaded by this new generation, with considerable technological skills.

**-Initial training:** 94.7% have a level of education of BAC + 2 and above. It is a population with appreciable skills and knowledge, which means that the banks have now focused on the recruitment of skills, constituting a strong added value for the entire banking business.

**- The breakdown of respondents by job held in the bank:**

**Managers:** Legal Directors (LDs) make up 13.2% of the sample, Human Resources Directors (HRD) are 2.2%, Telecom Network Managers (TNM) and Information Systems Directors (ISD) together constitute 1.8%, while Risk Management Managers (RMMs) represent 0.9% of the total sample.

**Operational:** Customer Service Representatives are 37.3%, Branch Managers are 24.6%, Cashiers are 18%, and Cashiers Managers are 7%. This diversity of stakeholders consulted, enriches, as specified, our study.

## 5.2. The results released:

### - Quantitative study:

- \* 91,7% of the people consulted, see that ICTs promote the sharing of information and knowledge in their banks.
- \* 91,2% of respondents believe that rapid access to information and the time saved by ICTs encourage sharing in their banks.
- \* 77,6% of respondents see ICTs as a factor in the speed of electronic exchanges, as high availability and easy access to information support a better sharing in the bank.
- \* 83, of respondents know that banks share their knowledge, putting online results (activity reports, periodicals, ..) from work, whether individual or group and to which access becomes possible.
- \* According to 76.3% of respondents, banks regularly feed knowledge bases into their intranets and websites, to improve the sharing of their knowledge..
- \* The sharing culture is described as strong in 46.2% of the banks surveyed, very strong in 21.9% of the banks (a total of 68.1%).

### Qualitative study:

- \* If ICTs promote collective work, they promote sharing between employees. Thanks to the economic and efficient possibilities of acquisition, storage, processing and diffusion of information, ICT presents essential tools for sharing practices in the bank.
- \* With the use of ICT, new forms of sharing appear: Electronic exchanges (circulars, emails, memos, briefing notes, ...). Rapid access to information, fast processing of data, with the resulting time savings, favor a rapid speed of electronic exchanges.
- \* Collaborative tools (messaging, intranet, ..) promote the practice of sharing, because they allow in a short time, to distribute a huge amount of information and knowledge to a large population.
- \* The stakeholders consulted demonstrate a significant culture, and are aware of its role in the success of any sharing practice. They point out that, by their nature, ICTs require cooperation and mutual enrichment between people, especially since tasks usually require the intervention of more than one party. The design and implementation of intranet technologies, such as groupware and workflow, are moving in this direction.

## 6. Conclusion

The results of this study show that ICTs contribute to the development of sharing practice in banks. In addition, the stakeholders consulted state that ICTs are an essential tool for communication and collaboration at work, and demonstrate a strong culture of sharing and a significant team spirit, which promotes this practice at all levels. Better yet, they think that ICT, especially collaborative ones, by their nature, impose this sharing in the bank; it implies that these technologies are of a strategic nature in Moroccan banks.

**Our two initial hypotheses are thus verified and validated.**

## References

- [1] Aldebert.B, « Technologies de l'Information et de la Communication: Implications organisationnelles et stratégiques dans les entreprises touristiques des Alpes Maritimes », Ph.D. thesis in Management Sciences, Nice-Sophia Antipolis University, defended on December 6th 2006.
- [2] Mounoud.E, Duzert.A, « Défis et opportunités: le KM entre technologies, comportements et organisations », in Benabderrahmane.Y, « Management des connaissances, déploiement des TIC et GRH des organisations: Cas de l'Algérie » Thèse de doctorat en Sciences de Gestion, Université Paul Valéry, Montpellier III, 2012, p 60.
- [3] Gunia.N, "The Human Resources Function Facing the Organizational Transformations of Companies: Impacts of New Information and Communication Technologies", Ph.D. thesis in Management Sciences, Toulouse 1 University, April 22, 2002.
- [4] Benabderrahmane.Y, « Management des connaissances, déploiement des TIC et GRH des organisations: Cas de l'Algérie » Thèse de doctorat en Sciences de Gestion, Université Paul Valéry, Montpellier III, 2012, p 60.
- [5] Isaac.H, Josserand.E, "Structure and Information System: What Roles in Knowledge Management Practices? »; cited in Kalika.M, "E-HRM, evolution or revolution? », Liaisons editions, 2002.
- [6] Chantal.M, Ethier.S, Simon.L, Viola.J.M, « Le dilemme technologie-individus dans l'implantation de la gestion des connaissances: Le cas du groupe Cossette Communication », Management Review n ° 2, Volume 32, Summer 2007.
- [7] McDermott.R, « Why information technology inspired but cannot deliver knowledge management », California Management Review, vol 41, n° 4, pp 103-117.
- [8] Kéfi.H, « Mesures perceptuelles de l'usage des Systèmes d'Information: application de la théorie du comportement planifié », Revue Humanisme et Entreprise n° 297, 2010, pp.7-8. [En ligne]. URL: <https://www.caim.info/revue-humanisme-et-entreprise-2010-2-page-45.htm>; consulté le 08/02/2017.