

Knowledge management in the Moroccan public sector, concepts and application: Tax office as a case in point

Fadwa ERRAGZI, (Doctorante)

*Laboratoire de Recherche en Stratégie et Management et des Organisations
ENCG, Hassan First University of Settat, Morocco*

Abdelhak BZIOUI, (Enseignant-Chercheur)

*Laboratoire de Recherche en Stratégie et Management et des Organisations
ENCG, Hassan First University of Settat, Morocco*

Badia OULHAJ, (Enseignante –Chercheuse)

*Directeur du laboratoire de Recherche en Stratégie et Management et des Organisations
ENCG, Hassan First University of Settat, Morocco*

Correspondence address :	National School of Commerce And Management of Settat Km 3, route de Casa BP 658 Hassan First University of Settat, SETTAT (+212) 523 723 577
Disclosure Statement :	Authors are not aware of any findings that might be perceived as affecting the objectivity of this study
Conflict of Interest :	The authors report no conflicts of interest.
Cite this article :	ERRAGZI, F., BZIOUI, A., & OULHAJ, B. (2022). Knowledge management in the Moroccan public sector, concepts and application: Tax office as a case in point. International Journal of Accounting, Finance, Auditing, Management and Economics, 3(5-2), 503-525. https://doi.org/10.5281/zenodo.7154670
License	This is an open access article under the CC BY-NC-ND license

Received: August 09, 2022

Published online: October 06, 2022

Knowledge management in the Moroccan public sector, concepts and application: Tax office as a case in point

Abstract

Knowledge is seen as an essential asset for public organizations. The loss of critical knowledge as a result of the increasing retirement of experienced human resources may pose a threat to the continuity of these organizations' operations, particularly since reforms in the public sector have transformed these entities into regulatory, evaluation, and control bodies.

Therefore, these organizations rely largely on the mastery of these skills to achieve their goals. This study aims to evaluate, within the context of the public sector, the significance and problems of knowledge and, more importantly, to build and propose a conceptual framework for knowledge continuity management (KM) in these organizations. This framework defines the key processes and elements that support the implementation of this process in order to ensure the continuity of knowledge following the departure of experienced personnel.

In this study, we tried to answer the question, "Does the General Directorate of Taxation have a knowledge management policy?". We have thus circulated a poll to persons who now occupy or are pursuing leadership positions. The findings indicate consensus regarding the necessity of the knowledge management policy, especially in succession management, for guaranteeing the consistent delivery of public services. But they also illustrate the absence of a well-defined process of knowledge transfer, which leaves the field of activity in this regard wide open and demands a large intervention by the central services to better explain the concept to the various employees in charge of the management of human resources and the other services, as this process involves any person holding critical knowledge for the efficient operation of its service and for the installation of a knowledge management system.

Keywords: knowledge management, public sector, retirement, tax department.

JEL Classification : D80, L20, O15, O21.

Paper type: Empirical research

1. Introduction

In a world that is undergoing rapid change as a result of globalization, the economy that is built on information and knowledge, together with the rapid development of information, communication, and technology (ICT), has become more of a survival issue. Both the corporate and public sectors have the potential to view this transformation not just as a challenge but also as an opportunity. This is something that should be examined.

For their survival in a world of cut-throat competitiveness and continuous environmental change, most of the big companies and organizations in the private sector have been leading research to improve their management techniques and tools. It was in the late 70s and the early 80s where governments became aware of the importance of the modernizing of their services by adopting a new approach, or what we know as the new public management, it revolved around applying the management practices well known and approved in the private sector into the public context, such practices are Enterprise Resource Planning (ERP), Business Process Re-engineering (BPR), and Total Quality Management (TQM). The one currently in vogue is knowledge.

A decade of experience in the private sector demonstrates that knowledge management is not simply another management fad, despite what some detractors have asserted. It has moved past that point, and it will most certainly continue to be an integral part of the overall strategy of any company going forward. Because of this, the moment has come for knowledge management to find a position in the public sector. Since a long time ago, knowledge management has occupied a central position in government work, making it inseparable from strategy, planning, consultation, and implementation (OECD 2001).

However, evidence from the existing literature shows that the public sector is falling behind in these practices. Governments are now realizing the importance of KM to their policy-making and service delivery to the public and some of the government departments are beginning to put KM on the top of their agenda. But it is not an easy task to implement, as it looks. "The benefits of KM will not be served to governments on a plate".

Strategies and plans for implementing KM must be guardedly thought-out in advance in order to succeed in the attempt and effort. There are concrete issues for government to consider and address. While there are many problems and difficulties that need to be solved in the public sector.

Within the confines of this investigation, the question that we are attempting to find an answer to is whether or not there are knowledge management programs operating within the various departments and agencies, and if so, what are the contextual factors that surround the development and implementation of these programs. If there are knowledge management programs operating, then what are the contextual factors that surround the development and implementation of these programs? The focus of the investigation can be broadened to include an analysis of the components that constitute this knowledge management and transfer programs, looking at those components from the point of view of both the content and the processes that comprise those components. This will be included in the report that summarizes the findings of the investigation.

The challenges of knowledge management in the public service and the influence it has had on the process of modernizing public management have prompted us to inquire about a significant matter: "Do we have a policy that governs the management and transfer of knowledge within our public administration?"

In order to provide a response to this inquiry, it is necessary to provide responses to the following questions; what are some possible outcomes for the redesigned knowledge management system? What impact do you see retirements having on the profitability of knowledge management and training? How does the presence or lack of an efficient knowledge management system influence the performance of the public administration, and

what are the implications of these factors? Explain why it's so important to pass on your knowledge when it comes to managing succession?

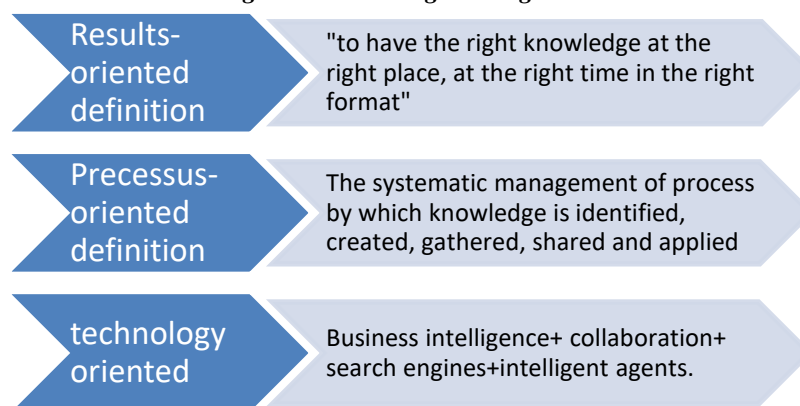
At the regional directorate of taxation in Marrakech, we'll be conducting our investigation. Starting with the assumption that the regional directorate of taxation in Marrakech does, in fact, have a knowledge management and transfer policy -which may be validated or refuted depending on the methodology employed- the following set of hypotheses can be constructed. At the same time, we take **H1** to be the alternative hypothesis, since it is the polar opposite of **H0** and predicts that the regional directorate of taxation in Marrakech has no policy of knowledge management or transfer.

According to the following plan, our research will be carried out within the regional direction of taxes of Marrakech. To begin, we will attempt to define the management of knowledge as well as the various concepts relating to the latter in order to gain an understanding of the knowledge management and the transfer. After that, we will show the research methodology that was utilized by first presenting the background of the study, which is the regional direction of taxation in Marrakech. After that, we will present the numerous outcomes that were acquired along with their respective interpretations.

2. Knowledge management concepts and definitions

The definition of knowledge management is a complex task, there is not one standard definition but different definitions. Steve Barth (2002) confirmed "There is not standard definition of Knowledge Management or KM "Put 10 KM experts in a room, and you are likely to get 30 different definitions". According to him: "Knowledge management is such a preposterous, pretentious and profoundly oxymoronic phrase that everyone who really understands KM--including many of the field's pioneers--refuses to use the term." This researcher explained that experts prefer to use terms such as knowledge sharing, information systems, organizational learning, intellectual asset management, performance improvement. For his part, René-Charles Tisseyre (1999) adds "to define Knowledge Management or its literal translation, 'knowledge management' is a difficult art because it calls upon two abstract notions: 'management' and 'knowledge' which can only give rise to a concept that is itself abstract and whose very existence might seem surprising". To define knowledge management, we have borrowed this illustration from Benjamins V, R.

Figure 1: Knowledge management



Source: Benjamins V, R. (1999)

This figure reveals that knowledge management is defined from three perspectives (objectives, process, technology). It is the process of developing, recognizing, sharing, and using knowledge to offer the appropriate information at the appropriate time and in the appropriate (accessible) manner. This accessibility is facilitated by technical instruments. This definition articulates the objective of knowledge management (managing intangible assets).

KM is a discipline that supports an integrated approach to the production, capture, organization, access, and use of corporate information assets. These assets include organizing databases, textual information like as policy and procedure documentation, and, most significantly, the tacit knowledge and expertise contained within the minds of individual employees.

3. The pillars of knowledge management

Knowledge management is predicated on a variety of factors that have a substantial impact on its success or failure. In his book *Guide to Knowledge Management*, G. BALMISSE (2002) identifies five key elements; strategy, culture, organizational structure, individuals, and technology.

People and technology are the key pillars of knowledge management, according to the Moroccan experience, as reported by the Economist in Edition N°:892 Le 10/11/2000 after a presentation on knowledge management organized by the Association of Users of Computer Systems in Morocco (AUSIM). Mr. Mohammed Hamlili, consultant at the Arthur Andersen firm in Casablanca specifies that the three pillars of KM are organization (business objectives, organizational structure and KM process), culture (collaboration, learning and innovation) and technology (types of information, architecture and solutions), so the KM process involves the creation, sharing and application of knowledge. To conduct a KM project, it is necessary to master the company's internal process, determine the business objectives, define the organizational structure, design the KM system and implement the approach and tools. The KM manager must have a good knowledge of the business, the staff and must report to the General Management. It is also a question of determining the communities (who knows what? Who controls what? And who does what?) and the KM facilitators. Leading change requires promoting the notions of collaboration, learning and sharing. It is necessary to evaluate the results of the process and, above all, avoid presenting the system as a computer project.

Other authors, such as Heisig (2009), analyzed KM frameworks from research and industry in terms of KM framework components and similarities and differences. The conclusion of the study was that there was an underlying consensus regarding the fundamental categories used to identify knowledge management activities and the key success factors (CSFs) of KM. Holsapple and Joshi (1999) analyzed and enumerated the following KM frameworks and models, which were uncovered through Heisig's (2009) review of the literature:

- Framework of Knowledge Management Pillars;
- Framework of Core Capabilities and Knowledge Building;
- Model of Organizational Knowledge Management;
- Framework of the Knowledge Organization;
- Framework of Knowledge Management Stages.

However, Holsapple and Joshi (1999) conclude that none of the earlier frameworks subsume the others and that a framework with a standardized method for characterizing the influences on the use of KM is necessary. The "Four Pillars of Knowledge Management" framework, which was designed and improved between May 2000 and May 2004 by the George Washington University, is being used for this study since it expands on the work done by earlier academics (Stankosky, 2005). The conceptual framework that is commonly referred to as the "Four Pillars of Knowledge Management" takes into consideration the social, political, governmental, and economic aspects of the surrounding environment. Leadership, organization, technological advancement, and educational growth make up the four cornerstones of the structure. These four pillars each represent a distinct subject that has repeatedly demonstrated the capacity to encompass all components of productive knowledge sharing and collaborative cultures (Stankosky; Calabrese and Baldanza, 2003). Leadership involves making decisions and ensuring that knowledge management activities are

strategically aligned with the goals of the organization. To guarantee that the Knowledge Management project is successful across the entire organization, the "Organization" pillar places an emphasis on the strategic rethinking and aligning of operational processes and procedures. The Technology pillar underlines the relevance of the enabling technology infrastructure, which enables Knowledge Management (KM) within the organization and without which the implementation of KM in any business would be extremely difficult, if not impossible. Lastly, learning is defined as the acquisition of knowledge or a skill through study, experience, or instruction, and it emphasizes the fact that the organization must address KM facilitating approaches such as increasing internal communications, promoting cross-functional teams, and creating a learning community. These are all important steps that the organization must take. This study focuses on the four pillars of the framework, which the management can manipulate to improve organizational performance through knowledge management (KM).⁴ Public management: history and definitions

There isn't just one method to describe what public management is. This uncertainty is caused by the ambiguities inherent in the mere concept of management, and the ambiguities of the public domain only serve to amplify them. We have decided to bring up a few definitions that are offered, and then to highlight the qualities of public management, which will be important for our research.

In 2004, Gibert gave his vision of public management by defining it in the broadest sense, as a notion with two "related and complementary" facets: the management of public organisations or 'public management stricto sensu' on the one hand and the management of public policies, on the other hand". while specifying that the "true The purpose of public management is to ensure that public policies achieve their objectives. " And that it "aims to act on the social system". Whether in a broad or narrow sense, Gibert reserves the notion of "public management" for the management practices of the public organizations.

Bezes's (2005) research on the development of public management in France lead him to oppose two visions of public management, a historical vision of a "public management", as a discipline consisting of "heterogeneous borrowings from the economy, management and management of private sector (Pollitt, 1990), and a contemporary vision presenting the public management" as a coherent, universal doctrine of public management, apolitical and international".

Krief (1999) defines public management as "management practised by public service organisations". For Laufer and Burlaud (1980), "Public management is a method, the public sector being a place where this method is applied". Vayrou considers that: "public management is first and foremost management. The public / private is not always enough to identify its operating logic. A large company private may be close to the operation of a public service because of the size of its structures, due to its bureaucratization".

The study of public management shows that, if it enters the scientific field, it encounters still as some difficulties in establishing itself as a discipline.

4. Knowledge management in the public sector

Knowledge is indispensable for almost all organizations, especially public organizations. Modern governments are expected to solve complicated livelihood problems and act as drivers for improved societal growth (Milbraith, 1989), and "problem solving" is called "expertise". From the perspective of the political-administrative dichotomy, state agents owe their influence not to elections but to their professional knowledge (Meier, 2006; Rourke, 1984). According to Waldo (1980), public administration, as an innovative and active factor facilitating civilization in history, relies on its knowledge, which is continually updated and state-of-the-art.

Surprisingly, there has been little interest in knowledge management in the field of public administration. There are only two articles in the field of knowledge sharing in major public administration journals (Kim & Lee, 2006; Willem & Buelens, 2007). A few publications on the antecedents of knowledge sharing in the public sector do appear in mainstream management journals (Cong, Li-Hua, & Stonehouse, 2007; Lee & Ahn, 2007; Sandhu, Jain, & Ahmad, 2011; Seba, Rowley, & Delbridge, 2012; Taylor & Wright, 2004; Yao, Kam, & Chan, 2007; Yusof, Ismail, Ahmad, & Yusof, 2012). The authors of these articles suggest that organizational structures, managerial commitment, leadership, trust in colleagues, information technology (IT) and rewards are key predictors of effective knowledge sharing in the public sector. However, no theory has yet been developed regarding the motives for knowledge sharing in the public sector. In order to fill this gap, this study examines knowledge sharing in the public sector and more specifically the motivations behind it, introducing the notion of Public Service Motivation (PSM) (Perry & Wise, 1990) to determine whether what motivates public officials to share knowledge is not only possible incentives and other situational factors, but also a more sacred motivation: their willingness to defend the public interest. Our observations are intended to help us better understand the motives for sharing knowledge and the motivational structure of knowledge sharing in the public sector.

5. Moroccan public administrations

5.1. History and major developments

It is important to place the administrative apparatus in the historical context of the Moroccan political system and the predominant role played by the executive branch of government within the state apparatus for nearly half a century in order to fully understand the issue of modernization of the Moroccan administration and its evolution over the last fifty years. This will allow for a full comprehension of both the issue and the evolution of the Moroccan administration.

After Morocco gained its independence, the number of civil officials who formed the hard core of "the administration" "just topped 36,000," with French nationals accounting for the majority of those positions. Building a modern administration from the ground up while avoiding a complete break with the structure that had been inherited from the protectorate period was one of the most significant issues that the Cherifian administration faced during that era.

The first steps that the Cherifian government took were designed to address the concerns raised by the "National Movement," to "Moroccanize" staff at the central government level, and to ensure a strong territorial presence of the State at the level of the Kingdom's Regions and Provinces. All of these goals were accomplished through the implementation of these policies. The government had been forced to hire a huge population of civil servants in a relatively short period of time, despite the fact that the qualifications and profiles of these individuals frequently did not meet the actual requirements of the posts that they occupied.

This most likely explains why the first general statute of the civil service was established on February 24, 1958, when it was promulgated by the dahir. This statute was modeled after the statute that was approved in France in 1946. This statute, which lays out the obligations and rights of civil officials, would, despite the numerous critiques it raises, constitute the cornerstone around which the Moroccan administration was built. It was written to spell out the obligations and rights of civil servants. Due to the fact that the requirements of the general civil service statute are both general and cross-cutting in character, it was necessary to provide for unique statutes in order to take into consideration the particulars of certain professions and situations. In this light, in 1963, a measure known as the "reform of the executives" was approved; this ultimately resulted in the creation of a number of statutes. One of the most significant challenges that are currently faced by the government in its efforts to implement

modernization policy is the proliferation of special statutes that have since been passed, as well as myriad of compensation schemes that are involved in their implementation.

5.2. Managerial Approach Within the Moroccan Public Administration

The civil service remains one of Morocco's largest employers. At the end of 2020, it will have more than 568.149 employees in all categories and ranks, excluding the army and local authorities. It monopolizes the public service, does not have market shares that it risks losing to another competitor since it owns the entire market. The notion of turnover is absent. Loss is impossible and bankruptcy is unimaginable. Yet, the Moroccan civil service is the embodiment of a heavy, gnawed and frozen machine.

In his study of the contradictions of administrative reform in Morocco, Mohammed El Yaagoubi notes that "Moroccan public administration has the characteristics of the Weberian bureaucracy in its classical sense. In other words, we find ourselves in front of a highly centralized and hierarchical administration, with multiple administrative structures whose essential characteristics are anonymity and impersonality of the relations in the administration or of the administration with its users.

From this point of view, it becomes easier to understand that, the search for an adjustment of the administrative structures to the contemporary objectives of the country, is a permanent dimension of the improvement of the functioning of the Moroccan administrative apparatus, especially in its human aspect.

The major provisions of the administrative reform as described in the report of the Ministry of Public Service concerns human resource management mainly in two aspects:

The legal framework that will cover the Advancement of by reforming the system of evaluation of human resources capacity and performance, as well as the remuneration that is known for its complexity and lack of equity, and finally Retirement by reforming the retirement pension system to make it more coherent, equitable, and cost-effective;

And secondly, on the development of the professionalism of the Public Service, which, according to the Ministry, can only be achieved by acting on the recruitment system, the organization and description of positions and tasks, the affirmation of continuous training and development, and lastly, the mobility of human resources, because, as is well known, the mobility of public servants is an unquestionably essential mechanism for the management and development of human resources.

To meet the challenges of modernization, the public administration has opened up to the new practices of human resources management by deploying the various HRM tools according to the needs and priorities of administrations. These new management practices are often outsourced to consulting firms. And it is thanks to the latter that new techniques have been introduced to the administration, i.e. annual assessment, GPEC and training engineering.

The desire of the public administration to integrate modern methods in the management of human resources is explained by the fact that important activities in the HR function and in spite of the efforts made are still not succeeding in achieving objectives such as, for example, staffing the administration with competent and motivated public servants who are seeking a career in the public service.

The acceptance of these new practices has enabled managers to detect some shortcomings in certain activities as mentioned above, starting with recruitment, which is based on often formal procedures for selecting candidates, holding competitive examinations or interviewing candidates, and which is most often a massive recruitment linked to budget items. Then career development, which has become one of the favorite subjects, especially with regard to the detection of high-potential executives capable of reaching positions of responsibility and positions considered as key positions within the civil service, also known among experts in

human resources management through talent management. Among the methods used in this framework is the annual assessment.

Today, the majority of Moroccan agencies rely on annual interviews and rating-based employee evaluations. Nonetheless, these evaluations demonstrate that employee ratings for avoiding conflict are often excellent. Typically, the purpose of this review was to determine the evolution and remuneration circumstances of employees.

By going on to continuing education, we can observe that public administration has developed the habit of creating a training plan to determine the training needs of each individual in his or her field. Hence the significance and significance of annual employee interviews. In actuality, however, these training programs are typically drafted by departments or human resources departments and sometimes contracted out to training organizations, which subsequently conduct the training sessions.

5.3. The knowledge management in the Moroccan administration

“ ... Knowledge is an important piece in the puzzle of our government's overall vision for building a knowledge society.... “said Mr. Driss Jettou during the inauguration of the e-gov days June 2005.

The Moroccan government is trying to abandon all long-standing practices and introduce new internal management standards that will produce knowledge, except that it is disparate between one jurisdiction and another, there are a few departments that are for the moment still rebellious, still in an archaic system and others who are in the advanced and very advanced and finally organizations that are in the middle trying to make efforts in this direction.

The development of a knowledge management strategy is not a simple transfer of concepts already used in the private sector; however, it is necessary to establish a model specific to the Moroccan public service while keeping the overall characteristics and objectives of knowledge management strategy.

In terms of knowledge creation, this is an area that has never been theorized in the Moroccan public administration, nor has it ever been studied, and the incentive to create knowledge is through easy communication and flattened organization, which helps the executives to express their ideas.

Knowledge is a paradoxical concept, because it is subjective to assert the appropriation of knowledge, however, if an organization claims to have knowledge, it is not always the case. Knowledge and information, it will create media, websites, portals but it is up to the user alone to judge the relevance of this knowledge and information.

Others characterize knowledge as training, which is influenced by each individual's human activity. There is a human knowledge that develops and nourishes itself, but the problem that the civil servant manages his daily life with Anician knowledge and does not make no upgrading of his knowledge to develop management tools and this by adapting and based on new knowledge. Another point highlighted is the urgency of finding a model that is applicable and transposable to public organizations in Morocco to move from individual memory to memory organization.

According to A. SARI in his MBA research “le rôle de la gestion des connaissances dans un projet d'e-gouvernance cas de la stratégie e-maroc 2010” 2006 “the process of knowledge creation in public administration would be according to some experts very long and hard to achieve but it is not impossible.

The public service, according to some officials, does not kill the initiative, but it does a place where we can create since we have more time and more means to create another speech explain that for the moment government officials are not yet are not concerned with knowledge management and are not interested in individual memory.

It was also stated that there is no overall knowledge management strategy in the Public Service. And it was also explained that knowledge requires knowing who owns knowledge and information, and whoever owns information, knowledge and knowledge in public administration appropriates it, making it a private good and not a public good. However, knowledge must be considered a public good and not a private good in order to successfully create knowledge in public organizations. At the level of skill, the low level of communication felt among government officials can negatively influence relational know-how in the organization”.

6. Context & research methodology adopted

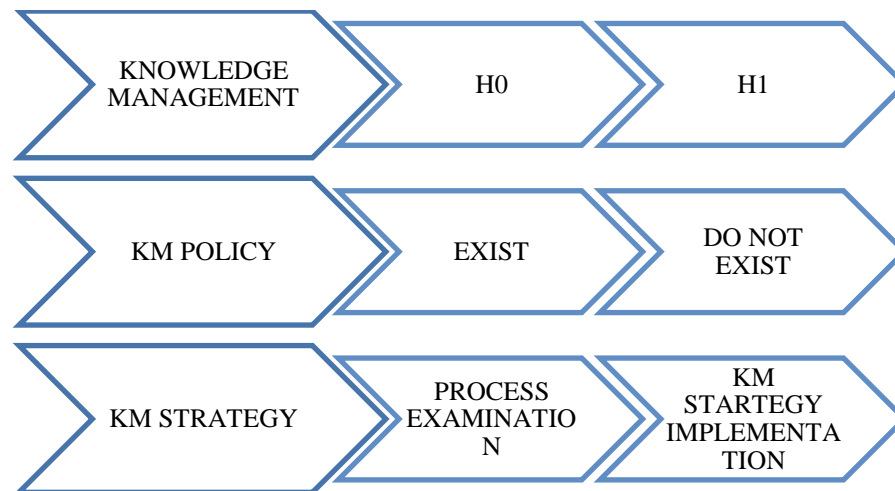
6.1. Context of research: presentation of the organization

Within the confines of this capstone project, we are under the obligation to put into practice my theoretical contribution, which was detailed at the level of the part that came before it. In order to provide an answer to the initial problem of succession management in public administration, we chose the case of the regional direction of taxation in Marrakech. It is also important to bring to your attention the fact that the Regional Directorate of Taxation is a Directorate of the Ministry of Economy and Finance, the primary goal of which is to ensure that sufficient amounts of tax revenues are collected. Therefore, it decides the basis on which the state's various taxes—including the value-added tax, the income tax, the corporation tax, and registration fees—are imposed, in addition to certain municipal taxes that are collected on behalf of local authorities (Housing tax, local authority tax; professional tax).

6.2. Research methodology

After having focused on the key elements of our analysis, in this part we will succeed in making the research concrete while validating the aforementioned hypotheses within the regional directorate of taxation in Marrakech which constitutes the ground of this study.

Figure 2. Conceptual model of research



Source: Authors

We were able to contextualize the issue of knowledge management within the administration; this research question which arose from a daily observation will take several tracks through this empirical study. To do this, we have opted for a mixed research approach that combines both quantitative and qualitative.

In this context, we are going to conduct a questionnaire which highlights the set of guide variables, namely: Age, seniority, gender, last diploma obtained as well as analysis variables. This questionnaire will be the objective of a primordial tool of the analysis which will relate

to a sample of **100** people, the choice of the panel is based on their capacity to reinforce the study and the analysis, in other words the civil servants who are directly affected by the issue of knowledge management and is practically subdivided into:

Table 1: Details of survey distribution

Surveys distributed in total	Recovered surveys filled	Investigations not recovered
100	79	21

Source: Ourselves

Table 2: Analysis variables

Analysis variables	Questions
Policy of knowledge management within the administration and its transfer.	8- 9 -10 - 11 - 12
Stakeholders in the process	14 - 18 - 26
The talent drain / Retirement	21 - 22 - 23 - 24
Career management	18 - 19 - 20
Key KM Criteria	13 - 16

Source: Ourselves

The objective of our research via these variables is to find out whether the tax administration accepts and takes seriously the importance of the existence of a knowledge management approach, and whether this awareness exists among current managers as well. As in the new executives who aspire one day to occupy one of the positions of responsibility. This conscience will be examined in these two categories according to age, the gender, the diploma, the seniority within the tax administration, and of course according to the position held and the function.

Then we will move on to the second and third axes in our questionnaire which will touch on the heart of our research, namely the transfer of knowledge. We will try to measure the degree of maturity of the concept of succession with our sample, the existence of a knowledge management policy, if so, who are the stakeholders in this process? Not to mention the probing of the HR strategy within the administration: is there a strategic plan for the transfer of knowledge? The other question pertains to the challenges of knowledge management within the tax administration.

But before pushing our research any further, we must first check the existence of a link between the chosen variables. To this end we will perform some tests according to the bivariate **analysis** method, namely the KHI-DEUX test. It allows us to decide on the link between two qualitative variables.

6.3. Results

▪ **The assumptions**

Most often, the situation is summed up in an alternative consisting of two hypotheses which are mutually exclusive and which are called respectively the null hypothesis **H₀**, or fundamental, and the alternative hypothesis **H₁**, or opposite. In general, hypotheses do not play symmetrical roles, and we choose as null hypothesis the hypothesis in which we believe or hold, or even the one which makes it possible to make calculations.

▪ **The decision rule**

A hypothesis test is a decision rule that allows, on the basis of observed data and with determined risks of error, to accept or reject a statistical hypothesis. It is defined under the null hypothesis “is true” and for an alpha α significance level set by the researcher. If the value of the **S_{obs}** calculated statistic (calculated from the observations of the sample) is

greater than the threshold value $S_{theoretical}$, i.e. which means $S_{theoretical} < S_{obs}$ then the null hypothesis is rejected at the risk of error α (set at 0.05) and the alternative hypothesis is accepted. And if $S_{theoretical} > S_{obs}$ the null hypothesis is accepted.

Our objective of the test is to find out if there is a relation between the existence and the concept of knowledge management policy in the regional tax office and the loss of competence.

The chi-square test, also called the chi-square test of independence, studies the statistical relationship between two qualitative variables. The chi-square, also noted χ^2 , χ^2 , chi-square or chi-square in English, is a measure of the differences in independence, that is to say a measure of the numerical distance between observed numbers and theoretical ones. It tests the independence between rows and columns of a crosstab. In other words, the chi-square test makes it possible to pronounce on the “significance” of the link between two qualitative variables.

Table 3 : KHI DEUX TEST

Chi-square tests					
	Value	dof	Asymptotic significance (bilateral)	Sig. exact (bilateral)	Sig. exact (one-sided)
Pearson chi-square	, 183 ^a	1	, 669		
Correction for continuity ^b	, 000	1	1,000		
Likelihood ratio	, 184	1	, 668		
Fisher's exact test				1,000	, 516
# Of valid observations	59				

Source : SPSS

The hypothesis test adopted is as follows:

H_0 : the existence of a knowledge management policy has an influence on the drain of competence.

H_1 : the existence of a knowledge management policy does not exert an influence on the drain of competence.

Interpretation of the output:

Using SPSS we have introduced the two variables to obtain the following results:

For the output we are interested in the significance column (Sig) which designates the alpha probability of making an error by declaring that there is a difference between the two variables. This alpha value allows us to confirm or refute the hypothesis H_1 . We can say that there is a dependency relationship between the two variables when the significance level is less than 0.05. In fact, in human sciences the significance level used is 0.05 (*Appendix*).

In our case the level of significance is 0.502 which **is greater than 0.05 so we reject H_0 and we accept H_1** . This means that there is not a dependency relationship between the existence of a knowledge management policy and the loss of competence.

7. Interpretations of the results and discussion

7.1. Open question discussion

In this section we focus on the open questions addressed to the informants. The first question relates to the meaning of knowledge management. For the entirety of the sample knowledge management is synonymous with continuity and the ability of the administration to continue to provide its services both now and in the future by providing qualified reserves to take over essential positions in the event that their senior holders resign or otherwise leave their positions.

But once we arrived to question N°8, things started to change. This question seeks to find out whether the tax administration has a knowledge management policy. 62/79 answered yes while 17/79 said no, so the majority confirms that the tax administration has a knowledge management policy. On the other hand, 53% of the sample members confirm that this policy is essential to improve the administration's image while 54% are for the importance of the knowledge management in the promotion of culture sharing and the skill promotion.

Moving on to question 12, "do you have any practices or tools in place to support the knowledge transfer and sharing within your department?" 74.68% answered yes, but it is the next question that will make us question the sincerity of the answers. Question 13 is a compound question whose purpose is to evaluate the interviewers' knowledge of the various stages of a knowledge management process. The first sub-question asks, "Have you undertaken an analysis of your department's critical knowledge to establish your needs?" 79.66% of the answers are negative. The second sub-question is do you have a map of the experts who possess the requested knowledge?" it received the same response. 79.66% said no.

The 14th question being a rather tricky one allowed us to confirm the non-assimilation of the concept of most of the respondents. 69.62% answered that there is no department responsible for knowledge management within the administration, according to 69.62% of respondents. While 30.38 percent of respondents indicated that this famous department exists, 23 out of 24 individuals confirm that it is the department of human resources and training.

For the 16th question, 45.57% confirm that the transfer of knowledge and especially the know-how allows improving the work process and even to innovate. For the 22nd, 23rd and 24th questions, there is also a discrepancy in the answers, since it is confirmed that those retiring contribute to the training of their successors, whereas in the question, which concerns the loss of knowledge following retirement, 57% of the answers confirm this loss. Still the confirmation by 80% of the respondents that they do what is necessary to capture as much knowledge as possible from those retiring before they quit leaves us confused.

7.2. Results discussion

The P value is greater than 0.05 on all SPSS outputs except table 10 and table 13 whose p value is successively equal to 0.00 and 0.04 and as we have already explained; "On the output we are interested in the significance column (Sig) which designates the alpha probability of making the error by declaring that there is a difference between the two variables. This alpha value allows us to confirm or refute the hypothesis H_1 , we can say that there is a dependency relationship between the two variables when the significance level is less than 0.05. In fact, in the human sciences the significance level used is 0.05".

For the table 10 we tested the relation between two questions in our survey; the How to describe the degree of importance that the general directorate of taxation places on the sharing of its knowledge? And does your administration have a policy planning knowledge management?

The alpha value gave us a result of 0,00 This means that there is a dependency between the importance of knowledge sharing and the existence of a knowledge management policy within the tax administration, something that reflects the awareness of all respondents of the inevitability of implementing a knowledge management process.

For table 13, the chi-square test is performed between the two questions the How to describe the degree of importance that the general directorate of taxation places on the sharing of its knowledge? And what is your assessment of knowledge transfer in your work? Would you say knowledge transfer is working well within your department? (Scale of 10), the alpha value is 0, 04 Thus, we also observe the existence of a dependency relationship between our two variables, which are the importance of knowledge sharing and the performance of knowledge

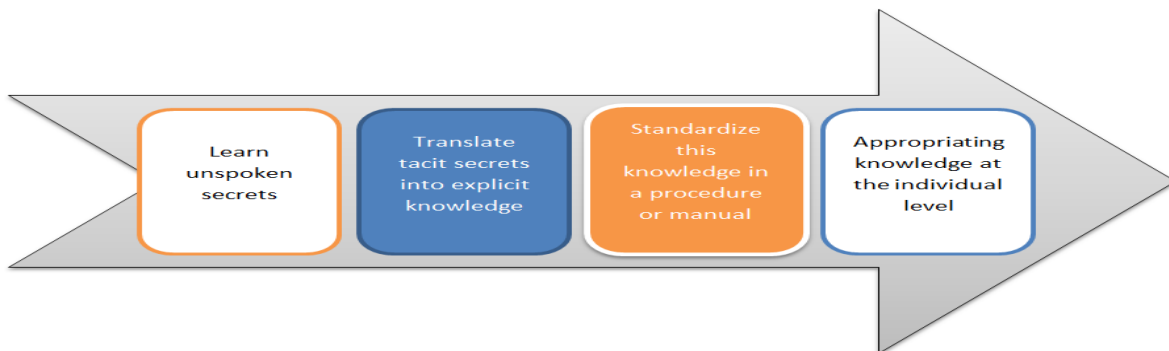
transfers, We can simply say here that the sharing of knowledge is undoubtedly important but the how is not less important, that is to say that a quality sharing is required because the achievement of the objectives cannot be done without an efficient knowledge transfer process. In general, and since we cannot go further in our analysis since most of the alpha values are higher than 0.05, we can say that the majority of the respondents admit that knowledge management is an important process to guarantee the continuity of the public sector in the best conditions, but unfortunately this process does not exist in a formal and official way with a procedure manual in due form. On the other hand, it was realized that the transfer of some information necessary to perform certain tasks is done voluntarily between agents.

But the most remarkable thing in our research is the understanding of the very concept of knowledge management and its protagonists, since almost all respondents sincerely believe that it is the human resources department that is responsible for knowledge management as a procedure, while the reality is that it is the entire staff that must contribute to the realization and implementation of all stages of knowledge transfer, especially the component of know-how and tacit knowledge. Knowing that for the explicit component is already well taken care of by the cell of continuous and initial training.

In the end, and as some recommendations to be made in this matter is to start, in parallel with the central service, the project of installing a knowledge management system in order to become a main actor in this process instead of remaining a simple intermediary and receiver of instructions, in the respect and application of the principle of subsidiarity which is a fundamental principle of regionalization, the latter concretized recently by the attribution of new responsibilities either to the Regional Director or to the chiefs of the regional services, i.e. the internal recruitment.

The following diagram presents a proposal for tacit knowledge management based on the article by Morten T. Hansen, Nitin Nohria and Thomas Tierney. What's Your Strategy for Managing Knowledge? (March-April 1999).

Figure 3: Tacit knowledge transmission



Source: Ourselves based on Morten T. Hansen, Nitin Nohria and Thomas Tierney 1999.

Successful implementation of knowledge management involves a cultural transformation within the organization and requires deliberate actions by management and employees (Grossman, 2006 in Austin, 2008). Managers embarking on the implementation of such a system must assess various aspects of the organizational culture and develop certain strategies that fit the uniqueness of the organization.

8. Conclusion

In this chapter, we have attempted to assess the spss results and remark on them based on both quantitative data and observation, which prompted us to study on this topic in the first place. The observation is summed up by the fact that knowledge management in the regional tax

directorate, despite the general consensus of all respondents on its significance, is particularly important for the survival and continuity of the service that this administration provides, and in particular in the context of succession management.

We discovered that this administration lacks a knowledge management policy and a well-defined process for achieving this objective. In addition, the vast majority of respondents honestly believe that knowledge management and transfer is one of the duties and responsibilities of the human resources department, and that it falls solely under its purview.

On the other hand, another topic on which there was widespread consensus was the demand for the establishment of an information system. This system's primary function would be to serve as a repository for all information and data, including but not limited to manuals, courses, emails, reports, and minutes of meetings, and it would be designed to make it easier for anyone who is interested in learning more and taking over in the near or distant future.

And as a final point, we will mention that when implementing a KM strategy, there are two aspects that must be taken into account and incorporated into the same change management process. These aspects are the technical and the human ones.

The first is that modern tools offer limitless opportunities to improve performance and collective learning, which are required to adapt to and anticipate changes in the environment, the expectations of increasingly demanding customers and employees, if they are part of a global approach and a long-term strategy that promotes knowledge sharing. The second is that the human dimension is concerned with the motivation, emotions, and cultural diversity of employees. Taking into account employees entails recognizing and valuing them. Individuals must be motivated to accept spreading and sharing their knowledge and expertise. Management and human resource management are responsible for fostering these conditions and facilitating employee participation in the learning process.

References

- (1) AFNOR, 2011. Valoriser la connaissance dans l'entreprise, Afnor Edition.
- (2) Bibi, G., Padhi, M., & Dash, S. S. (2020). Theoretical necessity for rethinking knowledge in knowledge management literature. *Knowledge Management Research & Practice*, 19(3), 396–407. <https://doi.org/10.1080/14778238.2020.1774433>.
- (3) DAVENPORT, E. (2002). Mundane knowledge management and microlevel organizational learning: an ethological approach. *Journal of the American Society for Information Science and Technology*, p.1038–1046.
- (4) DAVENPORT, T. PRUSAK, L. 1998. Working knowledge: How organizations manage what they know. Boston, MA: Harvard Business School Press.
- (5) Décret no2.04.811 du 23 Décembre 2004 publié au BO no5267 en date du 27 décembre 2004.
- (6) DIENG-KUNTZ, R. CORBY, O. GANDON, F. GIBOIN, A. GOLEBIEWSKA, J. MATTA, N. RIBIÈRE, M. 2005. Knowledge management : Méthodes et outils pour la gestion des connaissances, 2ème édition, Paris, Dunod.
- (7) DUIZABO, S. GUILLAUME, N. 1996. Les modes de transfert de connaissances dans les entreprises – Les cahiers du GRES, Université de Paris Dauphine, N°96-02.
- (8) ECS (european committee for standardization) Workshop Agreement. 2003. European Guide of Good Knowledge Management Practice, Chapter 2.
- (9) FERRARY, M. PESQUEUX, Y. 2011. Management de la connaissance, Paris.
- (10) HATCHUEL, A. WEIL, B. 1995. Experts in Organization, a Knowledge-Based Perspective on Organizational Change. *Studies in Organization: Innovation, Technology and Organizations*. Walter de Gruyter, New-York.

- (11) KOOHANG, A. PALISZKIEWICZ, J. GOŁUCHOWSKI, J. 2017. The impact of leadership on trust, knowledge management, and organizational performance: A research model. *Ind Manage Data Syst* 117: 521-537.
- (12) MATTA, N. CORBY, O. RIBIÈRE, M. 1999. Méthodes de capitalisation de mémoire de projet. RR3819, INRIA, p 29.
- (13) MAYERE, A. 1995. La gestion des savoirs face au nouveau modèle industriel, *Revue Française de Gestion*.
- (14) Ministry of Finance Human Resources Report, Budget Bill 2020, p: 9.
- (15) NONAKA, I. 1998. The knowledge creating company. IN Harvard, Business, Review on Knowledge Management.
- (16) ODOR, H. 2018. Knowledge Management. *Journal of Business & Financial Affairs* 7th edition. P. 335.
- (17) OMOTAYO, F. 2015. Knowledge Management as an important tool in organizational management: a review of Literature. *Library Philosophy and Practice* (e-journal), pp: 1-23.
- (18) OUZZANI CHAHDI, H. 1990. L'expérience de la réforme administrative au Maroc , *Revue marocaine d'administration locale et de développement* , n°23 p.184
- (19) OURZIK, A. 2005. Gouvernance et modernisation de l'administration, p. 115.
- (20) PRAX, J-Y. 2003. *Le Manuel du Knowledge Management : une approche de deuxième génération*. Paris : DUNOD.
- (21) REHMAN, W. ASGHAR, N. AHMAD, K. 2015. Impact of KM practices on firm's performance: A mediating role of business process capabilities and organizational learning. *Pak Econ Soc Rev* 53: 47-80.
- (22) SUPPIAH, V. and SANDHU, M.S. 2011. "Organizational culture's influence on tacit knowledge-sharing behaviour", *Journal of Knowledge Management*, Vol. 15 No. 3, pp. 462-477.
- (23) Tariq, M. Frooq, M. (2019). Knowledge Sharing Behaviour and Human Resource Management. *Information and Knowledge Management*. Published. <https://doi.org/10.7176/ikm/9-10-03>.
- (24) VAN DER SPEK, R. DE HOOGE, R. 1998. Knowledge Management Network, University of Amsterdam, The Netherlands (working paper).
- (25) WIIG, K. 1997. Knowledge management methods. *Practical approaches to managing knowledge* (p. 379-393).

Appendix

Table 4: Cross tabulation and khi deux test gender

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
You are :	Women.	Number	19	9	2	30	, 288
		%	37.3%	50.0%	20.0%	38.0%	
	Man	Number	32	9	8	49	
		%	62.7%	50.0%	80.0%	62.0%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Source : SPSS

Table 5: Cross tabulation and khi deux test age

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value	
			Important	Not important	Very important			
Your age is between:	20 - 25	Number	3	0	0	3	, 053	
		%	5.9%	0.0%	0.0%	3.8%		
	25- 30	Number	4	2	1	7		
		%	7.8%	11.1%	10.0%	8.9%		
	30- 40	Number	27	12	3	42		
		%	52.9%	66.7%	30.0%	53.2%		
	40- 50	Number	11	1	2	14		
		%	21.6%	5.6%	20.0%	17.7%		
	50-60	Number	6	1	4	11		
		%	11.8%	5.6%	40.0%	13.9%		
	Over 60	Number	0	2	0	2		
		%	0.0%	11.1%	0.0%	2.5%		
	Total		Number	51	18	10		79
			%	100.0%	100.0%	100.0%		100.0%

Source : SPSS

Table 6: Cross tabulation and khi deux test education level

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value	
			Important	Not important	Very important			
Your level of study:	Other	Number	6	1	2	9	, 865	
		%	11.8%	5.6%	20.0%	11.4%		
	Bac + 3	Number	5	3	1	9		
		%	9.8%	16.7%	10.0%	11.4%		
	Bac + 2 (BTS; DUT; DEUG ...)	Number	2	0	0	2		
		%	3.9%	0.0%	0.0%	2.5%		
	Bac + 4	Number	4	0	1	5		
		%	7.8%	0.0%	10.0%	6.3%		
	Bac + 5	Number	33	14	6	53		
		%	64.7%	77.8%	60.0%	67.1%		
	Baccalaureate	Number	1	0	0	1		
		%	2.0%	0.0%	0.0%	1.3%		
	Total		Number	51	18	10		79
			%	100.0%	100.0%	100.0%		100.0%

Source : SPSS

Table 7: Cross tabulation and khi deux test last obtained diploma

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value	
			Important	Not important	Very important			
Last diploma obtained :	Other	Number	1	0	2	3	, 060	
		%	2.0%	0.0%	20.0%	3.8%		
	Doctorate	Number	2	0	2	4		
		%	3.9%	0.0%	20.0%	5.1%		
	Engineer	Number	3	3	1	7		
		%	5.9%	16.7%	10.0%	8.9%		
	BA/BS	Number	10	3	1	14		
		%	19.6%	16.7%	10.0%	17.7%		
	Master	Number	33	12	4	49		
		%	64.7%	66.7%	40.0%	62.0%		
	Specialized technician	Number	2	0	0	2		
		%	3.9%	0.0%	0.0%	2.5%		
	Total		Number	51	18	10		79
			%	100.0%	100.0%	100.0%		100.0%

Source : SPSS

Table 8 : Cross tabulation and khi deux test seniority

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
Your seniority is:	0-5 years	Number	5	1	2	8	,066
		%	9.8%	5.6%	20.0%	10.1%	
	10-15 years	Number	10	7	3	20	
		%	19.6%	38.9%	30.0%	25.3%	
	15-20 years	Number	1	1	0	2	
		%	2.0%	5.6%	0.0%	2.5%	
	20 - 35	Number	13	1	5	19	
		%	25.5%	5.6%	50.0%	24.1%	
	35 and over.	Number	0	1	0	1	
		%	0.0%	5.6%	0.0%	1.3%	
	5-10 years	Number	22	7	0	29	
		%	43.1%	38.9%	0.0%	36.7%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Source : SPSS

Table 9 : Cross tabulation and khi deux test position

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
You occupy:	A position of responsibility	Number	23	8	5	36	,955
		%	45.1%	44.4%	50.0%	45.6%	
	A subordinate position.	Number	28	10	5	43	
		%	54.9%	55.6%	50.0%	54.4%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Source : SPSS

Table 10: Cross tabulation and khi deux test KM policy

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
Does Your administration have a policy for planning knowledge management?	No	Number	7	10	0	17	,000
		%	13.7%	55.6%	0.0%	21.5%	
	Yes	Number	44	8	10	62	
		%	86.3%	44.4%	100.0%	78.5%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Table 21: Cross tabulation and khi deux test KM promotion

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
Do you have practices or tools in place to promote knowledge transfer and knowledge sharing within your department?	No	Number	10	8	2	20	, 105
		%	19.6%	44.4%	20.0%	25.3%	
	Yes	Number	41	10	8	59	
		%	80.4%	55.6%	80.0%	74.7%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Source : SPSS

Table 32: Cross tabulation and khi deux test responsibility

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value
			Important	Not important	Very important		
Is there a department or person responsible for knowledge management within the administration?	No	Number	33	16	6	55	, 124
		%	64.7%	88.9%	60.0%	69.6%	
	Yes	Number	18	2	4	24	
		%	35.3%	11.1%	40.0%	30.4%	
Total		Number	51	18	10	79	
		%	100.0%	100.0%	100.0%	100.0%	

Source : SPSS

Table 13: Cross tabulation and khi deux test knowledge transfer

			How to describe the degree of importance that the DGI places on the sharing of its knowledge?			Total	P value	
			Important	Not important	Very important			
What is your assessment of knowledge transfer in your work? Would you say knowledge transfer is working well within your department? (Scale of 10)	1.0	Number	1	4	0	5	, 004	
		%	2.0%	22.2%	0.0%	6.3%		
	2.0	Number	1	1	0	2		
		%	2.0%	5.6%	0.0%	2.5%		
	3.0	Number	1	1	0	2		
		%	2.0%	5.6%	0.0%	2.5%		
	4.0	Number	4	2	2	8		
		%	7.8%	11.1%	20.0%	10.1%		
	5.0	Number	10	4	0	14		
		%	19.6%	22.2%	0.0%	17.7%		
	6.0	Number	17	4	2	23		
		%	33.3%	22.2%	20.0%	29.1%		
	7.0	Number	11	2	0	13		
		%	21.6%	11.1%	0.0%	16.5%		
	8.0	Number	5	0	5	10		
		%	9.8%	0.0%	50.0%	12.7%		
	9.0	Number	1	0	1	2		
		%	2.0%	0.0%	10.0%	2.5%		
	Total		Number	51	18	10		79
			%	100.0%	100.0%	100.0%		100.0%

Source : SPSS