The Effects of Organizational Absorptive Capacity, Professional Experience and Training over the Use of Sales Force Automation

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Abstract: This research brings out the impact of training and professional experience on organizational absorptive capacity and the use of Sales Force Automation (SFA). A quantitative study was conducted on a sample of 186 medical sales representatives who work in the pharmaceutical industry. The method of structural equations based on the PLS approach and linear regression have been deployed for data analysis. The results reveal a positive impact of the training over organizational absorptive capacity (potential absorptive capacity and realized absorptive capacity) and the use of SFA as well as a positive impact of professional experience on organizational absorptive capacity. Furthermore, the organizational absorptive capacity has a positive influence on the use of the SFA. This study contributes to the literature on SFA use by examining the role of training, professional experience, realized and potential absorptive capacities in the SFA use. This research is appropriate for managers of pharmaceutical companies who constantly seek to improve the use of SFA technologies. Thus, the staff of these companies is more likely to perform their duties in a way that promotes their realized and potential absorptive capacities and the best use of SFA through continuous training for inexperienced and experienced salespeople.

Keywords: SFA use, organizational absorptive capacity, training, professional experience, potential absorptive capacity, realized absorptive capacity, North Africa

1. Introduction

In an increasingly competitive market, the introduction of information and communication technologies (ICT) into business enterprises have made Sales Force Automation (SFA) systems fatal business devices, in which organizations regularly invest despite the high cost of implementation (Román and Rodríguez, 2015 ; Sanakulov, Kalliomaa and Karjaluoto, 2018).

Sales Force Automation is part of Customer Relationship Management (CRM) systems and consists of supplying sellers with management tools to assist them in their prospecting procedures. It also helps companies to collect, manage, store and share knowledge to develop a lasting relationship with customers (Boujena and Merunka, 2008; Upadhyay et al., 2018).

Companies acquire immense human and financial resources to equip their sales forces with information technology (Román and Rodríguez, 2015). Yet, Sleep et al. (2020) and Sanakulov, Kalliomaa and Karjaluoto (2018) argue that increased use of SFA systems does not continually lead to increased productivity and work efficiency. In fact, both Gartner and Standish Group claim that 75% of SFA projects fail (Bernoux and Gagnon, 2008). According to these Groups, there are several difficulties encountered when implementing a Sales Force Automation solution: resistance to change, the quality of use of the SFA and the difficulty in benefits provided by such a solution. As a result, the deployment of the SFA is a difficult and complex task that must be taken seriously. It is, then, necessary to understand why some organizations manage to use SFA tools and why others fail (Sanakulov, Kalliomaa and Karjaluoto, 2018).

The current hypothesis reveals that the failures of the SFA systems that endure arise from the fact that organizational changes are considered with a deterministic approach to technology. This is a recurring debate that has drawn the attention of researchers by opposing two types of determinism: technological determinism and organizational determinism. Technological determinism considers that technology has an impact on organizations insofar as it contributes to improving the efficiency of organizations and organizational mechanisms. Indeed, if the technology is properly implemented, it will impose itself intrinsically on the organization and on the stakeholders. Organizational determinism, on the other hand, stipulates that the diffusion of technologies depends on the characteristics of the organizations in which they are used and that the

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characteristics of the organization appear as a constraint to the introduced technologies (Leonardi and Jackson, 2004).

The majority of research on SFA systems is based on the deterministic approach (technological and organizational) and focuses on three key themes: SFA adoption by the sales forces (Larpsiri and Speece, 2004; Sinisalo, Karjaluoto and Saraniemi, 2015; Sanakulov, Kalliomaa and Karjaluoto, 2018), SFA impact on the organization (Sinisalo, Karjaluoto and Saraniemi, 2015; Román and Rodríguez, 2015; Wang et al., 2017) and the determinants of adoption and use of SFA (Sinisalo, Karjaluoto and Saraniemi, 2015; Cascio, Mariadoss and Mouri, 2010 ; Upadhyay et al., 2018). These works have been based on the deterministic approach that focuses on explaining individual reactions and behaviors with the implementation of a new technology as well as its impact on the organization. On the one hand, this approach has focused on enumerating the determinants of the acceptance and adoption of the SFA among the actors of the organization, more precisely the sellers and this is according to a linear diagram which is mainly inspired by acceptance models (TAM1, TAM2) (Davis, 1989). On the other hand, it has focused on the study of the positive (productivity, creativity, efficiency) (Cascio, Mariadoss and Mouri, 2010, Wang et al., 2017) or negative implications of the SFA on employers and employees (Sinisalo, Karjaluoto and Saraniemi, 2015).

However, despite the difference in their results, these research works, which have been based on the deterministic approach, had one thing in common: the analytical approach adopted was of a causal type; that means it attempts to establish a link between the antecedents or the consequences of adopting the SFA. The technological determinism adopted by the majority of research works on SFA systems (e.g. Sinisalo, Karjaluoto and Saraniemi, 2015; Román and Rodríguez, 2015 ; Wang et al., 2017) has been well criticized for not calling into question the relevance of the factors of success.

Thereby, the understanding of the logic of using the SFA thus requires to break with the technological deterministic approach and to adopt organizational determinism which considers that human actors and the organizational context are taken into account (Barley 1990; Orlikowski, 1992) and the relational approach by integrating the Knowledge Management (KM) more particularly organizational absorptive capacity which involves the incorporation, retention and distribution of knowledge (Cohen and Levinthal, 1990).

As an alternative to this deterministic approach, the relational approach based on knowledge management aims to focus on the link rather than people and makes it possible to understand how employees interpret and share knowledge. It assumes that people act in relation to each other and that individual autonomy can only be relative. It emphasizes interaction, communication, relationships and knowledge sharing among staff members to succeed in using technologies. (Stadler, Fullagar and Reid, 2014)

In this research, we are simultaneously in the organizational determinism approach and in the relational approach based on knowledge management. In fact, organizations invest considerable sums to acquire a Sales Force Automation system, but they do not properly use their systems to gain customer knowledge. Indeed, Khodakarami and Lahouti (2013) stated that SFAs are generally underexploited, especially with regard to creating customer knowledge. External knowledge has become a primary source of competitive advantage. To ensure their sustainability, organizations must « *recognize the value of new, external information, assimilate it, and apply it to commercial ends*" (Cohen et Levinthal, 1990, p.128), namely the organizational absorption capacity. According to Chaudhary (2019, p.3) *"An organization's absorptive capacity is not resident in any single individual, but depends on the link across a mosaic of individual capabilities"*, it requires organizational factors such as training and professional experience to help make individual knowledge more understandable.

The choice of this topic is primarily justified, first, despite the importance of the use of technology in sales jobs; empirical research on the use of SFA is quite limited (Sanakulov, Kalliomaa and Karjaluoto, 2018). The SFA use and organizational absorptive capacity are two considerable areas, but their links remain insufficiently dealt with at the academic level. Organizational absorptive capacity has largely fascinated knowledge management researchers (Wu et al., 2019), but not sales force automation research. Second, the majority of early research uses absorptive capacity as an unidimensional concept (e.g. Cohen and Levinthal, 1990), while recent research examines its sub-dimensions, potential and realized absorptive capacities (Ahmed et al., 2019 ; Chaudhary, 2019 ; Muraliraj et al., 2019). However, as far as it is known, there is no research that examined the relationship between organizational absorptive capacity and SFA use through potential absorptive capacity and realized absorptive capacity. Third, the results are different in the effects of training on information and communication

technologies (ICT) use. In fact, in the area of SFA use, training is accepted as an important driver of successful SFA use (e.g. Singh, Manrai and Manrai, 2015; Jantan and Honeycutt, 2013 ; Kodwani and Prashar, 2019). Other researchers such as Salopek (2009) have observed that many salespeople find training ineffective or less useful for a better use of technology. Fourth, professional experience has received little attention in ICT research specifically SFA systems. In doing so, we fill an important gap in the literature by examining the antecedents of SFA use in pharmaceutical firms which are non-R&D-intensive service firms.

Tunisia is a particularly interesting example of developing countries in North Africa. The use of SFA in developing countries is comparatively lower than in most developed countries (Román and Rodríguez, 2015). This research is particularly necessary in a context of African developing countries such as Tunisia, where companies in the pharmaceutical sector adopt less ICT than companies from developed Western countries.

This article focuses on the use of SFA to the detriment of the largely dominant concepts of adoption and acceptance in previous research works (Cascio et al., 2010, Wang et al., 2017), and its relation with the organizational absorptive capacity and its determinants such as training and professional experience. Thus, this research tries to answer this question: To what extent do training, professional experience and organizational absorptive capacity influence the use of the SFA? This study examines the role of training and professional experience on potential and realized absorptive capacity and on SFA use. In addition, this study also investigates the direct impact of each dimension of organizational absorptive capacity on SFA use.

Section 2 of this article presents a cross-referencing of previous research on the use of the SFA in the light of the organizational deterministic approach and relational approach based on knowledge management. Then, it explains the hypotheses and the conceptual model. Section 3 develops the research methodology. Section 4 presents the analysis of the data while the discussion appears in sections 5. Section 6 presents the conclusion by highlighting the theoretical and managerial contributions, the limitations of the study and possible directions for future research.

2. Theoretical background

2.1 The use of the SFA in the light of the organizational deterministic approach

The concept of Sales Force Automation has been conceptualized by Lambin and De Moerloose (2012) as an effective solution to optimize salespersons' activities with their customers. It is often adopted by businesses to improve customer service, better guide salespeople, improve sales force productivity, and ensure the best sales management decisions.

Baker and Delpechitre (2013, p.278) presented SFA as “computer software and relational database technologies created to support sales activities in the field”. Sinisalo, Karjaluoto and Saraniemi (2015) state that SFA is therefore part of a company's CRM (Customer Relationship Management) and is generally the first function (the others being marketing and customer service) that is automated using CRM technology. Jelinek (2013, p.637) has defined it as “the set of technological tools making it possible to better equip a sales and marketing organization to practice CRM”. Sleep et al. (2020) have defined SFA as a technological tool that helps organizations manage the sales function by collecting and storing customer data such as demographic data, purchase history, needs and wishes, etc.

Although SFA has been defined in various ways, the common thread of all these definitions is that the application of SFA technology helps to support the sales function thus enabling better execution of sales tasks in an organization (Upadhyay et al., 2018).

Research that focuses on the use of the SFA in the light of the organizational deterministic approach, states that the SFA use depends on the characteristics of the organizations. In this context, Serdagolu (2009) shows that there are relations between the use of the SFA and its antecedents. This is inspired by the value chain and the model of acceptance of the technology (Davis, 1989). Serdaroglu (2009) identified determinants that affect the use of SFA: perceived usefulness, perceived ease of use, supervisor support, enabling conditions, computer system self-efficiency, use of the SFA team and control of SFA technology from supervisors. He presents the use of the SFA as a two-dimensional concept: the SFA is a customer relationship management tool and an internal coordination tool for teams within the organization. The first dimension includes processes such as managing business contacts as well as understanding customer needs, organizing activities such as scheduling sales' calls,

preparation for the a visit, presentation of sales pitch while overcoming objections and continuing to serve the customer after the sale (Widmier et al, 2005). The second dimension allows internal coordination between the members of the company in relation to the management of information concerning the sales activities of the team and the training to be provided. In this way, the sales persons exchange information daily with each other while communicating the results of their activities to their management.

Central elements of SFA acceptance can be grouped into three categories, namely: organizational factors (training, managers' commitment), individual factors (personality traits, age, attitude and professional experience) and social factors (the role of social norms, peer usage). In this sense, Upadhyay et al. (2018) enumerated the direct and indirect influencers of use of sales technology, they claimed that attitude and peer usage have a direct effect on the use of sales technology. Pullig, Maxham and Hair (2002) showed that managers' commitment to the use of SFA tools is the key to a successful organizational change and that training helps sales persons to better understand the operation and use of SFA. Keillor, Bashaw and Pettijohn (1997) have demonstrated that age and professional experience can influence the process of accepting and using SFA tools.

2.2 The use of the SFA in the light of the relational approach based on knowledge management

Research that focuses on the use of the SFA in the light of the relational approach based on knowledge management states that there is a close relationship between CRM and knowledge management, this relationship is materialized through the transfer of knowledge, held by sellers, to other stakeholders in the company and to customers (Boujena and Merunka, 2008). Thus, the transverse system of the CRM type is dedicated to sellers to facilitate the accumulation, processing and sharing of customer knowledge, both tacit and explicit.

Migdadi (2020) states that knowledge management enables successful CRM of which SFA is a part since CRM processes are based on large amounts of knowledge to identify and track customers and then satisfy and retain them. Thus, companies would have to develop CKM (Customer Knowledge Management) capacities to properly manage the knowledge coming from customers. Customer knowledge will be a valuable and scarce asset for these companies to adapt to rapidly changing customer needs. In the same way, Tseng (2016, p.204) asserts that *"knowledge management the objective of which is the acquisition, dissemination and use of knowledge will be the cornerstone for the successful use of a CRM, since it allows the organization to have a global view of customers".*

According to Chua and Banerjee (2013, p.614), the continuous evolution of customer needs and wishes has led to a paradigm shift in knowledge management towards a dynamic customer-centered approach. He claimed that *"CKM (customer Knowledge Management) enables to positively affect CRM practices by facilitating the acquisition and continuous updating of knowledge on customer needs, motivations and behavior, as well as the application of this knowledge to improve CRM practices".* Tseng (2016, p.205) asserts that *"companies rely on good knowledge management to improve CRM practices through a better understanding of customer needs by providing personalized information and increasing interaction between companies and their customers".* Hasanian, Chong and Gan, (2015) also indicated that customer relations cannot take place without knowledge management since CRM processes are based on large amounts of knowledge. Knowledge management facilitates the sharing, creation and storage of knowledge thus it promotes the functioning of CRM.

There is very little research, as far as it is known, that addresses the relationship between SFA and KM but since SFA is part of CRM, we assume that there is a relationship between the SFA and KM. The capacities in terms of knowledge management are important pre-requisites in the implementation of an SFA. To be effective and productive, the SFA must have both explicit and tacit knowledge at the same time in order to be properly managed by the sellers. As far as it is known, only the research by Hunter and Perreault Jr. (2007) have examined the notion of using the SFA by relying on the theory of organizational learning and knowledge management. They defined the concept of using the SFA in three dimensions: access to information, its analysis and its communication. Access to information provides details on the possibility available to the sales force to obtain information related to the accomplishment of its sales work and the complaints related to it. Information analysis is translated into the ability of the sales force to synthesize information. As for the communication of information, it reflects the ability of sellers to share information between contributors.

2.3 Research Framework and Hypotheses

2.3.1 Effects of Training and Professional Experience on Organizational Absorptive Capacity and the Use of SFA

Muraliraj et al. (2019) asserted that companies must foster organizational absorptive capacities to cope with the turbulence of the business world and to survive in dynamic environments. Cohen and Levinthal (1990, p.130) were the first authors to develop the notion of absorptive capacity. They defined it as *"the aptitude of a firm to recognize the value of new information, to assimilate and to apply it for commercial purposes".* Three dimensions can be retained: the valorization of external knowledge, its assimilation and its application for commercial purposes. Zahra and George (2002) used this definition to describe organizational absorptive capacity as a dynamic capacity and multidimensional construct, and they defined it as a *"set of organizational routines through which firms acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capability"* (Zahra and George, 2002, p. 186). They propose four dimensions that are grouped into two categories, namely the potential absorptive capacity (PACAP: the ability of the company not only to acquire external knowledge but also to assimilate it) and the realized absorptive capacity (RACAP: the organization's capacity to transform and exploit knowledge). According to Albort-Morant et al. (2018), PACAP and RACAP are distinct capabilities that need to be managed separately because they allow differential outcomes to gain competitive advantage.

Ahmed et al. (2019) state that the majority of research examining organizational absorptive capacity has taken it as an unidimensional concept, regardless of the differences between realized and potential absorptive capacity. Questioning the determinants of absorptive capacity without differentiating between its types can be risky and even misleading. In addition, research on the relationship between three concepts training, organizational absorptive capacity and SFA use is scarce.

Murovec and Prodan (2009) consider that training is a determining variable that affects the use of the SFA. Sellers' training is subject to ongoing development and learning programs that provide sellers with the skills and knowledge they need. Chen and Huang (2009) show that human resource management practices (such as training) are positively related to knowledge managment.

Kodwani and Prashar (2019) state that the existing literature on training states that it remains a major concern for managers. Singh, Manrai and Manrai (2015) advocated the need for empirical work which explores the relationship between training and SFA use given the importance of the effectiveness of sales training. Thus, training is also an important factor in the development of sales work while using information technologies according to Cron et al. (2005). Indeed, sellers attend courses to improve their skills, and this is done through online training sessions. Cron et al. (2005) show that training contributes to the improvement of the use of SFA.

Kodwani and Prashar (2019) state that effective sales training improves knowledge and skill levels of sales managers. As a result, organizations invest immensely in terms of time, resources and effort to train their sales executives for better SFA use.
Thus, the hypotheses H1, H2, H2.1 and H2.2 are presented as follows:
H1. Training has a positive influence on organizational absorptive capacity.
H2. The training positively influences the use of SFA.
H2.1. The training positively influences the use of the SFA as a customer relationship management tool.
H2.2. The training positively influences the use of the SFA as a tool for internal coordination among stakeholders.

Few researches deal with professional experience and even with the relationship between professional experience and SFA use. As far as it is known, two little bit old studies have dealt with this relationship. Keillor, Bashaw and Pettijohn (1997) examined the relationship between sellers' work experience and their perception of technology. They found that less experienced salespeople are more resistant to the use of technology. Deng, Doll and Cao (2008) state that internal factors can influence knowledge management, which are the category of study, the type of position held in the company, as well as the professional experience within the company. Thus the hypotheses H3, H4, H4.1 and H4.2 are presented:
H3. Professional experience positively influences organizational absorptive capacity.
H4. Professional experience positively influences the use of SFA.

H4.1. Professional experience positively influences the use of the SFA as a customer relationship management tool.
H4.2. Professional experience positively influences the use of the SFA as a tool for internal coordination among stakeholders.

2.3.2 Effects of Absorptive Capacity on the Use of SFA

Cohen and Levinthal (1990) suggest that a firm with a large absorptive capacity makes the use of technology more attractive through the organization's contributors. Zahra and George (2002) made a reconceptualization of the organizational absorptive capacity different from that of Cohen and Levinthal (1990) by identifying two dimensions, namely the potential absorption capacity and the realized absorption capacity.

The Potential absorptive capacity is related to exploratory learning or the acquisition of external knowledge. It is the ability to assess the interest of external knowledge (Chaudhary, 2019); it is made up of knowledge acquisition and assimilation capacities. According to Ahmed et al. (2019), knowledge acquisition is the ability of companies to recognize and obtain important information from external sources for the proper functioning of the organization. Knowledge assimilation is the company's ability to interpret and process the knowledge obtained. Chaudhary and Batra (2018) claim that once organizations acquire potential absorptive capacity, this latter positively affects the use of ICTs.

The Realized absorptive capacity is defined as the organizational capacity to transform and exploit knowledge. Knowledge transformation is defined as "*firm's ability to develop and refine routines that facilitate combining existing knowledge"* (Zahra and George, 2002, p.187) with new external knowledge. According to Chaudhary (2019), transformation supports companies to combine external knowledge with existing knowledge in order to properly use technologies. Finally, the exploitation of knowledge is based on the application and implementation of acquired, assimilated and transformed knowledge (Ahmed et al., 2019), thus linking them to positive uses of technologies (Xie, Zou and Qi, 2018).

Hence, the following hypotheses: H5, H5.1 and H5.2.
H5. Organizational absorptive capacity positively influences the use of SFA.
H5.1 Organizational absorptive capacity positively influences the use of the SFA as a customer relationship management tool.
H5.2 Organizational absorptive capacity positively influences the use of the SFA as an internal coordination tool among stakeholders.

Figure 1 shows the assumptions and presents the research model.

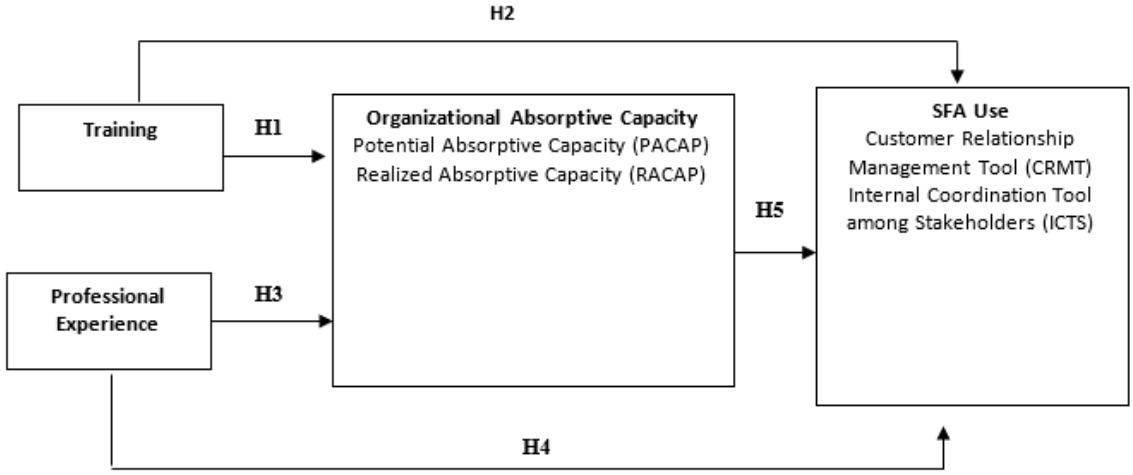

Figure 1: Research model

3. Methodology

3.1 Sample and data collection

The data collection has lasted six months during which the authors used a questionnaire handed directly to respondents or sent electronically by email. The authors chose the sample based on the "snowball" method to select medical sales representatives working in companies operating in the pharmaceutical sector and located in Tunisia. Tunisia is a country in North Africa located on the Mediterranean coast.

The choice of the pharmaceutical sector is justified by the fact that SFA system facilitates the working tasks of the medical sales representatives during their visits to pharmacies for example. This is why it is essential for the medical sales representatives to have a simple and intuitive tool that facilitates commercial activity.

The sample is made up of 186 medical sales representatives, 84 men and 102 women, aged between 36 and 45 years old. The choice of medical sales representatives is justified by the paramount role of the medical visitor in the pharmaceutical industry, which has a primary responsibility at the level information.

We chose the snowball sampling method, because we evaluate the target population, namely medical representatives, who are a bit special and geographically dispersed over Tunisia. In addition, we believe that the number of medical representatives in Tunisia is low. Around 4000 medical representatives are available throughout the national territory in January 2019 (http://recruter.tn/delegue-medical-un-metier-difficile-mais-valorisant. 2020.10.20)

3.2 Measurement instruments

All variables were measured using a Likert scale ranging from 1 (strongly disagree) to 1 (strongly agree). Table 1 shows the measurement scales.

3.3 Validation of measurement instruments

The exploratory factor analysis using the SPSS 18.0 software has allowed the refinement of the measurement scales. An exploratory factor analysis, the type of which is principal component analysis and Cronbach's alpha reliability analysis are deployed to test factor saturation. Table 1 details the principal component analysis of each dimension and presents the results of these analyses and proves that the Kaiser-Meyer-Olkin (KMO) measurements indicate the relevance of the factor solution for all the dimensions obtained. In addition, the Barlett specificity test is significant (P = 0.000) for all dimensions, which confirms the existence of a non-zero inter-item matrix. In addition, the quality of representation of the indicators is good since they have values higher than or equal to 0.5. Finally, the Alpha Index values are considered satisfactory and acceptable since they are above the minimum threshold of 0.6. These results prove that the reliability of the dimensions is checked.

Table 1 shows the results of the exploratory factor analysis.

Table 1: Results of exploratory studies

Items	Factors	Eigenvalue
The Training (Chen and Huang, 2009)(KMO=0.648; =0.768)		
TR_1: Availability of formal training activities (i.e. after a degree/ a diploma).	0.602	
TR_2: Availability of training policies and global training programs (a training program covering several aspects, e.g. pharmaceuticals, languages, negotiation techniques, etc.).	0.632	3.380
TR_3: Availability of training for newly hired personnel.	0.703	

Items	Factors	Eigenvalue
TR_4: Availability of training for developing problem solving skills.	0.637	
The Organizational Absorptive Capacity (Flatten et al, 2011)		
Potential Absorptive Capacity (PACAP) (KMO=0.648; =0.768)		
Acquisition		
ACQU_1: To look for relevant information about our industry is an everyday matter in our business.	0.872	
ACQU_2: Our management system encourages employees to use sources of information related to our sector.	0.861	
ACQU_3: Our management system expects employees to process information that are not part of our sector (outside the sector).	0.794	2.234
Assimilation		
ASS_1: In our company, ideas and concepts are communicated in between departments.	0.658	
ASS_2: Our management system emphasizes interdepartmental support for problem solving.	0.762	
ASS_3: In our company, there is a fast information flow (that is, if aservice obtains important information, it quickly communicates it to all the other services or departments).	0.871	3.345
ASS_4:Our management system periodically requires interdepartmental meetings to exchange new developments, issues and achievements	0.734	
Realized Absorptive Capacity (RACAP) (KMO=0.516 ; =0.842)		
Transformation		
TRAN_1: Our employees are able to structure and use the collected knowledge.	0.855	
TRAN_2: Our employees are used to assimilating new acquaintances	0.777	

Items	Factors	Eigenvalue
as well as preparing them for other purposes and making them available.		
TRAN_3: Our employees succeed in linking existing knowledge with new corporate inspirations.	0.803	6.634
TRAN_4: Our employees are able to apply the newly acquired knowledge in their practical work.	0.600	
Exploitation		
EXPL_1: Our management system supports the development of pharmaceutical laboratory projects.	0.807	
EXPL_2: Our laboratory takes technology into consideration and adapts it to new knowledge.	0.866	3.456
EXPL_3: Our laboratory is able to work more efficiently by adopting new technologies.	0.699	
***The use of SFA* (Serdagolu, 2009)**		
A customer relationship management tool (KMO=0.637, =0.748)		
CRMT_1: To serve customers in a more creative way (e.g. the use of computers by salespeople to improve problem-solving skills).	0.602	
CRMT_2: To improve the quality of service offered to prescribers.	0.609	6.456
CRMT_3: To identify the most profitable customers from the list of potential customers (prospects).	0.718	
CRMT_4: To plan sales activities (e.g. sales number, phone calls per day).	0.476	
An internal coordination tool among the stakeholders of the company		
(KMO=0.641, =0.820)		

Items	Factors	Eigenvalue
ICTS_1:To receive information from my director (manager, supervisor)	0.637	3.345
ICTS_2: To provide information to my director (manager, supervisor)	0.74	
ICTS_3: To report travel expenses to the head office.	- -	
ICTS_4: To learn about our existing products and new products	0.582	
ICTS_5: To coordinate activities with members of my team.	0.719	

4. Results and analysis

Two statistical methods, namely the simple linear regression method and the structural equation method, were used to test the research model. On the one hand, the linear regression method aims to test the relationships between training, organizational absorptive capacity and use of the SFA. On the other hand, it aims to test the relationships between professional experience, the organizational absorptive capacity and the use of the SFA. Regarding the structural equations method, the authors chose the Partial Least Square (PLS) method to study the relationship between the organizational absorptive capacity and SFA use. This method is considered pertinent to this research since the conceptual model includes a formative construct, namely the use of the SFA.

4.1 Effects of Training on the Organizational Absorptive Capacity and the Use of the SFA

To test the hypotheses H1, H2.1 and H2.2, the simple linear regression method was used by applying the two tests: the "ANOVA" test which makes it possible to test the existence or the absence of the model and the tests of Student "t" that allow the study of the significance of the coefficients of the regression equation. The results obtained are shown in Table 2. We opted for linear regression since the training variable is a qualitative variable. According to Carricano and Poujol (2008), ANOVA consists in testing the effect of a qualitative variable, it is training in our study on a quantitative variable.

Table 2: Summary of the validation of assumptions about the effects of training on the organizational absorptive capacity and the use of the SFA.

Hypotheses	Indicators	Validation
H1. Training has a positive influence on organizational absorptive capacity.	β=0.916 p=0.000 t=32.078	Supported
H2.1. The training positively influences the use of the SFA as a customer relationship management tool.	β=0.337 p=0.000 t=4.859	Supported
H2.2. The training positively influences the use of the SFA as a tool for internal coordination among stakeholders.	β=0.249 p=0.000 t=3.490	Supported

4.2 Effects of professional experience on the organizational absorptive capacity and the use of SFA

To test hypotheses H3, H4.1 and H4.2, ANOVA tests (analysis of variance) were used. The results have showed a significant difference of risk at 5% for the organizational absorptive capacity. Indeed, the organizational absorptive capacity depends on experience. In addition, the average results show that medical sales representatives with 4 to 10 years of experience contribute more to organizational absorptive capacity. This age range has the highest and least dispersed average with a standard deviation of 0.8 (see Appendix 1). Hypothesis H3 is then accepted.

The results of the ANOVA Test revealed a non-significant difference for the use of SFA as an internal coordination tool between stakeholders and the use of SFA as a CRM tool. Indeed, Fisher's test is not significant for the variable "use of SFA as an internal coordination tool among stakeholders", i.e. p = 0.341 superior than 5% and the variable "use of SFA as customer relationship management tool'', i.e. p = 0.143 superior than 5%. On the

other hand, the variance-based average comparison test is not significant because the probability level is higher than 0.5 for both dimensions, namely the use of the SFA as a management tool of the customer relationship and the use of the SFA as an internal coordination tool among stakeholders (see Appendix 1). The results of the hypothesis test prove that hypothesis H4 is invalid since H4.1 and H4.2 are disproved.

4.3 Effects of the organizational absorptive capacity on the use of SFA.

The approach of Hair et al. (2014) was adopted to test the predictive validity of the relationship between the organizational absorptive capacity and use of the SFA. This approach involves two steps, namely the specification and validation of the measurement model and the specification and validation of the structural model.

Therefore, the structural model has two measurement models, namely the organizational absorptive capacity measurement model (a third-order reflexive construct) and the SFA use measurement model (a second-order formative construct). In order to evaluate the measurement model, several validation criteria, derived from the PLS method, are used. These criteria differ according to the nature of the construct. In this sense, for a reflective construct, the composite reliability (CR), the convergent validity [average variance extracted AVE (Average Variance Extracted)] and the discriminant validity [cross-correlation (cross loading) (Chin, Henseler and Wang 2010) and criterion of Fornell-larker] are studied. Concerning the formative construct, the quality of the indexes at the level of the construct (the nomological validity and the content validity) and at the level of the indicator [significance of the weights: VIF (variance inflation factor)] are checked. The results from PLS prove that the validity of first-order reflective constructs, namely acquisition, assimilation, transformation and exploitation is acceptable. Given the internal coherence of the scales, the convergent validity and the discriminant validity are satisfactory.

The organizational absorptive capacity is a reflective first-order and reflexive second-order construct. The construct of potential absorptive capacity encompasses two dimensions, acquisition and assimilation. As for the realized absorptive capacity, this one includes two dimensions: transformation and exploitation. The authors have found that the construct of the potential and realized absorptive capacity has the following loadings: acquisition (0.34), assimilation (0.983), transformation (0.306), and exploitation (0.964). The authors have retained the two dimensions of acquisition and transformation, relying on Murovec and Prodan (2009). Despite the weakness of these two dimensions, the authors find that the composite reliability (CR) of the construct "the potential absorptive capacity" is 0.722, a value exceeding the theoretical threshold of 0.7 (Gefen, Straub and Boudreau, 2000). It is the same for the realized absorptive capacity where the composite reliability CR is 0.524. The convergent validity of the potential absorptive capacity has been considered sufficient. Indeed, the AVE is 0.505, just above the threshold of 0.500 (Fornell and Larcker, 1981). It is the same for the realized absorptive capacity where the AVE is 0.524.

Regarding the discriminant validity, the square validity of the AVEs of the latent constructs, namely the potential absorptive capacity and the realized absorptive capacity have values of 0.711 and 0.724 respectively. The value of Potential Absorptive Capacity (PACAP) is higher than its correlation with other non-diagonal variables. Similarly, the latent variable "realized absorptive capacity" proves that the square root of the AVE is higher than the value of the correlation with the other constructs (VAVE = 0.724) (see Appendix 1). Similarly, the results show that organizational absorptive capacity is a third-order reflective concept. Indeed, the realized absorptive capacity has a loading of 0.852 and the potential absorptive capacity has a loading of 0.819. In addition, the loadings have values above the threshold promoted by the literature, i.e. 0.5 (Chin, Henseler and Wang, 2010). The composite reliability (CR) of the construct organizational absorptive capacity is 0.630 so it is above the threshold of 0.6. Being 0.5011, the convergent validity of the organizational absorptive capacity is sufficient for the estimation of the AVE, since it is above 0.500 (Fornell and Larker, 1981). Concerning the discriminant validity, the results prove that the square roots of the AVEs of the latent construct "the organizational absorptive capacity" have a value of 0.600. This result indicates a value higher than the correlation of the organizational absorptive capacity (CAP) with the other variables that are off diagonal (see Appendix 1). Figure 2 explains the measurement model of third-order organizational absorptive capacity.

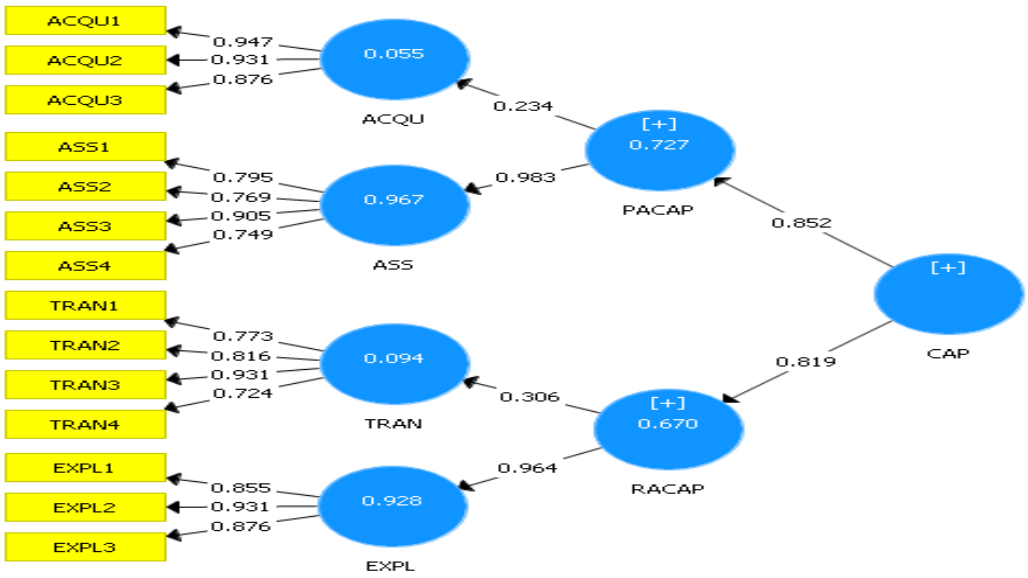

Figure 2: The measurement model of third-order organizational absorptive capacity

Concerning the concept of the use of the SFA, it is a second-order formative concept (Serdagolu, 2009). Table 3 presents the results of the first-order formative constructs, namely the use of the SFA as a customer relationship management tool and as a tool for internal coordination among stakeholders.

Table 3: Results of confirmatory analysis of first-order formative constructs: the use of SFA as a customer relationship management tool and as a tool for internal coordination among stakeholders.

latent variables	indicators	VIF	weight	t-test
Customer Relationship Management Tool (CRMT)	CRMT1	1.563	0.211	4.530
	CRMT2	1.569	0.251	4.190
	CRMT3	1.838	0.981	17.843
	CRMT4	1.516	0.300	3.427
Internal Coordination Tool among Stakeholders (ICTS)	ICTS1	1.719	0.867	10.918
	ICTS2	2.867	0.716	4.992
	ICTS4	1.682	0.499	3.700
	ICTS5	3.098	0.221	4.094

It should be noted that there is no problem of multicollinearity since the VIF values are higher than 1 and lower than 10. In addition, the results show that all weights have higher order values than 0.2 and therefore the contribution of each formative indicator in the latent variance is satisfactory. To estimate the formative construct, it is necessary to ensure the external validity of the index (Lacroux, 2011). The value of the relationship between ICTS and CRMT did not exceed 0.5, it is not very strong and it could not reach 0.6 as indicated by Roussel, Durrieu and Campoy (2002) and therefore it will be sufficient to adopt a first-order structure and the use of SFA construct as an internal coordination tool among stakeholders and as a customer relationship management tool. The study of the structural model and the hypotheses of the research were carried out by evaluating the values of the coefficient of determination R^2 (explained variance), the structural coefficients and the statistics t. Indeed, R2 and structural coefficients indicate the strengths and meanings of relations, while t-statistics and errors indicate the power of the influence of the variable. Following an estimation by the Boostrap procedure (Gefen, Straub, and Boudreau, 2000), the R2 values are higher than the minimum value recommended in the literature (0.19) (Chin, Henseler and Wang, 2010). In this sense, the R2 of the global model is 0.511, that is, the structural model has a satisfactory explanatory power of 51.1%

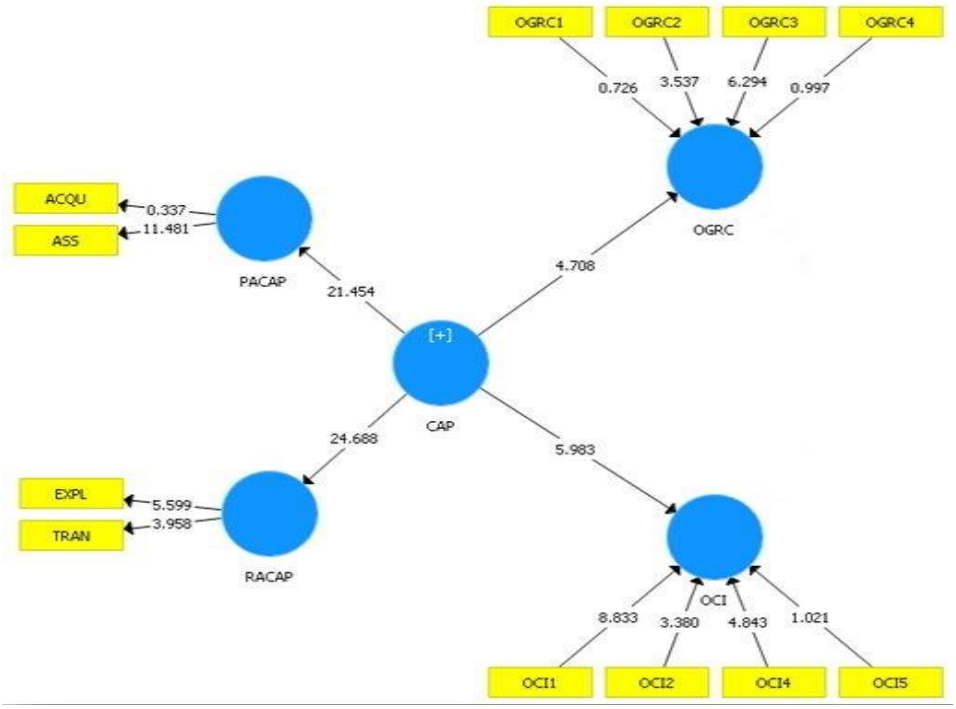

Figure 3: Structural model

Added to that, Stone-Geisser's Q2 fit index is analyzed (Geisser 1974, Stone 1974) to ensure the overall validity of the structural model. This indicator is used to assess the overall relevance of the model. The values of Q2 must be higher than or equal to zero. The Q2 indicator assesses the overall relevance of the model. Table 4 presents the values of the explained variance of model of dependent variables as well as the Stone-Geisser Q2 calculation.

Table 4: The results for the explained variance R^2 and Q^2 of Stone-Geisser

Dimensions	R^2	sted R^2	Q^2(=1-SSE/SSO)
Customer Relationship Management Tool (CRMT)	0,417	0,416	0,130
Internal Coordination Tool among Stakeholders (ICTS)	0,352	0,351	0,048
Organizational Absorptive Capacity	0,423	0,422	-
Potential Absorptive Capacity (PACAP)	0,631	0,630	0,306
Realized Absorptive Capacity (RACAP)	0,713	0,712	0,338

On the one hand, the results of the direct relationships between, the organizational absorptive capacity, the use of the SFA as a customer relationship management tool (H5.1) and on the other hand, the organizational absorptive capacity and the use of the SFA as an internal coordination tool among stakeholders (H5.2) are shown in table 5.

Table 5: The significance of the structural coefficients

Hypotheses	Path coefficient	t-statistic	P-value	Signs
CAP _ICTS	0.564	5.983	0.000	+
CAP_CRMT	0.513	4.708	0.000	+

These results prove that all the structural coefficients are significant and positively valid for the tested hypotheses, and this is applicable for all the structural relations. Hypotheses H5, H5.1 and H5.2 are accepted.

5. Discussion

The first tested hypothesis states the positive influence of training on the organizational absorptive capacity. This result converges with the work of Prodan and Ostermann (2009), Murovec and Prodan (2009) and Ahmed et al. (2019), who support the idea that the strategic practices of human resources, the training of which, positively affects the ability of the company to acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capacity. This means that a well-trained workforce facilitates the identification and the

interpretation of external knowledge, the combination of existing knowledge with external knowledge and the implementation of acquired, transformed and assimilated knowledge for a best SFA use.

The test of the second hypothesis, which defends the positive effect of the training on the use of the SFA, as an internal coordination tool among stakeholders and as a customer relationship management tool has been validated. This is proved by the improvement of salespeople's skills following their participation in the training sessions offered to them. This result joins the work of Ling and Nasurdin (2010), Cron et al. (2005) and Kodwani and Prashar (2019) who highlight the existence of a significant relationship between training and the use of SFA. Thus training has become an influential factor of SFA use, it motivates staff to learn and transfer their learning for the sake of using SFA system.

The third hypothesis postulating a positive impact of professional experience on organizational absorptive capacity was, unsurprisingly, confirmed. Indeed, the most experienced players are able to detect knowledge and exploit it for commercial purposes faster than others. This result is consistent with the work of Lane, koka and Pathak, (2006), who prove that experience has a positive effect on the organizational absorptive capacity. Thus the staff with a high degree of professional experience feel a sense of being committed to recognizing and obtaining knowledge from external sources, to interpret, incorporate and personalize it in the procedures and structures of the company.

The test of the fourth hypothesis proves that professional experience, negatively rather than positively, affects the use of the SFA as a customer relationship management tool and as a tool for internal coordination among stakeholders. The rejection of hypothesis H4.1 can be explained by the fact that, there is prior research (e.g. Abdolvand and Farzaneh, 2013; Johnson, Barksdale Jr. and Boles, 2001) which reveals that professional experience of salespeople does not positively impact the use of CRM (and thus SFA) applications. The reason for this is that experienced salespeople consider their contact list a personal asset and are resistant to turn it over to the organization. Normally, one of the drivers for an organization to implement an SFA system is to convert the Human Capital of the salespeople into Structural Capital of the organization, which leads to a loss of power of the experienced salesperson (Griffiths, 2011, p.186). Similarly, the rejection of hypothesis H4.2 can be explained by the fact, there is prior research (e.g. Poujol, 2009) that seems to support that there is always a tendency to consume more than to contribute to a knowledge repository as is the case of an SFA system for lead management and internal coordination. Young inexperienced professionals see more value in these knowledge repositories while the experienced professionals feel that they 'do not need it' because they know their business and thus find an asymmetry: they contribute to the repository more than they get out of it. In order to get them to use the system and contribute to it, there needs to be some sort of external incentive (Griffiths, 2011, p.213).

Finally, the last hypothesis, which emphasizes that organizational absorptive capacity has a positive influence on the use of the SFA as a customer relationship management tool and as a tool for internal coordination among stakeholders, has also revealed the significance of the relationship. Indeed, this result goes hand in hand with the work of Cohen and Levinthal (1990) and Noblet and Simon (2010) who prove that a high level of absorptive capacity favors, at best, the exploitation of ICT tools by companies. In this sense, these authors argue that companies that have an ability to detect external knowledge to mobilize information technology better. This mobilization of technologies facilitates the communication between the players of the enterprise and contributes to the development of a durable relation with the customers. The result of this last hypothesis is consistent with the work of Zahra and George (2002) and Wu et al. (2019) who prove that the company that develops a great capacity for assimilation, acquisition, transformation and exploitation of knowledge will have greater capacity to use technologies. This result leads to the following conclusion: firms that have a high potential absorptive capacity, i.e. the ability of the enterprise to detect and absorb external knowledge using the processes deployed by the enterprise, and a significant realized absorptive capacity, that is, the ability to combine existing knowledge and new knowledge for transformation and exploitation; all these factors have a better ability to mobilize and use technological tools of SFA type.

6. Conclusion

This research shows that training and professional experience have a positive influence on the organizational absorptive capacity and the use of the SFA and that the organizational absorptive capacity in turn positively influences the use of the SFA.

On the theoretical level, this research simultaneously links the deterministic approach and the relational approach based on knowledge management, to study in depth the determinants of the use of the SFA more precisely the training, the professional experience and the organizational absorptive capacity. The contribution of this research to the existing literature, in particular on SFA use, can be justified in two ways. First, the study empirically examines how training and professional experience influence potential and realized absorptive capacities, respectively. It provides new insight into the combined effect of absorptive capacity, training and professional experience on SFA use. Second, this research helps to develop an understanding of how salespersons acquire, assimilate, transform and exploit external knowledge for a better SFA use in a pharmaceutical context and in a country (like Tunisia, North Africa) where these potential and realized absorptive capacities are little dealt with in the previous literature.

From a managerial point of view, this research could be relevant for pharmaceutical laboratory managers, who are constantly seeking to improve the use CRM tools of SFA type through a better understanding of the determinants that may affect this use. In this sense, a pharmaceutical laboratory must have the ability to detect external knowledge and apply it for better use of SFA tools. In addition, a better understanding of how training and professional experience interact on organizational absorptive capacity and use of the SFA can help pharmaceutical companies determine what steps need to be taken to improve the use of the SFA.

This research immensely helps owners and managers of companies in the pharmaceutical industry to carry out ongoing training for new and inexperienced and experienced salespeople to improve their abilities to acquire, assimilate, transform and exploit external knowledge and consequently the use of SFA. Continuous training and professional experience are no longer considered an option but rather a requirement; therefore pharmaceutical companies must plan and / or manage strategies for the implementation of regular training for their staff in order to appropriate absorptive capacity and SFA use.

Nevertheless, the current research presents certain limits, which opens horizons, to complete it. First of all, the current research was unable to deeply and comprehensively address the interaction between CRM systems of SFA type and the three types of customer knowledge "knowledge about customer"," knowledge from customer "and "knowledge for customer". In addition, the choice of the field of the pharmaceutical industry may be simplistic in regards with the lessons and conclusions drawn in terms of inferential statistics. Other elements could be taken into account by the researchers in their subsequent research, so it would be relevant to study the consequences of the use of the SFA on the salespeople's performance and on the quality of service provided to the end customers in the industrial environment. It would also be wise to carry out comparative studies between companies in various sectors in the use of SFA tools.

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Appendix 1: "SMART PLS Version 3" outputs

Table 1: Correlation matrix of first-order reflexive variables

	ACQUI	ASS	EXPL	TRANS
ACQUI	**0.918**			
ASS	0.055	**0.807**		
EXPL	-0.105	0.375	**0.888**	
TRANS	0.056	0.198	0.041	**0.815**

Table 2: Correlation of second-order constructs (potential organizational absorptive capacity and realized absorptive capacity) with the use of SFA

	PACAP	RACAP	ICTS	CRMT
PACAP	0.711		0.400	0.492
RACAP	0,408	0,724	0.528	0.353
ICTS	0,831	0,844	0.600	
CRMT			0.476	

Table 3: Correlation of third-order construct with the use of the SFA as a CRM tool and internal coordination tool among members

	CAP	ICTS	CRMT
CAP	0.600	-	-
ICTS	0.564	-	-
CRMT	0.513	0.467	-

Table 4: Correlation matrix of the use of the SFA as a CRM tool and as a tool for internal coordination among stakeholders

	CAP	ICTS	CRMT	PACAP	RACAP
CAP	1,000				
ICTS	0,564	1,000			
CRMT	0,513	**0,467**	1,000		
PACAP	0,831	0,400	0,492	1,000	
RACAP	0,844	0,528	0,353	0,408	1,000

