Sales training and ICT: a literature review

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Abstract
Purpose – The purpose of this paper is to identify in the specialized literature published in the past 20 years about sales training, some elements or key factors that could be applied to the use of information and communication technologies (ICT) as a support for the learning of the detection of business opportunities.
Design/methodology/approach – This is a study of a documentary nature in which a method of systematic literature review was applied to 132 studies published in journals indexed in Scopus and Scielo on sales training processes. The analysis of the data combined a process of categorization and frequencies statistical analysis.
Findings – The results highlight the role of ICT and specifically the use of mobile devices to support the strengthening of training in sales in terms of relationship, opportunity and flexibility in communication with the client, the construction of positive emotional environments and experiential/situated training.
Originality/value – The originality of this study lies in the extraction and interpretation of key factors focused on addressing a guiding question about the relationships between the use of ICT and sales training.

Keywords Experiential learning, Mobile learning, Emotional education, ICT-based sales training

Paper type Literature review

1. Introduction

The use of information and communication technologies (ICT) has been carried out as a growing process in formal education at different levels (Kim, 2018) and in a slightly lower but equally increasing magnitude within the context of the formation of human talent at the business level (Romi, 2017; Stokie and Urošević, 2008). This can be seen from the comparison made between the use of corporate training, ICT and corporate training and ICT in education, as shown in Figure 1, from the research produced and registered in databases of indexed journals such as Scopus.

In relation to the above, the units or departments in charge of skills development in the members of the organizations recognize the importance of achieving optimal levels of performance in them related with their positions and responsibilities (Pham and Nguyen, 2017). This becomes possible, among others, because of high levels of training in a wide variety of skills that are closely related to the profile of the position of each employee (Szasz et al., 2017).

In this business context, the importance of the skills development related to sales is recognized because within all the processes that take place in organizations sales can make a big difference in terms of viability and financial sustainability (Abdolvand and Farzaneh, 2013), especially in highly competitive sectors. More specifically, in the framework of sales training, there is a topic that is considered especially relevant and that affects the effectiveness of the sale notoriously: the identification of business opportunities.

This is important especially in goods selling business where being the first supplier to detect the sale opportunity generates an indisputable competitive advantage. To achieve that advantage, the seller must be able to identify the customer’s needs and based on them
find the right product or service that meets those needs. If this dynamic is developed in a fluid and clear manner for the client, the probability of closing deals in favor is quite high (Üstün and Iacobucci, 2012).

However, in the training of the skills related to sales, it will be necessary to consider the particular characteristics of this population in terms of its geographic dispersion and the continuous mobility throughout the zones or sectors that are assigned to work. In this order of ideas and taking into account that the use of ICT is recognized as a factor for improving corporate training processes (Couto, 2017), the use of mobile technologies to support the training processes is highly relevant, especially to update the sales forces.

In this regard, the use of mobile devices applied to teaching and learning processes, commonly known as m-learning (mobile learning) defined by Traxler (2007) as a type of experience that is essentially personal, contextual and situated and that has been intended, define from the characteristics and possibilities of devices and technologies, from the apprentices mobility and learning and in terms of learning experience with mobile devices mediation.

From the research point of view, we consider both training in sales and ICT incorporation into such processes as emerging study objects, given the size and growth curve in the publications generated on these issues in the past 20 years, as shown in Figure 2.

The emergence of this issue implies the relevance of its in-depth exploration, with the aim of finding the best ways in which the use of ICT (in a context of labor mobility) can become a factor in improving the effectiveness of sales training processes, and more specifically those focused on the detection of business opportunities, for which it has been proposed to carry out a systematic review of literature, whose results are described throughout this paper.

2. Method

The literature review protocol was constructed following the indications of Khan et al. (2017) within the framework of three major processes: planning, execution and writing of the review through the phases shown below in Figure 3.
2.1 Construction of searching strings

This phase began with determining the purpose of the review, which focused on key factors in sales training processes identification so that they could later find alternatives to correspond with the educational use of mobile devices and with business opportunities identification. This purpose was drawn through three guiding questions:

*RQ1* What are the key factors in sales training processes?

*RQ2* Of these factors, which ones can be intervened with the use of mobile phones?
RQ3 Of those, which ones apply to business opportunities detection?

To deal with the tracking of information relevant to these questions, an initial search string was created consisting of the following descriptors: “sales training” or “entrenamiento en ventas” or “formación en ventas” or “capacitación en ventas.”

2.2 Searching strategy

The descriptors were applied in Scopus (827 documents) and in Scielo (3 documents) so that they could be covered in both English and Spanish. Later, and to orient the results to articles with research results, a first filtering was done by the type of document, including only articles published in the journal and in reports of conferences and articles in press (in advance), with which the set of documents was reduced to 668 documents.

As a pilot, a randomized reading of 25 articles was carried out from which it was evident that some of them focused on issues that were not of interest for the review. For this reason, it was considered convenient to extract from these articles some additional common terms that appeared consistently and were aligned with the guiding questions. With these terms an addition to the search string was made to refine its results before final filtering.

This process led as a second filtering process with the purpose of refining the thematic relevance of the articles. The following terms were selected as additional searching keywords: “Sales Training,” “Training,” “Sales Force,” “Personnel Training,” “Personal Selling,” “Salesperson Performance,” “Training Effectiveness,” “Adaptive Selling,” “Salesforce,” “Experiential Learning,” “Sales Education,” “Training Methods,” “Learning approaches and issues,” “Experiential Learning Techniques,” “Information Technology” and “Marketing Education Issues.”

Final filtering had to do with the delimitation of the time window for the review and the main criterion of delimitation was the phenomenon of massification of the internet given the relevance of the use of ICT in training processes for the purposes of this revision. In this sense, the search was limited to the past 20 years (1998-2018) for which a final set of documents of 162 items was configured. To this set of documents, an additional 59 documents on product of a parallel search on “opportunity detection” were added.

2.3 Application of inclusion/exclusion criteria

The final set of documents was organized by number of citations in descending order for the purpose of applying an abstracting process (reading title and abstract) through which the final verification was made of both the thematic relevance of the articles and the existence of research results in them. As a result of this process, an in-depth reading was made of 132 articles that met these two inclusion/exclusion criteria and that corresponded proportionally in quantity per year to the curve of the total production in the subject, as seen in Figure 4.

2.4 Searching documentation and data extraction strategy

For this phase, a shared documentation matrix was created in Google Drive from which two observers recorded data extracted from the articles of the final set of documents for in-depth reading. These data corresponded to relevant information for each of the three guiding questions of the review. In the matrix, the complete references of the articles were recorded, along with information on key factors in sales training, existence of ICT in the studies reviewed and their contributions to this training process.

2.5 Data synthesis and validation

The analysis of the data was carried out through a complementary exercise of frequencies of appearance and categorization of the extracted data. The categorization of the key
factors yielded four groups of categories through which the interpretation of the results was advanced as follows:

1. cultural factors;
2. pedagogical;
3. logistic; and
4. technical.

It should be noted that the process of analysis and interpretation of data was carried out by two separate observers who verified the pertinence of the data extracted from the final set of articles. The consistency in this process was verified by the application of a Cohen Kappa coefficient ($k = 0.514$), which according to Kraemer (2014) represents an inter-rater observation of adequate reliability.

3. Results

3.1 Quality of information sources

The articles read in depth were distributed heterogeneously in 75 indexed journals. The quality of the information sources is indicated in Table I, which shows the ten journals that contributed the most articles for the review, their impact factor and quartile in SJR.

3.2 Key factors in sales training

Because of the diversity and quantity of terms extracted from the literature that related to the guiding questions of the review, it was necessary to execute a process of qualitative analysis of the extracted data based on categorization to order and synthesize them. This process allowed to unify, standardize and group terms according to their relationships or characteristics into five major categories/key factors labeled as indicated in Figure 5.
The factor that appears most frequently has to do with the management of human resources in terms of recruitment, selection and motivation (34.62 per cent). As a second factor of high frequency, the processes related to communication with the client (23.08 per cent) are presented followed by those related to experiential learning (19.23 per cent), those related to the application of technologies (11.54 per cent) and with the education of emotions (11.54 per cent).

3.2.1 Effect of human resource management on sales training. According to Storey (2007), human resource management is defined as a form of practice in organizations which is responsible for managing the processes that have to do with the selection, enrollment and permanence of members in the organization (employment relationships).

The key ideas extracted from the literature on this particular aspect have to do with the importance of including in sales training issues such as:

- the use of sales channels that are enhanced by the use of digital technologies;
- the use of alternative means to conferences or workshops as forms of training;
- highlight enthusiasm and creativity as an integral part of sales training;
- adequate selection of personnel to train;

### Table I

<table>
<thead>
<tr>
<th>Journal</th>
<th>In-depth reading in %</th>
<th>SJR 2018 Impact factor</th>
<th>SJR quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Marketing Education</td>
<td>6.67</td>
<td>0.747</td>
<td>Q1</td>
</tr>
<tr>
<td>Journal for Advancement of Marketing Education</td>
<td>5.33</td>
<td>0.150</td>
<td>Q3</td>
</tr>
<tr>
<td>Industrial and Commercial Training</td>
<td>5.33</td>
<td>0.265</td>
<td>Q2</td>
</tr>
<tr>
<td>Industrial Marketing Management</td>
<td>5.33</td>
<td>2.375</td>
<td>Q1</td>
</tr>
<tr>
<td>Journal of Personal Selling and Sales Management</td>
<td>4.00</td>
<td>1.044</td>
<td>Q2</td>
</tr>
<tr>
<td>Services Marketing Quarterly</td>
<td>4.00</td>
<td>0.393</td>
<td>Q2</td>
</tr>
<tr>
<td>International Journal of Training and Development</td>
<td>4.00</td>
<td>0.453</td>
<td>Q1</td>
</tr>
<tr>
<td>Advanced Science Letters</td>
<td>2.67</td>
<td>0.117</td>
<td>Q3</td>
</tr>
<tr>
<td>European Journal of Training and Development</td>
<td>2.67</td>
<td>0.347</td>
<td>Q2</td>
</tr>
<tr>
<td>Sport Management Education Journal</td>
<td>2.67</td>
<td>0.226</td>
<td>Q3</td>
</tr>
</tbody>
</table>

![Figure 5](image-url)
- effective transfer of knowledge into sales practice; and
- the perception of sales training as a growth factor of a professional career within the organization.

Regarding the above, for any productive initiative in any part of the world, it is important to select an adequate team of collaborators in charge of the sales operations of the products or services that the company produces. The productivity of the organization is determined by the ability to put its products on the market so that the seller’s efficiency is a direct indicator of the productivity of the organization (Chan et al., 2014). That is why organizations invest a lot of effort and resources searching for the optimization of the skills of their commercial staff, looking to increase the income as an organization.

Gope et al. (2018) and Amoako and Okpattah (2018) agree that an adequate selection of personnel is essential to guarantee the appropriation of knowledge during the training processes in the organization. Whereas Paulson (2018) mentions that the adequate recruitment in addition to the continuous training of the personnel assure the success in the sales and with it the permanence of the organization. In this regard, Ibrahim et al. (2017) complements the above, indicating that with the training in soft skills through training spaced over time, the success in sales is increased, and the acquisition of knowledge is more effective.

Besides, Johnson and Sohi (2017) and Popp et al. (2017) indicate that the motivation of the human resource devoted to sales is a factor that contributes to the strengthening of the activities of launching and selling products if they receive prior training on new products. Associated with the above, Zaki et al. (2017) conclude that to ensure success in staff training, it is necessary to make an individual, face-to-face evaluation with each employee and based on their results, make adjustments to the training plan originally drawn up.


### Aspects related to communication with customers

According to Marcos Cuevas (2018), communication with customers is the ability to handle different relationships depending on the type of sales process, whether transactional or value generation.

The key ideas extracted from the literature on this particular aspect have to do with:

- customer behavior tracking;
- uncertainty management;
- non-verbal communication;
- stress management; and
- interpretation of various cultural contexts.

Although most business opportunities originate from the needs of customers, in the early stages of identifying those needs, the client has uncertainties about the cause of the problem that afflicts him, and there is no clarity about what he/she needs to solve it (Waled et al., 2007). According to Ulaga and Kohli (2018), this is a stage where the seller’s role becomes crucial, which helps reduce uncertainty by providing timely and accurate information. Once the need is discovered and the uncertainty is handled by the vendor, the negotiation process is developed, which is typically extensive and complex and its progress depends to a large extent on the vendor’s ability to communicate effectively with the customer.
In this sense, studies such as those of Nuryakin (2018) show that the relationship capacity of sellers with their clients has a positive impact on the orientation of the clients toward the achievement of the results and this in turn has a positive impact in the performance of sellers. The researchers observed that some characteristics of the vendors such as enthusiasm, creativity and interest in informing the client allowed a greater approach and better guidance throughout the negotiation.

One of the aspects to highlight in the results of the review of the literature has to do with the importance of developing skills in the management of intercultural relations, especially in multi-cultural environments. According to Delpechtre and Baker (2017), intercultural management skills are important to achieve success in business. It is important to have the ability to know what is important for a person from another culture and what are the meanings of their language and verbal expressions, as this ability facilitates the adaptation of discourse and behavior in the development of business meetings. The authors suggest that this type of communication skills can be taught through a role play scheme where the role of the client is assigned to immigrants of diverse origins.

Similar examples of the above are found in studies by: Plouffe et al. (2017), Titze et al. (2017), Coffre (2017), Upadhyay and Khandelwal (2018), Singh et al. (2015), Lassk et al. (2012), Rodriguez et al. (2015), Ricks et al. (2008) and Rollins et al. (2014).

3.2.3 Experiential learning and the recognition of business opportunities. According to Sattler (2018), experiential learning is one of the best ways to train sellers because it allows them to live real situations with their complexities both human and technical.

The key ideas extracted from the literature on this particular aspect have to do with:

- team work;
- knowledge transfer; and
- practice.

Many of the studies reviewed mention that intercultural communication skills can be taught through role-playing games and specifically through experiential learning schemes. In general, in the field of sales of products or services, the professionals in charge of business identification must cultivate certain skills that can be acquired with practice. From this perspective, it has been found that experiential learning is a powerful alternative to teach communication, leadership and sales skills (Costa et al., 2018; Sattler, 2018; Shreffler et al., 2018).

These studies make use of different methodological approaches, focusing especially on the development of simulations or role play in classrooms (83.1 per cent), internship practices at the end of the training program (70.6 per cent) whereas the least used practice is the assignment of apprentices (24 per cent).

According to Costa et al. (2018), designing sales training processes through experiential learning schemes enables them to receive training that allows them to solve problems, learn by doing, reflect critically on theory and participate in real-life situations, ensuring a relevant impact of information and consequently, the assimilation of knowledge.

Similar examples of the above are found in studies by: Jones and Colwill (2013), Yaseen et al. (2018), Khoumbati et al. (2010), McKelvey and Southall (2008), Sheptak and Menaker (2016), Nielson and Border (2016) and Hagenbuch (2006).

3.2.4 The use of technology in sales training. The use of technologies is a category that appears related to the previous one, that is, it is proposed as the substrate that allows the trainee to experience their learning in an experiential way but with various supports that facilitate and make interactions, access to information and collaboration more flexible.

The key ideas extracted from the literature on this particular aspect have to do with:
mobile learning;
- e-learning;
- simulation-based environments; and
- social networking/social media.

The reference to technology is often assimilated to the use of electronic devices or software applications; however, a different approach has to do with the application of innovative procedures that rely on the use of digital technologies where the focus is in the procedure and not in the technological support. In this regard, Rapert (2017) proposes a teaching strategy through a table of professionals who work outside the university and collaborate through the use of computer networks as advisors to the academy, recommending readings and monitoring the projects. This strategy generated greater value to the contents of the course, increased the impact on the student and improved their willingness to receive recommendations.

Another systematized training approach using a procedural technology is the one proposed by Holden (2016) who invites to change the concept of the sales of an art to an exact and reproducible science, based on data analysis and interpretation of market trends, which generates a motivational environment and progressive confidence between seller and client. This reinforces the findings of Mahesh and Bhushan (2016) who, when trying to evaluate the effect of sellers’ motivation toward product knowledge in sales of complex financial products, found that the willingness to learn is not enough in a market competing technological products; detailed knowledge of the product and the mastery of the sales technique also play an important role (data management, figures and trends). This helps to gain the confidence of the client and prevent him from changing his mind with the influence of external agents or by other sellers of the market.

Another relevant issue regarding the use of technologies is the importance of articulating sales training processes with the organization’s own computer systems such as CRMs. In that sense, it is not enough to improve the contents or training methodologies of the vendors; knowing the results in terms of increased sales or profits generated by the training received by vendors is also important. For this, Kumar et al. (2014) propose a methodology to measure the effectiveness of a training by calculating the future value of a vendor, making an estimate of the future profits that sellers can generate and how this is affected by training and the incentives.

In addition to the above, a result that has to do with the use of technologies focused on the importance of involving components of collaborative learning in the processes of sales training which finds in the use of ICT an adequate ecosystem of support and projection. In this sense, self-directed training based on the use of technologies is an alternative for those who work in sales because of their limited availability of time and their continuous movement through the territory they must attend. For that reason, Boyer et al. (2014) recommend that organizations offer permanent support to officials to adhere to this training scheme which must be offered on a voluntary basis to ensure better results. The experiences advanced in this direction consistently show the creation of peer support networks to complete the self-directed training programs.

In addition to the above, the enthusiasm levels of both the facilitator and the apprentice are strengthened through the support of autonomous learning in sales, in participation in online discussion forums through mobile phones or tablets, which is a recommended practice to take advantage of collaboration with peers and learn from the experiences of colleagues. In this regard, Rollins et al. (2014) reviewed this practice applying netnography and confirmed that sellers can learn through reading and writing in blogs and forums to the point that they recommend companies to incorporate these instances of collaboration and online expression within their vendor training methodologies.
However, interactive contact on the internet and especially on social networks is not always entirely positive. In this regard, Bata et al. (2018) report that the use of mobile social networks as a tool for prospecting clients and monitoring them can lead to dependence, reduced performance in the performance of work and isolation of the team of co-workers; consequently, they recommend companies to establish clear policies for the use of social networks at work.

Similar examples of the above are found in studies by: Jimenez (2013), Badrinarayanan et al. (2011), Heidecke and Back (2009), Brandi and Christensen (2018), Khoumbati et al. (2010), Sharma and Sagar (2018) and Limbu et al. (2014).

3.2.5 The education of emotions. According to Horn et al. (2011), the education of emotions leads people to regulate their behavior and relationships with others, which allows the development of healthy interactions. In the case of sales training, proper emotion management strengthens the relationship between seller and customer and the flow of valuable information for both.

The key ideas extracted from the literature on this particular aspect have to do with:

- emotional burnout;
- internal motivation;
- emotional intelligence; and
- empathy.

To finalize the analysis of the results of the literature review, it is worth mentioning the relevance of understanding the complexities of achieving an efficient transfer of the knowledge received by the worker in his work activities. In the field of sales, this is especially important because the transfer of knowledge depends on increasing the sales of the company. One of the elements that intervenes in the transfer of knowledge to the work activity is motivation, a factor that is measured repeatedly in the different studies reviewed and whose effect on knowledge transfer is already known; however, it is not the only one factor; there are other factors that affect and make the effect of motivation unpredictable. In this regard, Paulsen and Kauffeld (2017) addressed this issue from positive emotions and postulate that the motivation to transfer the acquired knowledge to work tasks is mediated by positive and contagious feelings according to the theory of expansion and construction of positive emotions (Waugh and Fredrickson, 2006). Thus, if a training course promotes the transmission of positive emotions, a greater transfer of the emotion will be achieved. These authors applied measurement surveys at the beginning and at the end of a three-day training period to 78 groups (867 participants), and it was found that the motivation for transferring the knowledge measured on the last day of the course is related to the high level of positive emotions measured on the first day.

Complementing this finding, Seiberling and Kauffeld (2017) noted that in addition to motivation, knowledge transfer is affected by the learner’s willingness to transfer knowledge to their work. This study consulted a group of 891 participants in leadership training twice immediately after finishing the course and eight weeks later (465 answered the second questionnaire). From these data, it was found that motivation and will have different effects in the transfer of knowledge to work, but combined they explain the variation of the transfer in the group consulted. They also detected that there is a mediating effect from the supervisor’s support and the trainer’s performance for which it is recommended to carry out additional evaluations to determine the degree of generalization that can be obtained from this finding in other populations.

Another factor that intervenes in the transfer of knowledge toward performance at work is soft skills.
In this regard, Ibrahim et al. (2017) proposed a study to assess the effect that training in soft skills can generate in work performance and found very positive results with a 14.5 per cent increase in worker productivity, but they also showed that if the training in soft skills is taught in a fragmented way with time slots for workers to reflect and internalize the contents, the increase in the work performance of the participants reaches 27.9 per cent.

Finally, a study by Polo-Vargas et al. (2016) contributes to the awareness of the importance for sales work of the ability to identify the mood of the interlocutor to improve communication and business performance.

Similar examples of the above are found in studies by: Locander et al. (2014), Arndt and Wang (2014), Manna and Smith (2004), Titze et al. (2017), Fu et al. (2017) and Mullins et al. (2015).

4. Discussion

The results found in the management of human resources in sales training highlight the importance of flexibility, personalization and timely updating as factors of good motivation during these training processes. In this context, the use of mobile devices is proposed as an appropriate strategy that allows access to updated information about the services and products that will be the subject of sales processes.

On the other hand, both access to information and receipt of feedback on training processes are carried out at the time and place that each vendor determines as the most appropriate, according to their availability and disposition. Also, in terms of communication with the client, the immediacy and diversity of options to carry it out efficiently are some of the added values that the use of mobile devices proposes as part of sales training processes. This added to the possibility of being in contact with their clients permanently strengthens the intercultural relationship capacity for the seller who is in training. This capacity of relationship in turn strengthens the ability of the seller to guide his client to face the uncertainties inherent in the identification of problems or opportunities in his company.

Understanding the importance of experiential learning for sales training, mobile devices would provide a practical and flexible support to carry out learning experiences that occur in real environments, outside the corporate training classrooms. The functionalities are increasingly complex and articulated, and the flexibility of mobile devices makes it possible to overcome simulations or case studies as central axes of corporate training to give importance to the training of development of sales skills under real conditions.

Regarding the use of technologies, it is important to highlight the importance of creating and sustaining collaborative learning environments that complement and support self-directed learning, which is the very characteristic for sales training profiles. For this purpose, the use of mobile devices becomes part of the basic support tools both to advance personal participation in training processes and to participate in collaborative interactions that enrich the individuality of the seller’s profile.

The above summarizes the contributions of this review. However, it is also worth mentioning its limitations which come from its nature as a documentary study. In that order of ideas, despite the rigor applied in the method, there is always a component of subjectivity in the reading and interpretation of the extracted data that determines the way in which the results are presented and ordered. Whereas the results of the review make it possible to identify a very interesting direction for future research where sales training and professional practice would be conducted in what is called the “Economy 4.0,” in which, according to Cellary (2019) and Rodriguez Fernández and Pérez del Prado (2018), both learning and work performance would be developed in digital environments affected by leading-edge technological developments such as artificial intelligence, robotics, big data and the internet of things.


References


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