

Title: Professional Development of Revenue Management Leaders – the serious game

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ABSTRACT

This paper explores the professional development needs of revenue management leaders. Considering the evolution of the function and the responsibilities of a revenue manager and the apparent lack of highly developed senior managers in the field of revenue management. The exploratory research determines the skills that revenue management leaders should ideally possess, identifies the areas where further professional development is needed, and examines how related professional development should be conducted. The growing need for the development of related soft skills, in particular communication skills, is clearly identified as well as the value of serious game as a soft skill development tool.

Keywords: Revenue Management Leader, Professional Development, Serious Game

Introduction

The field of revenue management (RM) has evolved significantly since its inception in the late 70s. The volatility of demand trends, the growing online reputation pressure and the challenge of recruiting leaders in the industry have all contributed to the complexity of introducing a culture of RM in recent years (Helsel, 2016). The role of a RM leader has gained in importance and responsibility, and now holds a central place in the organization. Considering the constant changes in the field, and thus in the function of revenue manager, Ferguson and Smith (2014) believe that the role and the required skills of a professional RM will not stop evolving. These findings are reflected, on the one hand, by a lack of qualified personnel specialized in RM (Milla & Shoemaker, 2007; Talón-Ballesteró & González-Serrano, 2013; Zheng & Forgacs, 2016) who can follow the new trends towards which the branch is heading. On the other hand, there is a lack of adequate training to meet the needs of the industry (Skugge, 2003, p.50, Koupriouchina, Van der Rest & Wang, 2015, 385).

The purpose of this paper is to determine the skills needs of a revenue management leader, to present the areas of expertise in which further training is required, as well as to examine the possibilities of using a serious game for their professional and personal development.

Literature Review

The role of the revenue manager

The role of a revenue manager is to implement the strategies and principles of RM within an organization with the aim of optimizing income. In the hospitality sector, the revenue manager's functions vary greatly depending on the size of the establishment (Ferguson & Smith, 2014). A revenue manager's role is traditionally defined as "transdisciplinary" (cited in McKenna, 2014) and "multifunctional" (Stuart-Hill, 2016). However, in recent years, RM has evolved into a more strategic role, focusing in particular on optimizing total revenue (Kimes, 2016). In order to respond to these changes, the role of the revenue manager has been forced to evolve alongside the discipline (Ferguson & Smith, 2014) with a much wider range of responsibilities. As a result, the experience and skills required make the ideal revenue manager have become increasingly sophisticated (McGuire, n.d.). Moreover, the discipline will continue to evolve in the coming years, resulting in the role of the revenue manager continuing to become more complex.

From manager to senior manager

According to the results of a study conducted by Folkman (2014), the set of competencies required at the four levels of management is more or less the same. The majority of the differences do not lie in the type of skills required, but in their degree of importance. Indeed, it seems that when an employee climbs up the career ladder, certain skills, such as the ability to develop a strategic perspective, become more important. The findings of Folkman's survey of 332,860 respondents (2014) highlights the skills that have the greatest impact on the success of an employee at each level of management and are shown in Table 1 below. To rise to the senior management level, the ability to inspire and motivate others, as well as to communicate

powerfully and prolifically, are at the top of the list of skills needed to be successful in one’s position. While in the middle management level, the ability to analyze and solve problems is the most important skill (as denoted by #1). It therefore follows that the need for personal skills is increasing when climbing the levels of management.

Table 1: Skills required at the four levels of management

	Top Management	Senior Management	Middle Management	Low Management - Supervisors
Inspires and motivates others	1	1	2	2
Displays high integrity and honesty	2	3	4	1
Solves problems and analyzes issues	6	5	1	2
Drives for results	4	3	4	4
Communicates powerfully and prolifically	3	2	4	7
Collaboration and teamwork	6	6	3	5
Builds relationships	6	7	7	5
Technical or professional expertise	9	9	8	8
Develops strategic perspective	5	8	9	10
Develops others	10	10	9	8

Source: Adapted from Folkman (2014) Page 1

From another point of view, according to Reh (2016a), the responsibilities assigned to a manager and a senior manager are essentially the same, the difference between the two positions being the employee’s experience. Reh (2016b) suggests that if a manager wishes to evolve in the role, they must primarily develop knowledge in the field of finance and business strategy, as well as soft skills such as leadership, negotiation skills and communication skills. Reh’s statements tie up with the results of the investigation conducted by Folkman (2014). In view of the above and following the examination of a large number of articles on the subject, there appears to be no universal criteria for differentiating a manager from a senior manager. Depending on the organization and the role of the employee, the notion of senior is used differently or is sometimes even non-existent. Certain titles, such as “head of department”, do not use the nomenclature of senior, while they fall into the same category. The function of senior manager (or leader) is thus, in some way, the extension of the function of manager. This is why, as mentioned above, the required skills are practically the same and the main nuances lie rather in the scope of responsibilities and the importance of soft skills. Thus, given the importance of its role, it is essential to identify what skills a senior revenue manager needs and where further development is needed. A review of several studies on the subject has identified a set of 11 key competencies. These have been classified into three categories, which are individual excellence, strategic skills and operating skills, as shown in Figure 1 below, inspired by Microsoft's education competencies wheel (2016).

Figure 2: Skills required of a senior revenue manager



Source: Author figure

Future challenges

By exploring the skills required, the ideal profile of a senior revenue manager seems to respond directly to the future challenges of the industry. Among the latter, the evolution of the organization structure is at the heart of the questions raised. RM is growing in importance within hotels, which results in proposals to restructure these organizations. On the one hand, Josephi et al. (2016), suggest merging the sales, marketing and RM departments into a single department. Hospitality leaders interviewed by Milla and Shoemaker in 2007 believe that in order to make the most of the integration of customer relationship management and RM, the two departments must work together pursuing a common goal. In 2010, in a study conducted by Kimes on the future of RM (2016), just under 30% of respondents indicated that the RM department would be integrated into the sales and marketing departments. Thus, these suggestions reflect the need of the RM department to have a global view of the situation and to actively collaborate with other departments. On the other hand, some experts, such as Kimes (2016), believe that the RM function will slowly be centralized. One reason for this is that the role of the revenue manager becomes increasingly complex, reducing the number of candidates with the required skills sets (Milla & Shoemaker, 2007). All these adjustments to organization structure also means that the volume of decisions in which a senior revenue manager is involved keeps growing and the profession will continue to gain importance in terms of scope and responsibilities (Ferguson & Smith, 2014). As a result, in order to effectively manage these changes, a senior revenue manager must possess leadership, communication and negotiation skills. These skills seem crucial for the senior manager to be able to build close relations with their own team and other departments, and be seen as a leader.

Technological advancement is also at the top of the list of future challenges in RM. For example, the development of fully integrated systems would allow better management of the ever-growing volume of data sources (Josephi et al., 2016). A senior revenue manager must manage data from both internal systems and various external sources. The function of a RM leader therefore requires technical skills and analytical thinking in order to make effective and relevant decisions, given the volume of information available. At

present, all these internal challenges hinder the implementation of total revenue management (TRM). According to Wolf (n.d.), TRM is composed of two main elements, namely “the optimization of all revenue streams for guests staying in-house, i.e. making them spend more or recognizing their spending potential prior to arrival in order to influence the business mix, and the optimization of revenue streams regardless if the guests are in-house or outside”. In other words, this means moving from RevPAR to TrevPAR and implementing effective strategies and tracking methods closely with all departments.

However, the lack of integrated systems providing a comprehensive overview of all revenue streams in a hotel prevents the practice of TRM (Zheng & Forgacs, 2016). In addition, conflicts between the sales department and RM do not facilitate collaboration, a key element for an effective implementation of TRM. The application of TRM strategies is a trend towards which hotels will have to evolve in order to ensure the financial success of the organization and one of the first steps is to establish a culture of RM within the organization (Wolf, n.d.): to do so, one of the key elements is a RM professional with a high level of communication skills. Josephi et al. (2016) also attest the need to have a revenue manager at a senior level, to which more responsibilities and autonomy must be granted so that they can supervise all revenue streams. The effective deployment of RM is therefore based on three essential elements: technology, organization and qualified personnel (Josephi et al., 2016; Zheng and Forgacs, 2016). The development of integrated systems is not sufficient. RM is a field impacted by multiple external factors, some of which can only be detected by humans (Skugge 2003). In this regard, Zárraga-Oberty and Bonache (2007) emphasize the importance of the human element in a RM system. Milla and Shoemaker (2007) share this view, saying that exploiting the full potential of software depends on the person who uses it. Nevertheless, one of today’s main constraints to change is professional development. Unlike other functions in the hospitality industry, the position of revenue manager is relatively new and the professional development path is not yet well defined (Huey, 2013). There is currently a substantial gap between theory and practice, as evidenced by the content of training and the expectations of the hotel sector (Koupriouchina, Van der Rest & Wang, 2015). Existing training therefore does not meet the current needs of the RM branch. As a result, several experts reveal a lack of qualified personal in RM (Milla & Shoemaker, 2007; Talón-Ballesteró & González-Serrano, 2013; Zheng & Forgacs, 2016). In order to meet the constant evolution of RM, the improvement of training programs is therefore fundamental.

The serious game as a learning tool

With the advent of new information and communication technologies, as well as the democratization of Internet, traditional education methods are gradually being replaced by more effective and innovative practices to meet evolving trends. The way to learn and develop new skills, as well as the way to teach and transfer knowledge is strongly influenced by these changes. Among the tools that disrupt education and training, the serious game has a central place. But what is a serious game? At first glance, the terms serious and game do not fit well together. Still, a multitude of articles praise the qualities of the serious game as a training tool and the latter will be briefly exposed later. Before that, it seems important to define the concept of the serious game. The definition adopted in this research is the following:

A serious game is a “mental contest, played with a computer in accordance with specific rules, that uses entertainment to further government or corporate training, education, health, public policy, and strategic communication objectives” (Zyda, 2005). Among its many functions, the serious game takes on the role of an innovative alternative to usual practices of teaching and learning. Not only innovative, the serious game is also recognized as a tool to facilitate learning, since it uses powerful mechanisms of the game to promote training (Monahan, Harr, Knight & Crump, 2016). As Vaz de Carvalho, Escudeiro and Coelho (2016) point out, the growing reputation of serious games demonstrates their high value, as well as their effectiveness in education.

According to the many articles published on the subject, the use of a serious game as a training tool has the following four main benefits: interaction, commitment and intrinsic motivation, measurement of performance, as well as low-cost solutions. Given its virtues as well as the positive opinions of several professionals in the industry, the serious game appears as the appropriate tool to improve training in RM and develop the skills identified as necessary to excel in the function of senior revenue manager. In order to confirm this hypothesis, several specialists have been questioned on this subject.

Methodology

The research method chosen in this study is a mixed method, called “exploratory design”. Exploratory design involves a sequential research process, which means that the study was conducted in two stages (Creswell & Plano Clark, 2011). The first phase consisted of collecting data using a qualitative approach (semi-structured interviews), which was then followed by a quantitative approach (a survey). The data gathered during the interviews highlighted certain themes and elements which then helped to construct the questionnaire. In addition, the interviews were conducted in order to validate certain hypotheses which came up following the literature review and which would form the basis of the questionnaire. The quantitative and qualitative data have then been merged during the discussion.

The exploratory design was chosen because it is the method best suited to the needs and objectives of this study. This research methodology seemed to be the most appropriate for a subject of study such as this one, which deserved, as a first step, detailed and in-depth discussions with experts from different backgrounds and having their own point of views. Secondly, the use of an instrument such as the questionnaire has offered the opportunity to address a broader panel, namely the primarily persons concerned by the research question, and test the information gathered previously.

The data collection, designed to gather information on the three main themes addressed in this paper, RM, e-learning and serious game, will then be used to assist hotel management to identify the skills development needs of senior revenue managers to assist in the development of the serious game as a possible training tool.

Results

Three experts from different fields were interviewed. Each interview focused on the interviewee's area of

expertise and therefore, the questions were not all the same. The first person to be interviewed (hereafter Interviewee 1) was a university lecturer specializing in e-learning, who recently completed a Master degree specializing in digital technologies of communication and education. Then, a serious game developer working for a leading hospitality company in simulation learning technology was interviewed (Interviewee 2). The third person to be interviewed was a RM leader responsible for a major region of one of the world's largest hotel chains (Interviewee 3).

According to Interviewee 3, the element that today truly distinguishes a senior employee is the ability to demonstrate some of these soft skills, such as the ability to have good judgment, influence others, solve a problem, collaborate and work in teams, interpret data analysis and, in particular, communicate effectively. In addition, Interviewee 3 agreed that there is a clear gap, namely a lack of soft skills and that there is a lack of practice of soft skills in the functions of RM. Regarding the skills that should be developed via a serious game, soft skills, problem solving and critical thinking are three areas that Interviewee 3 considers very important.

According to Interviewee 1, the development of communication skills and public speaking are two important competencies in senior functions. According to Interviewee 2, the main skill that can effectively be developed via a serious game is decision-making. The cycle of cause and effect provided by the serious game is almost impossible with most other tools and therefore, is one of the best consequences of using a serious game in terms of skills building.

Regarding the quantitative approach, a total of 33 responses were collected through an online questionnaire. Among these, seven persons did not complete the questionnaire to the end and their responses could not be counted. Therefore, the presentation and the analysis of the quantitative results are based on 26 completed questionnaires. Table 2 presents an overview of the respondent profile.

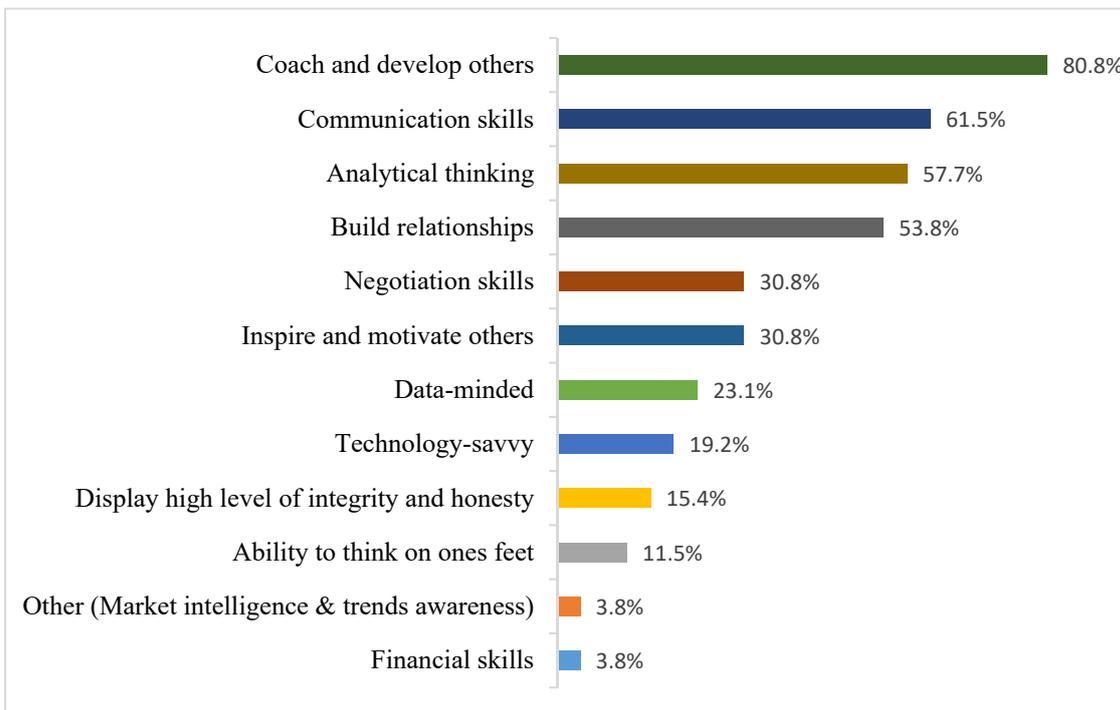
Table 2: Respondent profile

Sociodemographic variables	Description	Responses
Position title	Executive	5 19.2%
	Director	7 26.9%
	Senior Manager	6 23.1%
	Manager	4 15.4%
	Analyst	3 11.5%
	Other (Assistant)	1 3.8%
Department	Revenue Management	22 84.6%
	Revenue Management & Marketing	1 3.8%
	Sales & Marketing	1 3.8%
	Operations	1 3.8%
	Training in RM	1 3.8%
Working experience in this job role (average)		6.9 years
Age	29 or younger	8 30.8%
	30 - 39	10 38.5%
	40 - 49	4 15.4%
	50 - 59	4 15.4%
Highest level of education received	High school	1 3.8%
	Associate degree	4 15.4%
	Bachelor degree	9 34.6%
	Master degree	9 34.6%
	PhD degree	0 0.0%
	Other (Certificate, Diploma, etc.)	3 11.5%
Country of residence	Europe	18 69.2%
	America (USA and Canada)	5 19.2%
	Asia (Thailand and UAE)	3 11.5%

Source: Author's data

Figure 2 lists the 11 competencies, identified from the literature review, according to their importance to being promoted from revenue manager to senior revenue manager (RM Leader).

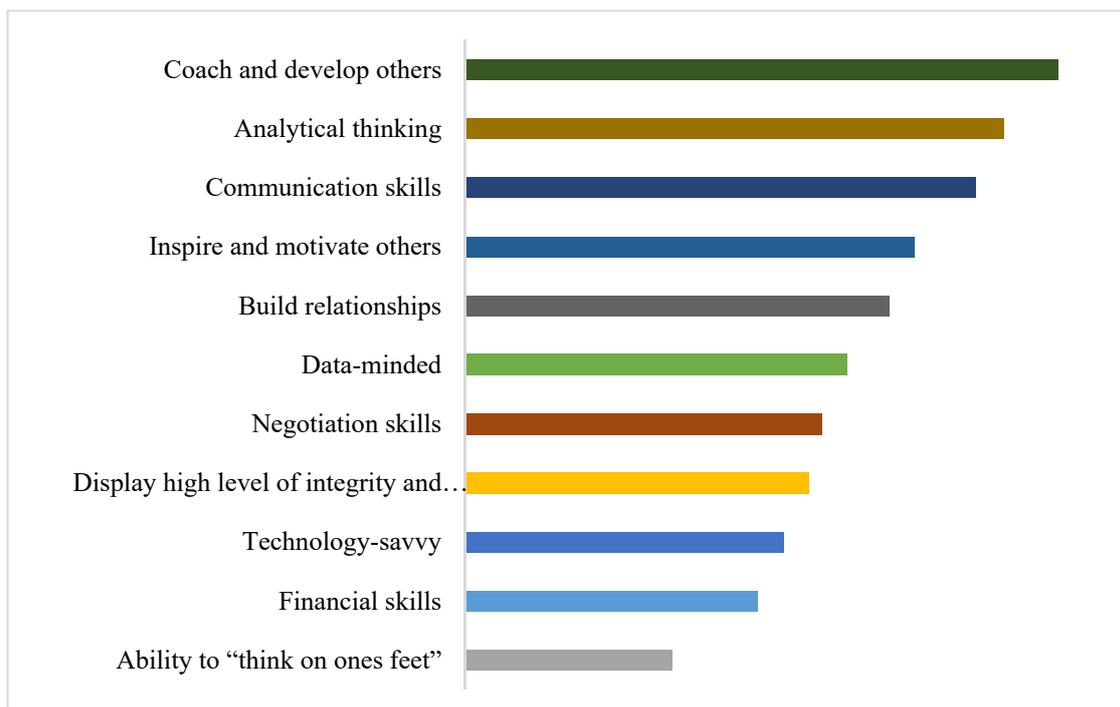
Figure 4: Skills classification towards being promoted from revenue manager to senior revenue manager



Source: Author data

Figure 3 ranks the 11 qualities that a senior revenue manager should possess, from the most important to the least important.

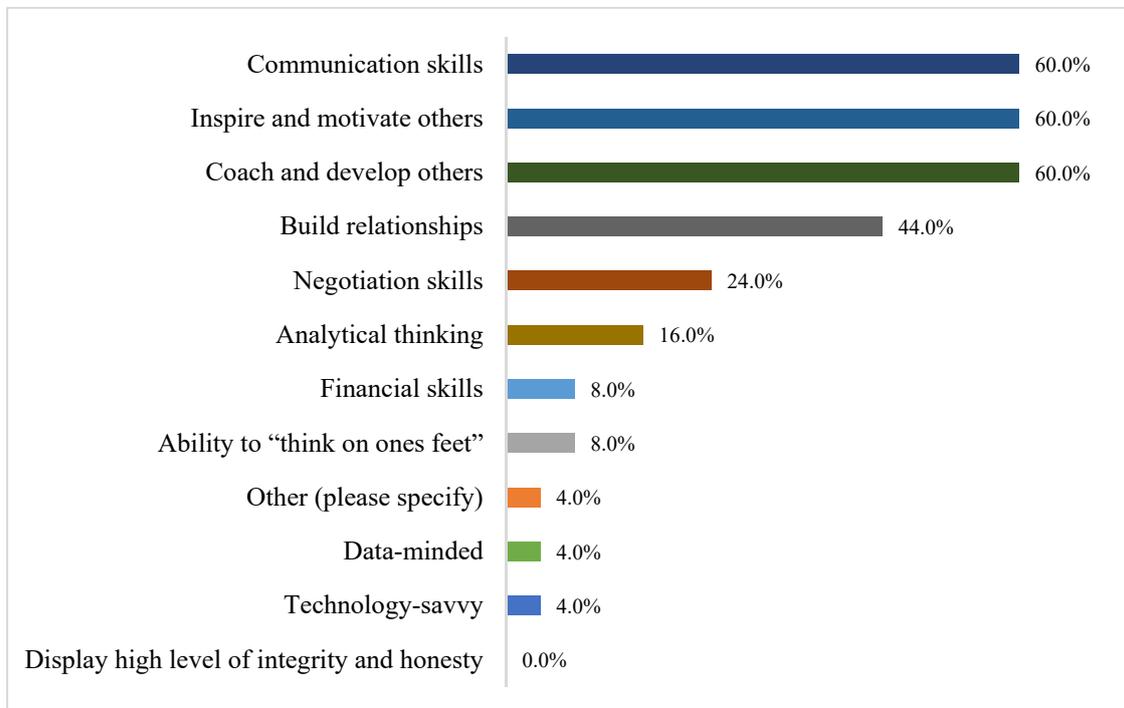
Figure 6: Ranking of the 11 qualities that senior revenue managers should possess



Source: Author's data

The last question concerning the skills of a senior revenue manager had the aim of identifying the skills senior revenue managers need to develop further as shown in Figure 4.

Figure 8: Ranking of the skills that the senior revenue managers the respondents know still need to develop



Source: Author data

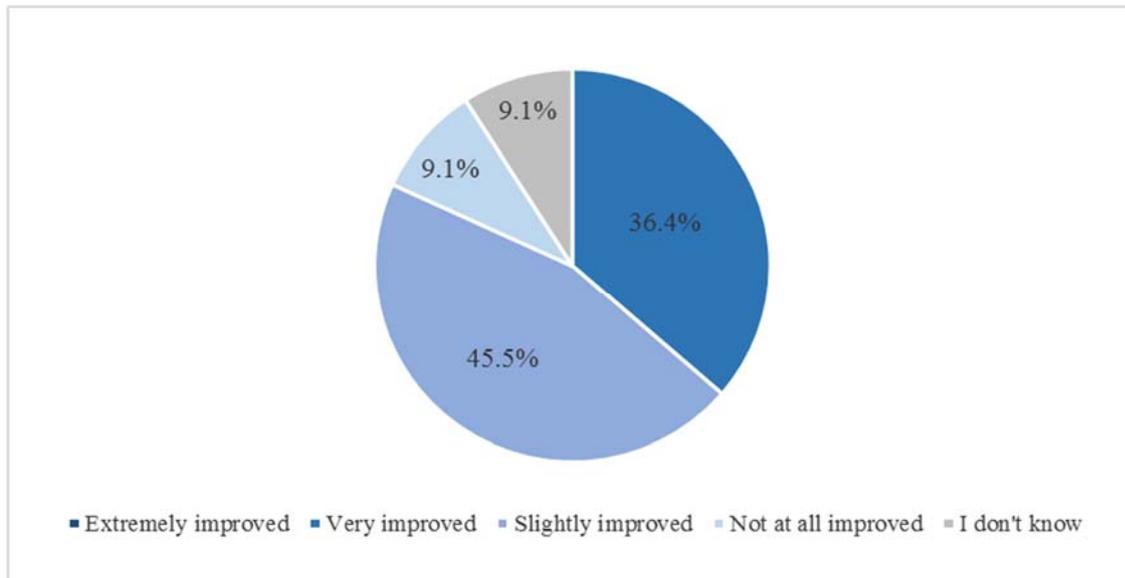
In question 4 "How many hours a year do you expect to dedicate to your professional development?", two respondents answered "as many as you can". As for the other 24 participants, responses were varied and ranged between 5 and 2700 hours. In question 5 "How many consecutive days per year could you spend developing yourself within a team (away from your desk)?", participants gave values ranging from 1 to 40 days. The average is 5.8 consecutive days.

Concerning the last question about their professional development, namely "How many times a year could you justify being away from your workplace (desk) for training purposes?", answers were relatively uniform. The highest value is 15 and the smallest 2. On average, respondents claim to be able to justify being away from their workplace for training purposes 5.6 times a year.

Among the 26 participants, 42.3% already had the opportunity to use a serious game as a learning tool. Regarding the framework in which the serious game was used, 72.7% of respondents said it was in a professional capacity.

Question 10 had the aim of understanding how the respondents experienced the serious game. The respondents could choose between five adjectives (entertaining, engaging, boring, effective and insignificant) as well as a free field. Nine respondents out of 11, namely 81.8%, found the serious game entertaining, 63.6% found it engaging and more than half of them (54.5%) considered it effective as shown in Figure 5. None of the participants rated the experience as boring or insignificant.

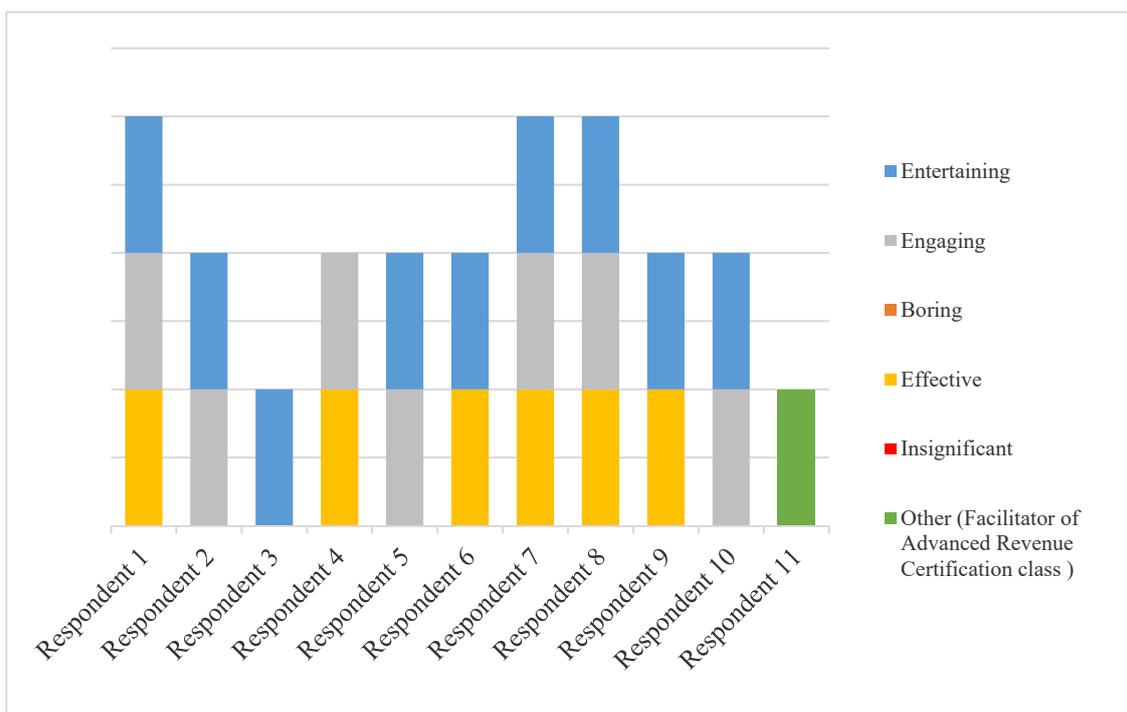
Figure 9: Improvement of the work performance further to the use of the serious game



Source: Author data

Slightly less than half of the participants (45.5%) felt that their professional performance improved slightly following the use of the serious game (Figure 6). Of the remaining six respondents, four reported that their performance had very improved and the other two participants responded “not at all” and “I don’t know” respectively.

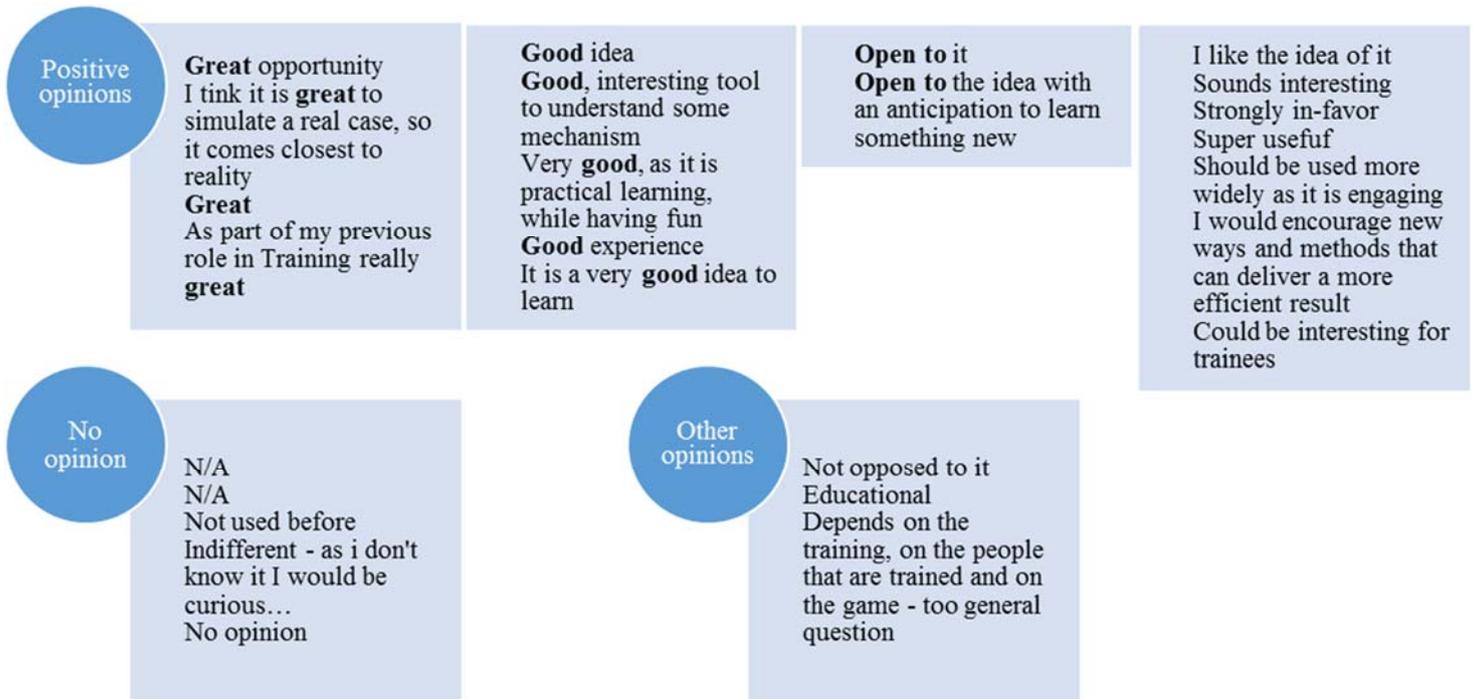
Figure 10: How the respondents experienced the serious game



Source: Author data

The last two questions were formulated in an open way, in order to know the opinion of the respondents on the use of a serious game and the skills that this tool should develop, without directing them towards preconceived answers. Figure 7 lists the data from question 12, namely “What is your opinion about using a serious game as a learning tool during training?”.

Figure 12: Opinion about using a serious game as a learning tool during training



Source: Author data

In question 13 “From your point of view, which senior skills in particular should be developed via a serious game?”, participants gave 37 responses, including 20 different skills. These were classified according to the four key competency domains and a category “other” (Table 3).

Table 3: Senior skills that should be developed via a serious game

Individual Excellence	Strategic skills	Operating skills	Organizational skills	Other
Communication (2x)	Financial acumen	Quick thinking	Organizational skills	Optimizing
Team Leadership	Decision making (2x)			occupancy / ADR
Teamwork	Data-minded (2x)			Segmentation
Delegation	Analytical skills (7x)			Channel mix
Influence	Practical thinking			Show a mirror - Let
	Strategic thinking (2x)			People experience
	Commercial			how they act; how do
	awareness - How to			other people
	use RM techniques to			experience you.

grow profit
Understanding
complexity
Thinking out of the
box (2x)

Source: Author data

Discussion

Further to the literature review and the analysis of qualitative and quantitative data, it is clear that soft skills are at the heart of the crucial qualifications of a senior revenue manager.

According to the 26 respondents to the questionnaire, effective communication is an essential quality in a senior revenue manager function. Interviewees 1 and 3 agree with this statement. Regarding the literature, the study conducted by Folkman (2014) ranked communication skills in second place of the essential skills at senior management level. The first place was given to the ability to inspire and motivate others, while the results of the questionnaire place this skill after effective communication skills. According to the results of Kimes' study in 2010 (2016), strong leadership and effective communication skills were rated 4.32 and 4.24 respectively on a scale of 1-5 (5 = very important).

The ability to coach and develop others was identified by the participants to the survey as the most important skill for a senior revenue manager. On the other hand, the results of Folkman's study (2014) place this competence only at 10th place. This can be explained by the fact that Folkman's study (2014) was conducted among 332,860 individuals from different fields, whereas the quantitative data in this study are based solely on 26 professionals, largely working in the hotel RM sector.

All seem to agree on the importance of analytical thinking skills. Indeed, both the results of the survey and the opinions of the experts show that it is fundamental that a senior revenue manager has the ability to think analytically. This competence also proved to be the most important in the survey conducted by Kimes (2016), with a value of 4.57. This can be explained by the fact that analytical thinking is paramount for interpreting results, adjusting them (McGuire, n.d.) and thus making informed and effective decisions, as well as solving problems.

As explained above, the current literature reflects the lack of qualified personal in RM functions (Milla & Shoemaker, 2007; Talón-Ballesteros & González-Serrano, 2013; Zheng & Forgacs, 2016). The results of this research demonstrate in particular the need to target the development of soft skills in the training of senior revenue managers. According to the respondents to the online survey, communication skills, the abilities to coach and develop others, inspire and motivate, as well as to develop relationships are the four core competencies for which further development is necessary. Interviewee 3 also agrees with these results, the latter being of the opinion that RM professionals must improve soft skills.

In order to respond to these skills development needs of senior revenue managers, the serious game presents itself as the ideal training tool. The main reasons for this are due to the virtues and advantages of the serious

game, and the type of skills that it develops. A serious game is a multidisciplinary learning tool called “capstone course”, according to the Interviewee 2. In other words, it offers the opportunity to combine the learning of several fields of knowledge and skills at the same time. As explained above, the functions of RM are “transdisciplinary” (cited in McKenna, 2014) and “multifunctional” (Stuart-Hill, 2016). This is why a senior revenue manager must be able to take into account different variables and apply several skills for optimal decision-making. The use of serious games in RM training would, therefore, combine the development of the aforementioned soft skills in a context involving the application of analytical, decision-making and problem-solving skills.

The responses of the 26 participants to the questionnaire indicate a desire to develop mainly analytical skills by means of a serious game.

The skills that a senior revenue manager should possess mostly require a hard-coded know-how, commonly known as “tacit knowledge”. According to Polanyi (cited in Zárrega-Oberty & Bonache, 2007, p.5), this know-how lies in the experience and skills acquired by the employee and is revealed only by its application. The serious game is a learning tool based on experience, which aims to practice and apply skills, contrary to more traditional teaching methods. It can therefore also play an important role in the transfer of tacit knowledge. This suggestion is in line with Rowe, Asbell-Clarke and Baker (2015), who propose the serious game as an innovative tacit knowledge measurement solution.

Moreover, as mentioned by Interviewee 2 and in the article by Monahan et al. (2016), the value of the serious game as a training tool rests on its ability to provide feedback and generate answers and outcomes that inform the participant directly about the impacts of one’s own decisions. Interviewee 2 confirmed that this function was almost impossible to find in other training tools.

Thus, the serious game can generate many benefits within the context of the professional development of senior revenue managers. Results show the need to use serious games in a blended learning context. Indeed, Interviewees 1 and 3 as well as the literature review attest that it is important that participants work together and meet. More than two-thirds of the respondents were also positive about the use of a serious game as a training tool. The only problem is that a high level serious game is still to be conceived.

It should be noted, that conclusions drawn must be further qualified because of the low response rate to the questionnaire and the low availability of professionals in the field to be interviewed. Therefore, additional research perspectives may exist; and confirmation of the results of the present research need to be further confirmed. Also, further research on the components of the serious game should also be conducted. In addition, the research conducted in this study focused on senior revenue managers in the hotel sector. Although these limitations do highlight the need for further research in the area, the results presented here do attest the need to further develop revenue managers into RM leaders, as well as develop the soft skills of senior managers in general, since revenue streams are omnipresent within a hotel, in many of its departments, and the promotion of a culture of RM is essential for the success of most tourism organizations. Therefore, it would also be interesting to extend the research to tourism leaders.

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