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Profile of Information Professionals: An Information Science perspective based on the RIM framework

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Abstract

The objective of this paper is to present the preliminary results of a content analysis of the Records and Information Management: Core Competencies framework (RIM) in order to understand which Knowledges and Skills are the most mentioned. It was found that the RIM emphasizes a set of Knowledges and Skills of utmost importance for the practice of the information profession and that these can be complementary or equivalent, varying according to the qualification required of the professional. With this analysis it is expected to contribute to a better understanding of the core Knowledges and Skills of Information Professionals from an Information Science perspective.

Keywords: Knowledge, Skills, Information Professional, Information Science.

Introduction

The identification of the Knowledges and Skills of Information Professionals have been subject of considerable attention by both practitioners and researchers. Currently, there are several frameworks available that discuss, organize and present the Knowledges and Skills of Information Professionals, (e.g., (ARMA, 2017; ECIA, 2005)). Given the importance of this subject, in this work we present the preliminary results of a content analysis conducted in the Records and Information Management (RIM) framework of the Association of Records Managers and Administrators (ARMA, 2017). This analysis is justified by the increasing importance of Information Professionals in organizations, as they are responsible for managing information and ensuring that information is one of the main organizational assets. To this end, Information Professionals must have or acquire what RIM calls Knowledges and Skills, and certain groupings of these as Competencies (ARMA, 2017, p.1).

The need to clearly understand the core Competencies of Information Professionals is widely discussed in literature (e.g., (SLA, 2004; ECIA, 2005; Pinto & Ochôa, 2006; ARMA, 2017)). As Falcão (Pinto & Ochôa, 2006, p.15) mentions: "Clear and unambiguous identification of core competencies for information workers […] is particularly important in a period of social and technological change and globalization.".

According to RIM, there is a considerable number of Knowledges and Skills that an Information Professional must have to perform certain Activities in different Competency Domains and Different Competency Levels. From the analysis of the framework it is possible to realize that there are certain Knowledges and Skills that are more mentioned than others. For this reason, it is considered important to identify which Knowledges and Skills are the most mentioned in order to understand which, according to RIM, are the most requested in an Information Professional. To this end, a Content Analysis was carried out in the RIM document.

In our view, this work can contribute to a better understanding of the information profession and can help current and future Information Professionals to identifying the core areas of Knowledges and Skills they need to develop and improve. This work can also be useful for organizational managers, as it can help them understand what to expect from an Information Professional.

The Information Professional

The Information Professional considered in RIM is the Records and Information Manager, which corresponds to what the *Classificação Brasileira das Ocupações* (CBO) call it as Information Professional ("*Profissional da Informação*"). This term includes a family of professions, which includes librarians, documentalists, information analysts (networked information researchers) and other professions, called "synonyms" by CBO, such as "information scientist", "information consultant", "information specialist" and "information manager", to name just a few nomenclatures applied to the Information Professional in Brazil (MTE / SPPE, 2002). The need for this diversity of nomenclatures has been verified at least since 1985, when Almeida Júnior realizes, in a potentially expanding market, what he calls "stubbornness in the use of the term «librarian» as a designation of the professional trained in the Librarianship [in the face of] an attempt to maintain a structure that is no longer in keeping with current social needs" (Almeida Júnior, 2000, p.31).

Despite this diversity, there is something that does not differ or is disputed: the fact that these professionals are responsible for one of the strategic assets of any organization, the information. It is the Information Professional who should work on the information to help managers before, during and after the decision-making processes (Almeida Júnior 2000; Azevedo 2003; Silva, 2004; Amorim, 2011, Marcos, 2017). Realizing this responsibility, it is important to understand what Knowledges and Skills these professionals should have or acquire to better perform their work with information.

In order to identify the Knowledges and Skills needed by the Information Professionals, some organizations have presented some frameworks for the profession. Among these organizations it is possible to mention the European Council of Information Associations with the "Euro-Referencial I-D" (ECIA, 2005); the *Observatório da Profissão da Informação-Documentação* (OP-ID) in Portugal with "*A Imagem das Competências dos Profissionais de Informação-Documentação*" (Pinto & Ochôa, 2006); and the Association of Records Managers and Administrators with the "Records and Information Management: Core Competencies" (ARMA, 2017). The latter is the object of this work and was selected due to the fact that its second version is the most current version of all the frameworks identified.

The RIM Framework

The RIM had its first edition in 2007, and the second edition (considered in this study) was published in 2107 (ARMA, 2017). The second edition of the RIM had the participation and contributions of 32 Records Management and Information Governance Professionals and 163 other specialists. The RIM framework presents several concepts that, for a better understanding of this work, will be discussed below.

One of the key concepts in RIM is the concept of Activity, which refers to a set of tasks that the Information Professional must be able to perform. These tasks help to answer questions about the perception of the profession, namely: "What activity is performed?"; "To whom or at what is the activity directed?"; "How is the activity accomplished?"; "Why is this activity performed?".

To perform an Activity, the Information Professional must have certain Competencies, which are defined in RIM as Knowledge, Skills, characteristics, or traits that contribute to outstanding performance in a profession (ARMA, 2017). These are related to the way in which the professional will carry out his work and are in line with authors such as Correia (2003), Silva and Ribeiro (2004), Loureiro and Jannuzzi (2005), Amorim and Amaral (2011), Marcos (2017), among others. Knowledges and Skills are the elements that together make up a Competence for a specific Activity.

Knowledge are learned factual or procedural information that support the Skill to perform the activity and Skills embodies observable, quantifiable, and measurable performance parameters that involve physical, verbal, or mental manipulation of data, people, or objects (ARMA, 2017).

The set, group or categories of Competencies in a certain area of action that define the main responsibilities or duties that make up the Information Profession are identified as Competency Domains. In all, six Competency Domains are identified in RIM, namely: "Business Functions", "RIM / IG Practices" (Records and Information Management Information Governance Practices), "Risk Management", "Communications and Marketing" and "Information Technology". According to RIM, the Information Professional may also have a certain Level of Competence in performing a given Activity, regardless of the time of profession. These levels of Competence reflect the level of knowledge or experience of the professional that is relevant to a specific topic or skills. In RIM, the Competency Levels start at Level 1 that corresponds to Beginner and goes to Level 4 that corresponds to Expert. In short, the RIM relates Knowledges and Skills with common Information Profession Activities. These are organized in six Competency Domains, framed in four different Competency Levels.

As previously mentioned, the RIM identifies different Knowledges and Skills for different Competency Domains and different Competency Levels. As an example, it is possible to mention the knowledge of "Business Values and Ethical Conduct" which appears associated with three distinct Activities: "Support opportunities for career development that are consistent with Records and Information Management program objectives to improve staff effectiveness.", "Instill the importance of ethical conduct by setting an example of ethical behavior to protect information assets." and "Provide leadership and strategic direction to successfully operate the enterprise-wide *Records and Information Management* program". All these three are related to the "Leadership" Domain and to the level 4 of the Competency Levels. A fact observed in this knowledge refers to the theme of the "professional development" of others, which mentioned in the activities mentioned above, is an ethical point mentioned in codes of ethics of the information profession (APDIS; BAD; INCITE, 1999, p.5) (Garcia-Febo, L; et. al. 2012, p.6).

With regard to Skills, the skill "Adapt behaviors and working methods when faced with change" is repeated in Levels 1, 2 and 4, always associated with the "Leadership" Domain and with three distinct activities: "Perform effectively during times of organizational change"; "Remain effective during changes in responsibilities, the workplace or other conditions that affect the organization" and "Promote effectiveness during changes in tasks, work environment or conditions". It is important to note that all these skills have a common word, effectiveness, which has emerged in several studies such as Almeida (2018), Santos (2016) and Sousa (2013), just to name a few authors.

Research Approach

In the RIM framework several Knowledges and Skills are common for different Domains and at different Levels. Given this fact, the question that arises is: which Knowledges and Skills are the most common and how do they relate to Domains and Levels of Competence? To answer this question, the following objectives were defined:

1. Identify which are most frequently mentioned Knowledges and Skills in the RIM

2. Identify in which Competency Domains and Levels, this Knowledges and Skills are placed.

To achieve the proposed objectives the first step was to perform a Content Analysis which, according to Moraes (1999, p.2), is "a research methodology used to describe and interpret the content of every type of document, thus achieving an understanding of its meanings at a level that goes beyond the ordinary reading". he Content Analysis applied to the RIM, considered a set of steps in order to understand the framework. The first of these steps was to perform a "«floating» reading" of the RIM (Bardin, 1977, p.96) in order to obtain insights on its constituent parts as well as its Knowledges and

Skills. With this "«floating» reading" it was possible to observe the relations between some constituent elements of the framework, such as Activities, Competency Domains, Competency Levels, Knowledges and Skills. It was also found that there were Knowledges and Skills that are often more mentioned than others and that there were certain Domains and certain Levels with a greater number of Knowledges and Skills associated.

The second step was to list what in Content Analysis are called Indicators. Care had to be taken to ensure that these Indicators could ensure that the framework was thoroughly and homogeneously analyzed, and that was why Indicators that met the framework objective were sought (Bardin, 1977). The Indicators that came closest to this goal were the Information Professional's Knowledges and Skills. However, these Indicators could not be analyzed in isolation, as they fit and relate to the Domains and Levels of Competence and are still the necessary elements for the professional to perform certain Activities.

The third step was to establish the hypothesis that would help to achieve the objectives of this study. Thus, the hypothesis considered was to verify if there was a higher frequency in the mention of certain Knowledge and Skills and, if so, in which Competency Domains and in which Competency Levels this occurred.

Results and Discussion

In a first analysis of the data, we sought to verify the frequency of citation of each Knowledge and each Skill in the Domains of Competence and in the Levels of Competence. The results of this analysis are presented in Table 1. As can be seen in the Table 1, each Competency Domain and Competency Level considers several Knowledges and Skills. The results show that the Competency Domain "RIM / IG Practices" has the highest frequency of citations of Knowledges and Skills. In contrast, the "Communications and Marketing" Competency Domain is what you consider to be less Competencies and less Skills. On the other hand, it also shows that it is at Level 3 that are more citations of Knowledges and Skills.

Table 1: Knowledge (K) and Skills (S) frequencies and their relationship with Competency Domains and Competency Levels

Competency Domains	Level 1		Level 2		Level 3		Level 4		TOTAL	
	C	S	C	S	C	S	C	S	C	S
Communications and marketing	5	5	23	18	42	33	18	17	**88**	**73**
Business Functions	35	30	66	64	144	121	79	80	**324**	**295**
Risk Management	24	20	59	53	123	85	68	56	**274**	**214**
Leadership	12	16	15	15	40	46	96	102	**163**	**179**
RIM / IG Practices	112	103	167	149	170	127	38	32	**487**	**411**
Information Technology	19	20	40	45	56	36	36	33	**151**	**134**
Total	**207**	**194**	**370**	**344**	**575**	**448**	**335**	**320**	**1487**	**1306**

In the following sections we will analyze the results by Knowledges and by Skills.

Knowledges

As can be seen in Table 1, in the RIM a total of 1487 citations of Knowledge are counted, of which 923 refer to Knowledge that is mentioned only once, and 564 citations refer to 206 Knowledge that are mentioned more than once (with frequencies (f) varying from 2 to 13). Table 2 shows the list of knowledge mentioned 5 or more times in the RIM.

Table 2: TOP Knowledges mentioned in RIM (f>=5)

Knowledge	Frequency
Generally Accepted Recordkeeping Principles® and best practices	13
Organizational policies and procedures	11
Customer relationship management	8
Conflict management styles and strategies	7
Project management tools and techniques	7
Organizational goals and objectives	7
Training methodologies and techniques	7
Business continuity planning and operations principles and best practices (i.e., for disaster prevention, response, recovery, and resumption of business)	7
Negotiate agreements with vendors that store vital records	6
Organizational structure	6
Legal and regulatory requirements	6
Organizational change	5
Organizational Privacy Policy	5
Data storage practices and media	5
RIM / IG principles and best practices	5
Auditing principles, techniques, and methodologies	5
Information security requirements	5
Communication techniques	5
Search techniques	5

Due to the size limitation of this paper, we will present a brief analysis of the 3 most cited Knowledges. The most mentioned knowledge is the "Generally Accepted Recordkeeping Principles and best practices", being cited 13 times (see Table 2). Analyzing this Knowledge in more detail, relating it to the Domains and Levels of Competencies (see Table 3), it is found that it is mainly mentioned in all the Competency Levels of the Domain "RIM / IG Practices". In addition, it is also mentioned in level 3 of the Domains "Communication and marketing" and "Leadership".

Table 3: Knowledge "Generally Accepted Record Keeping Principles and Best Practices" vs. Competency Domains and Competency Levels

Knowledge: *Generally Accepted Recordkeeping Principles® and best practices*					
Competency Domains	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Total**
Communications and marketing			1		**1**
Business Functions					
Risk Management					
Leadership			1		**1**
RIM / IG Practices	3	2	5	1	**11**
Information Technology					
Total	**3**	**2**	**7**	**1**	**13**

Regarding the second most mentioned knowledge, "Organizational Policies and Procedures", this is cited 11 times. Table 4 shows the relationship between this Knowledge and the Domains and Levels. In RIM, this knowledge is mainly associated with the "Leadership" domain and is present in all levels of competence related to this domain. In addition, this knowledge is associated with the domains "Risk Management" and "RIM / IG Practices", in which case it only relates to one of the competence levels.

Table 4: Knowledge "Organizational Policies and Procedures" vs. Competency Domains and Competency Levels

Knowledge: *Organizational policies and procedures*					
Competency Domains	Level 1	Level 2	Level 3	Level 4	Total
Communications and marketing					
Business Functions					
Risk Management			1		1
Leadership	2	2	2	2	8
RIM / IG Practices	2				2
Information Technology					
Total	4	2	3	2	11

Regarding the third most mentioned knowledge, "Customer Relationship Management", which is cited 8 times in the RIM, is associated with the domains "Communications and marketing", "Business Functions", "Leadership" and "RIM / IG Practices". It is also worth mentioning that it is a knowledge that is mentioned at different Competency Levels, according to the Domain where it is considered.

Table 5: Knowledge "Customer Relationship Management" vs. Competency Domains and Competency Levels

Knowledge: *Customer relationship management*					
Competency Domains	Level 1	Level 2	Level 3	Level 4	Total
Communications and marketing		1			1
Business Functions			1	1	2
Risk Management					
Leadership				2	2
RIM / IG Practices		1	2		3
Information Technology					
Total		2	3	3	8

Skills

In relation to Skills, the RIM presents 1306 citations of Skills (see Table 1), with 988 citations referring to Skills mentioned only once, and 318 citations refer to 90 Skills that are mentioned between 2 and 78 times. Table 6 shows the list of Skills that are mentioned 5 or more times in RIM.

Table 6: Top Skills mentioned in RIM (f>=5)

Skills	Frequency
Communicate appropriately for the task, orally and in writing	78
Solve problems	13
Communicate properly with stakeholders, orally and in writing	10
Demonstrate honesty and act according to ethical principles	9
Provide customer service	8
Analytical thinking	8
Provide leadership	5

Considering the results presented in Table 6, the most mentioned skill in RIM is "Communicating properly for work, orally and in writing", being cited 78 times. Table 7 shows that this Skill is present in all Competency Domains and just missing Levels 1 and 2 of the "Leadership" Domain. It is also noted that this Skill is more mentioned on the Competency Domain "RIM / IG Practices", "Business Functions" and "Risk Management".

Table 7: Skill "Communicate properly for work, orally and in writing" vs. Competency Domains and Competency Levels

Skill: *Communicate appropriately for the task, orally and in writing*					
Competency Domains / Levels	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Total**
Communications and marketing	1	2	2	2	**7**
Business Functions	1	3	8	3	**15**
Risk Management	2	3	5	5	**15**
Leadership			3	2	**5**
RIM / IG Practices	7	11	10	4	**32**
Information Technology	1	1	1	1	**4**
Total	**12**	**20**	**29**	**17**	**78**

The second most mentioned Skill is "Problem Solving" which appears 13 times in RIM. Table 8 shows that the "Problem-solving" Skill is present in 4 of the 6 Competency Domains: "Communications and marketing", "Business Functions", "Leadership" and "RIM / IG Practices". It should be noted that for the "Business Functions" domain, this skill is considered at all levels of competence.

Table 8: Skill "Problem Solving" vs. Competency Domains and Competency Levels

Skill: *Solve problems*					
Competency Domains / Levels	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Total**
Communications and marketing	1			1	**2**
Business Functions	1	1	1	1	**4**
Risk Management					
Leadership				1	**1**
RIM / IG Practices	5	1			**6**
Information Technology					
Total	**7**	**2**	**1**	**3**	**13**

Finally, the third most mentioned Skill in RIM is "Communicate effectively with stakeholders, orally and in writing" whose relationships with the other Indicators can be seen in Table 9. It is possible to observe that this Skill is mostly mentioned in Level 2, not mentioned in Level 1 or 4. In addition it is not mentioned in the "Leadership" Competency Domain.

Table 9: Skill "Communicate properly with stakeholders, orally and in writing" vs. Competency Domains and Competency Levels

Skill: *Communicate properly with stakeholders, orally and in writing*					
Competency Domains / Levels	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Total**
Communications and marketing		1			**1**
Business Functions		3			**3**
Risk Management			2		**2**
Leadership					
RIM / IG Practices		3			**3**
Information Technology		1			**1**
Total		**8**	**2**		**10**

Conclusions

This paper presents the preliminary results of an analysis of Records and Information Management: Core Competencies (RIM), regarding the most cited Knowledge and Skills of Information

Professionals. In this study, we considered an accounting of all citations of Knowledge and Skill in the RIM, however, we believe that this analysis has some limitations and will be the starting point for a more refined analysis.

Despite the limitations, the analysis of RIM allowed to identify 1129 different Knowledges and 1078 different Skills, of which 19 Knowledges and 7 Skills are mentioned 5 or more times. These Knowledges and Skills, as they are the most mentioned, seem to be good candidates to be considered the most important for the profile of an Information Professional. In addition, it was possible to identify that "RIM / IG Practices" is the domain with the most references to Knowledges and Skills and the "Communication and Marketing" the one with the fewest references. As for the Competency Levels, Level 3 is the one that contains more Knowledges and Skills.

With this work, we intend to start a comprehensive study on the profile of the Information Professional, in order to identify the most important Knowledges and Skills. In the future we intend to analyze and compare the main frameworks in this field.

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