

2. Literature Review

2.1. Recognition of IM as a discipline and a profession

2.1.1. What is a discipline?

The Oxford English Dictionary (OED) defines a discipline as:

‘a branch of instruction or education; a department of learning or knowledge;
a science or art in its educational aspect,’ (OED online, 2008a).

Becher & Trowler (2001) identified several indicators of a discipline following a qualitative study conducted among 220 academic practitioners, within 12 separate disciplines, in both British and American academic institutions. They concluded that the extent to which a subject was considered as a discipline depended on:

- the degree to which a freestanding international community had emerged;
- the existence of professional associations and specialist journals.
- A discipline could also be partly identified by the existence of relevant academic departments.

Research by Stankosky (2005), which considered the creation of a KM discipline, deemed that only a university could ultimately legitimize an academic discipline. This was demonstrated by the institution offering a degree-awarding program in the field of study. He also recognised that a discipline should be based on universally accepted frameworks, principles and best practices. Webber (2003), in her research considering the status of

information science as a discipline within the UK, similarly recognised that a discipline provided a context for research and therefore, required a defined knowledge base. Although Webber (2003) concluded that information science was a discipline, she was concerned by the decreasing use of its name by the main UK professional association and many academic departments, over such phrases as 'information management.' She felt more research attention was needed in determining this latter concept's disciplinary status and boundaries.

2.1.2. What is a profession?

The OED defines a profession as:

'an occupation in which a professed knowledge of some subject, field or science is applied; a vocation or career, especially one that involves prolonged training and a formal qualification,' (OED Online, 2008b).

During the 1960s a number of studies were carried out which looked specifically at what was recognised as a profession. The findings of these early studies are echoed in most modern examinations into the subject (Middlehurst & Kennie, 1997; Watkins, 1999). Willensky (1964) considered the process of 'professionalization,' and identified the steps taken by work groups to become a recognised profession. He identified that first, a substantial number of people become engaged on a full-time basis in some activity that needs doing. Second, a training school is established for the preparation of new practitioners. These schools, if not originally based within universities soon form connections with them, and there is then a steady development of standard terms of study, academic degrees, and research programs to expand the base of knowledge. This knowledge is linked to practice, and a rationale for exclusive jurisdiction over the body of

knowledge is created. Next, the group form a professional association to promote their collective interests. The core tasks and competencies of the profession are defined, and those competent in professional practice are separated from those deemed incompetent, those who have not completed the prescribed training. The association determines who is allowed entry to its ranks controlling access to training schools, and controlling the curriculum taught within these schools. The fourth step is a persistent process, where the association engages in political activities to get legislation enacted to protect the group. Finally, a formal code of ethics is developed to protect the profession, its clients and the service ideal. (Wilensky, 1964; Pavalko, 1971).

Other studies conducted at this time considered what attributes a profession was said to possess. Goode (1961, 1969), Greenwood (1962) and Etzioni (1969) all recognised the attributes of a profession to be:

- a basis in a specialised and systematic body of theory and knowledge,
- professional authority, allowing the professional to practice autonomously, derived from extensive and lengthy training in said body of theory,
- community sanction and recognition of this professional authority,
- a regulative code of ethics, and an ideal of service,
- and a collective professional culture and integrity, developed and maintained through formal and informal groups; such formal groups including professional associations, and educational and research centres.

It was the first three of these attributes, and the relationship between them, which were considered as the most important in determining a profession from an occupation.

It seems clear from these findings that the idea of a profession is linked to that of a discipline. Webber (2003) identified that a discipline required a defined knowledge base to be used as a foundation for research, and this in turn has been identified as the first attribute of a profession. Becher & Trowler (2001) identified that a discipline could be identified by the presence of professional bodies, again an identified attribute of a profession. It has been observed that research undertaken by a training centre will expand the body of knowledge of a profession and be linked to the practice of that profession. Subsequently, the professional association that is then formed will set its own educational standards and curriculum accreditation. Therefore, being allowed to shape the knowledge base of the discipline it is practising and in turn, the future knowledge base of the profession. Again, more evidence that the idea of a profession has a very close relationship to the idea of a discipline. It follows then, that for this to be possible, there should be a strong correlation between the defined discipline that is studied and the defined profession that is practised.

2.2. IM as a discipline

2.2.1. Context of the IM discipline

Taylor & Farrell (1992) identified that IM was concerned with the use of information technology (IT) and information systems (IS) for decision making through IRM. In this, IT was seen as both the hardware and software platforms which made the acquisition, processing and dissemination of information in all its various forms possible; IS as the automated and/ or manual processes and defined procedures for collecting, processing,

transmitting and disseminating information; and IRM as the top management functions of planning, budgeting, organizing, directing, training and control of information as a resource. Taylor & Farrell (1992) considered the broadly categorised influences on IM to be: business principles, information science, and engineering. They saw the business perspective demonstrated through the use of technology to produce results for competitive advantage, the emphasis being on the end-user aspects of managing information. With the information science perspective the accent was on information retrieval, and the use, testing, evaluation and characterizing of information systems; and engineering influencing the architecture of such systems. This view was somewhat supported by Ingwersen (1996) who saw IM as a sub-discipline of information science which was concerned with the effectiveness of IS and information transfer, and the relationship between information and its generator. Similarly, Rowley (1999b) saw IM as a practise-based discipline that had both technical, most broadly in the sense of systems-based, and behavioural dimensions. In a much earlier piece, Vickers (1984) also identified IM to be concerned with IS, these systems either being computer-based or physical, such as a library or filing system. He saw the need for IM in organisations being demonstrated through the poor integration and design of IS, with much energy being devoted by enthusiastic amateurs in re-inventing the basic principles of classification and indexing. There was a clear need for a professional approach to IS design and management, with specialist knowledge being deployed where appropriate.

In 1998, Rowley suggested a framework that presented the structure of knowledge, research and practice in the area of IM. A representation of this framework can be seen below.

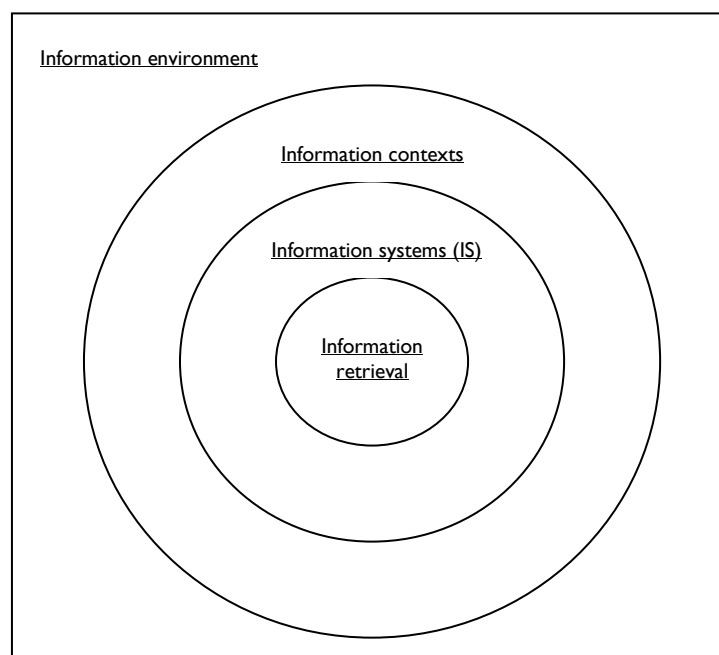


Figure 1: A framework for IM information environments.

Rowley (1998) saw the information environment that surrounded the information contexts to consist of political, legal, regulatory, societal, economic and technological forces. The information context was the context in which IS were encountered. The context influenced system design and encompassed the user. Organizations and business were important categories of context. IS represented the systems designed to enter and store information, and facilitate its effective retrieval. Systems included hardware and software, data, and in some cases, users. Information retrieval was concerned with the individual interfacing with the system, and is concerned with the actions, methods and procedures for recovering information from stored data. The first two levels, information retrieval and IS, focus on the individual and their use of information and the systems that are designed to facilitate such use. The second two levels, information contexts and information environments, are concerned more generally with the relationship between information and society and its organizations. Effective IM, argued Rowley, needed to address the issues at all of these levels and the relationship between these issues.

In both an article published in the same year and one a year later, Rowley also proposed a cyclical model of the 7R's of IM, identifying that IM as a discipline must be concerned with the management of all the processes identified (Butcher & Rowley, 1998; Rowley, 1999b). The cycle gave a summary of the processes that contribute to information processing and knowledge creation. The cycle is presented below, the processes occurring in an anti-clockwise direction.

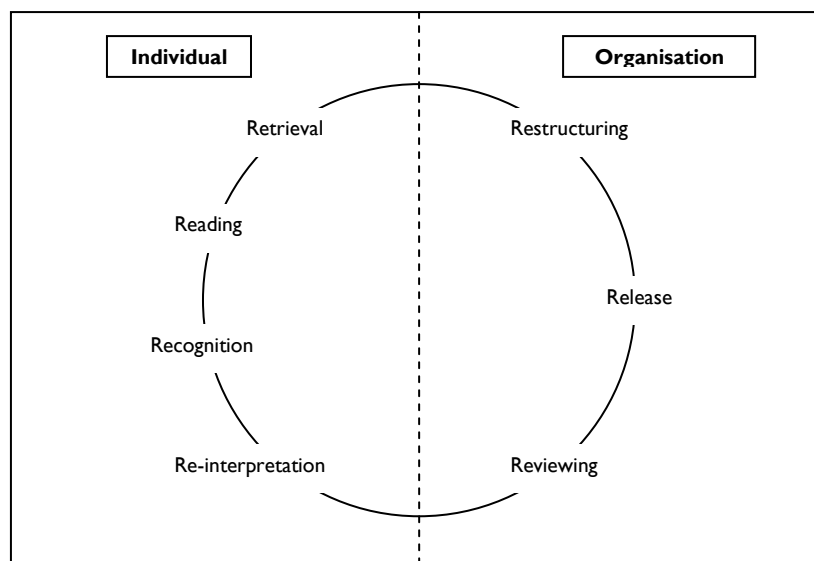


Figure 2: The IM cycle

On the left-hand side are the processes performed by the individual, on the right-hand side are the processes performed by the organisation. The completion of all these processes may be supported by systems but this would be more likely the case in the organisation based processes. Although, Rowley (1999b) identified that information processing was an activity common to all information users, she viewed IM as the support of others in their information processing, and the province of the professional.

2.2.3. Nature of the IM discipline

The models suggested by Rowley above were in response to her recognition that IM meant different things to different people. Rowley (1998) recognized that a number of different professionals would be involved with the IM processes at each level of her identified framework, demonstrating in a later paper that these individuals would require and possess differing IM competencies derived from education and training within the varying disciplines of: business and management studies, information and library studies, and computer science (Rowley & Slack, 2000). To this end Rowley recognized that within further and higher education, IM was addressed in many different ways. Courses and module options in IM in the UK can be offered by departments and schools representing any of the above mentioned disciplines (Rowley & Slack, 2000; Wilson, 2002a); the IM perspective adopted for any particular course curriculum depending on the mix of disciplinary components used (Taylor & Farrell, 1992). Hornby & Andretta (2001) argue that this has been turned into a strength within the UK, with the modularization of courses allowing individuals to tailor their degree towards their chosen IM career path through the selection of various option modules. This flexibility in approach however, inevitably leads to an absence of consensus on the core concepts of IM and makes the boundaries of an IM discipline difficult to define. Similarly, the multi-disciplinary, or inter-disciplinary, nature of IM opens the field up to criticism when described as a discipline in its own right. Rowley (1999b), as well as Hornby & Andretta (2001), also recognized that the growth in the capabilities and applications of ICTs over the past twenty years, had lead to changes in the nature of the systems IM was, and would be concerned with. These changes had caused the skills required to effect IM to become transitory and had created volatility in the discipline's knowledge base, again making the required body of knowledge of an IM discipline difficult to define.

2.2.4. Stakeholders of the IM discipline within the UK

Hornby & Andretta (2001) observed that like all disciplines delivered through professional courses in a Higher Education (HE) context, IM was forced to maintain a balance between the academic expectations of the university in which it was located and the demands of the professional associations which recognised its courses. The academic expectations of any discipline taught in the UK are set primarily by the QAA, part of their role being the development of benchmark statements which set out the expected standards of bachelor degrees with honours in broad subject areas (QAA, 2007a). They also define the nature and extent of the discipline in question, setting the boundaries of included subject areas (Hornby & Andretta, 2001). In 2000, the QAA published a benchmark statement for the newly titled discipline 'Library and Information Management.' This benchmark statement was recently revised, and published in late 2007. The original QAA benchmark statement recognised the Librarianship and IM disciplinary group to include librarianship, information science, archives administration and RM, as well as KM, publishing and communications (QAA, 2000). It did not stipulate a distinct IM discipline however, seemingly only using 'Information Management' as an umbrella term for information related disciplines other than librarianship. Conversely, it did state that degree programmes within this field were designed to prepare students for professional posts in IM, along with posts in library or record office management, and cognate fields. The revised benchmark statement confirms this, and both statements declare the importance of professional and vocational relevance of degrees within the Librarianship and IM subject area (QAA, 2000; 2007b). The 2007 benchmark statement recognises that programmes are likely to be accredited by relevant professional bodies such as CILIP. However, it also notes that it is applicable to all programmes whether they are accredited by a professional body or not. (QAA, 2007b).

If courses are accredited by a professional body, it is the view of Hornby & Andretta (2001), that this body will exert a considerable amount of influence upon the content and structure of its curriculum. To illustrate their point, they note that the original benchmark statement produced for the Librarianship and IM discipline was actually based on the course accreditation documents of the two societies who amalgamated in 2002 to form CILIP (CILIP, 2005a), the Library Association (LA) and the Institute of Information Scientists (IIS) (Hornby & Andretta, 2001). However, where the QAA benchmark statement focuses on the content of a degree in terms of the standards of teaching, professional body accreditation considers the content in terms of preparing a student to be fit to practice the represented profession upon graduation (Huckle, 2002).

Accreditation is a voluntary process of self and peer review, and assures students that the course they are undertaking meets the standards of the profession they are about to enter (CILIP, 2005b). Also, unlike the QAA benchmark statement, CILIP accreditation is relevant to degrees at both undergraduate and postgraduate level (CILIP, 2005b). In assessing a course for accreditation, CILIP does not seek to stipulate the exact content of the course but will expect the learning outcomes of its core content to address a significant proportion of the Body of Professional Knowledge (BPK) (CILIP, 2005b); a document devised by CILIP to define the unique knowledge base of library and information professionals that distinguishes them from professionals within other domains (CILIP, 2005c). The Institute also require courses to include generic management and transferable skills, including project management and research skills, and also expect all students on a course to be exposed to current professional practice (CILIP, 2005b). Recently recommendations have been made for changes in the CILIP accreditation process, including the recommendation that it should be Universities, rather than the individual courses that they offer, which should be accredited (CILIP, 2008).

The BPK document adopted by CILIP comprises a 'core schema' of 'devices and processes central to the specialist knowledge and skills exercised by the information professional,' (CILIP, 2005c). These are contextualised by the ethical, legal, policy and organisational issues within the 'applications environment;' and are complemented by 'generic and transferable skills,' including computer and information literacy, and interpersonal skills. CILIP recognise that the BPK is not a curriculum, and acknowledge that it is possible and indeed desirable for students to pursue a wider range of subjects than are stipulated. It is also recognised that the identified areas of knowledge and practice within the domain of the information professional will evolve and develop over time, and as such the BPK is designed to be flexible and adaptable to accommodate changing needs. (CILIP, 2005c). CILIP realise that the BPK overlaps with the knowledge bases of other similar professions, but contend that it is how this knowledge is applied that denotes information as a profession and a discipline (Huckle, 2004; CILIP, 2005c).

By defining a body of knowledge in this way, CILIP are identifying the boundaries for the information discipline and profession. However, the admittance that the body of knowledge is not exclusive to just the information profession, and that the body of knowledge is open to revision, calls into question the validity of these boundaries. Similarly, the QAA benchmark statement for the Librarianship and IM discipline is also open to revision. Furthermore, it is not possible to determine the boundaries of any single discipline from either document as both the BPK and benchmark statement are concerned only with the generic skills central to all the disciplines they represent, and do not seek to define the boundaries of any one in particular. It is therefore, not possible to determine from these documents a definite body of knowledge for an IM discipline, and in turn determine the basis of an IM profession.

2.2.5. Studies of the IM curriculum

A number of studies were identified that considered the curricular content of HE IM degrees within the UK. Ellis et al (1997), considered the course elements of IM programs against the core and non-core elements of an IM curriculum previously identified by the LA. Core elements identified were:

- studies of organisations and management;
- information in organisations- information flows between and within organisations, decision making, and RM ;
- professional issues- definition of IM, roles of the information manager;
- information studies- indexing, classification;
- information sources- internal and external sources, online systems and services;
- information as a resource;
- information environment- information economy, laws and acts relating to information use e.g. data protection, freedom of information, copyright;
- IT- hardware/ software; programming; networks; hypertext; e-mail; databases; systems analysis and design; systems management.

- information and users.

Non-core elements included: research methodology; statistical methods; interpersonal, communication and presentation skills; and marketing. Also considered as non-core elements were the application of IM within, and information sources for, specific areas such as business, healthcare, science and law.

Ellis et al (1997) found that at the time of the study all of the 'courses' taught within an IM program had a high level of practical teaching in IT, with exercises and proficiency in spreadsheets and database design given as specific examples. They found great variation in the 'information' type courses but found many programs had courses on the theory and practice of IM. Management courses varied as to the amount of practical skills and theory taught, yet most explored types of organisations, organisational culture, roles in organisations, and group behaviour. Systems teaching was however, found to be similar across all the courses offered on the programs. Research methodology and statistics were courses included in three of the programs, considered as being important skills in the information manager's toolkit, although only considered as non-core elements by the LA. 'Training skills' was also a module which appeared in one of the IM programs. (Ellis et al, 1997).

Hawkins (2000) considered IM courses within her review of UK Library and Information Studies (LIS) curricula. Course content was analysed using the LA/ IIS accreditation documents, and modules within courses were then grouped under the five topic sections outlined within the accreditation checklist. These sections included points very similar to the core elements used within Ellis et al's (1997) study. Section titles were:

- Information generation, communication and utilisation;

- Information management and organisational context;
- Information systems and ICTs;
- Information environment and policy;
- Management and transferable skills.

Twelve IM courses were identified from information received by ten Universities, all of whom were members of the British Association of Information and Library Education and Research (BAILER). All courses entitled IM were considered for analysis, regardless of study level or mode of delivery. Although the accreditation document was used, it was not stated whether courses considered within the study had been LA/ IIS accredited. Determined on occasion, from only the module title, Hawkins identified that all twelve courses comprised modules which could be grouped under four of the five outlined sections. These sections therefore, represented the core areas of the curricula. Only 'Information environment and policy' was not represented by all twelve courses. Modules from nine of the courses could be grouped within this section but three courses only offered option modules which represented the topic. It was found that some Universities also offered modules which could not be grouped within the set topic areas. These were mainly option modules, and subjects considered included new media, electronic publishing and digital design; IM within specific contexts- health, schools and local government; and KM. No other real conclusions were drawn from the study however.

In light of the Bologna Declaration (1999), Widén-Wulff et al. (2005) sought to map the education of IM and KM within Europe as part of a larger report considering the curriculum of librarianship and information science as a whole (Kajberg & Lørring, 2005). Through a sample of IM modules from various schools within Europe they identified the key competencies of IM were:

- Contents – different forms of information (i.e. external/internal, formal/informal)
Different approaches towards the nature, role and value of information and knowledge in organizations
- Context – the role of organizational culture, information society. Knowledge creation.
- Process – information storage and retrieval, information seeking, tools and techniques for information dissemination
- People – information sharing and utilisation
- Technology – information systems and design
- Strategic and planning issues, including ideas of intellectual capital.

Within the content analysis they found a greater correspondence of topics within the IM modules considered, rather than in the KM modules; it therefore, being problematic to identify a coherent understanding of the KM field. In considering how IM education was

delivered in Europe, Widén-Wulff et al. (2005) found that IM courses were typically delivered at Postgraduate level, the greatest number of MSc IM programmes found within the UK. Undergraduate courses in IM existed but were very much a minority. They also concluded that KM was usually found as an integrated part of IM programmes and that there were very few MSc programmes specifically in KM.

In an investigation of a different nature, Quarmby et al (1999) surveyed graduates of the MSc IM programme at the University of Sheffield, to ascertain the relevance of the curriculum to the LIS employment market. Respondents were asked for the particulars of their graduate employment posts including job sector and title. They were asked to list the duties of both their first and current/ last posts, and to classify them into ten given categories. They were then asked to rank these duties in order of their importance to that post. Respondents were also asked which components of the course they felt had been most useful in their career. Responses from this question were organised against the then current, principal modules of the MSc, and presented in percentage of response. The survey found that the majority of respondents (43%) found employment in the Industry/ Commerce sector, and that the two most common job titles held were a variation on 'Computer/ Systems/ IT/ Programmer' at 23%, and 'Information Officer/ Scientist/ Manager' at 22%. The two categories with the highest response, of duties carried out by respondents in both their first and current posts were, 'Searching for information' followed by 'Administration and management.' In total, thirty-three main duties were identified and ranked in order of importance for both graduates' first and current/ last posts. A high degree of similarity was found between the two rankings, especially at the top and the bottom, but more variation was present with the middle ranking duties. The six highest ranked duties performed were found to be: Searching-Internet; Searching- manual; Database management; Administration; Searching- CD-ROM;

and Educate and train end- users. The most important component of the IM programme for respondents was considered as 'Database design and systems analysis' with 19% of responses, shortly followed by 'Computer skills' at 17 %. 'Internet and hypertext mark-up language (HTML)' and 'Online searching and searching skills' were the next two components with the highest response.

2.3. IM as a profession

2.3.1. Role of representative associations

As a representative body for information professionals, CILIP have inevitably forged a role within the practice of the IM profession. Thompson (2006) wrote an occupational profile for an Information officer/manager for Graduate Prospects, the UK's official graduate careers website. In this she stipulates that most employers require a degree or specialist postgraduate qualification accredited by CILIP from applicants, it being difficult for them to progress without these relevant qualifications. She also states that chartered membership, the 'gold standard' professional qualification offered by CILIP (CILIP, 2007b), is often either a requirement or an advantage within employment posts. (Thompson, 2006). CILIP Chartership recognises that an individual has performed at the highest standards of professional practice, and has a commitment to undertake continuing professional development in line with CILIP's defined BPK; as stipulated by CILIP's Ethical Principles and Code of Professional Practice for Library and Information Professionals. To be considered for chartered membership, an individual must be a current Associate member of CILIP; indicating that they possess an accredited CILIP or other recognised qualification, or that they are a para-professional who has gained CILIP Certification in recognition of their current experience. They must also demonstrate that they have completed a stipulated period of professional experience, one year being the minimum length of practice for those who hold an accredited CILIP qualification. (CILIP, 2007b).

Another representative association for the practice of IM within the UK is, Aslib, The Association for Information Management, its membership consisting of corporate, individual affiliate, and student members. Aslib recognises itself as ‘the world's leading corporate information management organisation’ (Aslib, 2008a), its expertise lying in advising organisations and governments on any of their IM issues and problems (Aslib, 2008b). The key roles of the organisation are to: stimulate awareness of the value and benefit of managing information as a resource; represent and lobby for matters of national and international importance to the information sector; and provide a range of information related products and services to address the needs of the information society. Aslib meets these roles through its four main functions of consultancy, journal publications, training, and recruitment for information professionals. (Aslib, 2008b). Although involved in the professional IM arena, Aslib is not capable of awarding professional qualifications or accrediting courses. It is CILIP therefore, that fulfils the role of a professional body in the UK for IM as outlined by Wilensky (1964).

2.3.2. Professional practice of IM

Within his study of librarian’s information acquisition and transfer within an academic library setting, McClure argued the case for creating the position of ‘information manager’ within the library, a role which would have overall authority and responsibility for organisational information handling. The responsibilities of this job title, which was becoming much more common in a number of government sectors and businesses at the time, included: directing the development of information resources for improved organizational decision making; coordinating the organisation’s access to and dissemination of information related to the accomplishment of goals and objectives; facilitating the exchange of organizational information amongst members; providing a

storage and retrieval system for information resources; evaluating existing mechanisms of information access and dissemination and proposing alternative methods by which organizational members will have access to information resources for decision making. McClure saw this as a role for an administrator, who had broad skills and knowledge of information sciences, information technology, personnel and social psychology, contingency management techniques, systems analysis and program planning, and at least basic statistical skills for summary and analysis of information. (McClure, 1980).

Stibic (1986) saw the information manager as an integrated role for both computer people and librarians, the diverse functions within the role including: general management of information use within the organisation, including co-ordination and strategic planning of the information resources and information systems for the achievement of organisational objectives; the selection and installation of hardware, and design of telecommunications infrastructure; the selection and development of software; control of the computer centre, mail room and printing department; control of the library and information centre; the design and use of in-house standards; hardware and information security; and responsibility for education of members within their team. A study, consisting of interviews with 10 information managers within the Republic of South Africa was carried out by Roets & Boon (1992). Many of the responsibilities that the participants identified as part of their role in this study corresponded to those identified by Stibic (1986). However, Roets & Boon (1992) felt there was a discernable shift in the emphasis of the role to 'real' IM, although the management of ICTs was still a major responsibility.

Stibic (1986) identified that the role of the Information manager could be defined and named in many variants. Examples given in his paper included: information architect, information manager, information officer, intelligence manager, and Chief Information

Officer (CIO). He felt the latter title was the one by which an information manager was most commonly known, and felt that the role was usually placed high in an organisation's hierarchy, reporting directly to the company's president. This was confirmed by Roets & Boon (1992), who also added that the manager of information as a resource should be placed on the same level as the managers of other organisational resources such as human resources and finances, to reflect the importance of information to the organisation as an asset. It must be noted however, that as such a select group were used for the South African study it is not really possible to generalise these findings to all of those describing themselves as information managers. Also, it is not clear where the evidence for Stibic's paper originated from.

Chapman & Pinder (2007) produced an IM responsibilities framework based on research carried out in 2006 by TFPL. Their report identified IM as a process that many disciplines were a part of, including library and information services, RM, KM, and a separate IM discipline, but the details of this were not expanded upon. They identified that there were many IM specialist roles that were made up of a number of IM responsibilities and competencies, although, they note, these roles may not be labelled as IM. They identified six linked clusters of IM responsibilities, that stipulated functions interestingly very similar to those identified by Stibic (1986) and Roets & Boon (1992). These responsibilities were: information strategy; enterprise information architecture, which is concerned with the provision of the infrastructure that enables IM; information governance; content creation and acquisition; communication and publication; and information exploitation and use. Approximately 100 different role titles were identified by Chapman & Pinder (2007) as having responsibility for at least one, if not more, of these six IM responsibilities. The role of CIO was only mentioned within the first responsibility; whereas, the specific role of Information Manager appeared in four of the other responsibilities identified.