Knowledge Management in Law Firms: An Annotated Bibliography

Andrew M. Winston

Drexel University

INFO 522

December 8, 2010
Knowledge Management in Law Firms: An Annotated Bibliography

Discussion

Introduction

This annotated bibliography covers knowledge management in the law firm context. There is a surprising dearth of scholarly research on this topic, much of it generated by one scholar. Only one article was found to address what, for practitioners, might be the most critical issue: the effect of knowledge management on law firm financial performance. These articles were published between 1999 and 2009, and were authored by scholars in Norway, Australia, South Africa, the United Arab Emirates, the United Kingdom (Scotland) and Canada; no American scholars appear to be publishing in this area, nor British scholars addressing the major London firms.

Description of topic

Knowledge management in the law firm context, as encapsulated by du Plessis and du Toit (2006), involves a law firm’s “ability to identify, capture, and leverage the internal knowledge of individuals,” and to combine such internally-sourced knowledge with knowledge derived from various external sources in order to “enhance the ability of all law firm staff, to create and share knowledge across the firm” in order to compete more effectively with other law firms in providing client service. Law firm knowledge management is dependent upon and intertwined with information technology (IT) and the extent to which law firms effectively adopt IT in support of knowledge management, but is not solely a technological matter—issues such as information culture and the importance of personal service by IT staff in the knowledge management context (Choo et al., 2002) ensure that the issue cannot be reduced solely to the question of which software to purchase.
Discussion of findings

Notwithstanding the size of the legal industry in the United States and worldwide, and the trend over the past few decades toward larger and larger law firms operated more like complex corporations than nonhierarchical partnerships, and the nature of law firms as knowledge-driven organizations, there is surprisingly little scholarly research about knowledge management in the law firm context. Of the research that exists, a significant portion of it was published by Dr. Petter Gottschalk of the Norwegian School of Management, either alone, or, in a few cases, working with other scholars. (Because he has written so extensively on this topic, articles he has authored are included in the bibliography in chronological order rather than alphabetically by title, so that the evolution of his research may be more apparent.) All of the research was conducted on non-United States law firms. Because all firms involved are either in Europe (Norway and the United Kingdom), or are, like the U.S., in former British colonies with a common law legal system, the results are nonetheless relevant for American law firms.

The use of IT in support of law firm knowledge management was a major focus for many of the articles reviewed. All of the articles authored or co-authored by Gottschalk focus on this topic in various contexts. In his initial article, Gottschalk developed the hypothesis, based on a survey of Norwegian law firms, that a positive relationship exists between IT use and law firm knowledge management (Gottschalk, 1999a); further research by Gottschalk indicated that the extent to which law firms use IT generally has a significant impact on the extent to which they use IT for knowledge management (Gottschalk, 1999b). In 2000, Gottschalk found that law firms did not, contrary to expectations, use IT significantly less than consulting firms in knowledge management, although law firms made heavier use of databases, rather than more general information sources (Gottschalk, 2000).
Apistola and Lodder (2005) presented a proposed framework for law firms to consider in evaluating whether and to what extent to different IT tools (e.g., e-mail, intranets, the Internet, groupware, knowledge systems) might be useful in addressing different aspects of law firms’ knowledge management needs (developing, sharing, and evaluating administrative data, declarative knowledge, procedural knowledge, and analytical knowledge). Interestingly, lawyers at the South African firms surveyed by du Plessis and du Toit (2006) generally reported positive attitudes toward the use of IT for knowledge management, and high usage of Internet and intranet applications, but little use of extranets and a surprising level of uncertainty about the knowledge management systems their firms used.

More specific research topics with respect to IT and knowledge management emerged in Gottschalk’s further research. Gottschalk and Khandelwal (2004) explored a “stages of growth” model for the development of law firm IT systems in connection with their knowledge management processes, as firms pass from (1) having only “end-user tools” like e-mail and word processors, to (2) using IT to identify “who knows what,” to (3) using IT to retrieve information stored in documents such as contracts, memoranda, etc. in the “what they know” phase, to (4) using IT systems in such a way that the systems themselves help provide solutions—the “how they think” phase. Unfortunately, the results of the research did not confirm that law firms tend to move through these stages of growth in the manner hypothesized (Gottschalk & Khandelwal, 2004). In 2003, Gottschalk and Khandelwal published the results of research on Australian firms that, when analyzed using a stages of growth framework, suggested that the number of lawyers, and the number of IT workers, tended to predict the stage of IT knowledge management projects such firms used.
Gottschalk and Karlsen (2009) revisited the stages of growth model with additional research, in an article that contains helpful reviews of the law firm business (acknowledging the rise of multinational law firms and firms’ intense competitive outlooks), the role of lawyers as knowledge professionals, and the idea of knowledge organizations, finding that most of the firms surveyed were in the third stage of growth. This newer research, however, did not confirm law firms’ progression through the stages of growth, either (Gottschalk & Karlsen, 2009).

Gottschalk (2002a) addressed an area of great interest to practitioners when he explored whether client demands were driving law firms’ implementation of IT in knowledge management areas. Despite industry predictions, survey results did not show that client desires had a significant impact on firms’ selection of IT for knowledge management purposes, although clients reported higher levels of satisfaction with firms that could readily receive from and share with clients both administrative and substantive information about client matters (Gottschalk, 2002a). Of course, as with much of Gottschalk’s earlier work on law firm knowledge management, given the rate of technological development and implementation in the past decade, one wishes for more current research.

Gottschalk also explored the use of IT in what he refers to as “inter-organizational knowledge management,” or knowledge management among law firms that are members of networks in which business is referred, and to an extent knowledge is shared, among members (Gottschalk, 2001). Based on research with respect to Norwegian members of Eurojuris, a network of firms in 19 European countries that has invested heavily in IT, law firms were using the network for finding solutions to legal problems, selecting among possible solutions, and evaluating the solutions selected, but cooperation on cases by member firms was not reported (Gottschalk, 2001). Gottschalk and Khandelwal (2002b) compared research on inter-
organizational knowledge transfer based on surveys of Norwegian and Australian firms, finding that while firm cooperation and knowledge cooperation predicted the use of IT in support of such networks in Norway, only knowledge cooperation was such a predictor in Australia.

Other articles address the human side of law firm knowledge management. An intensive case study of a large Canadian law firm with a significant investment in knowledge management strategy, technologies and processes suggests that “information culture”—a firm’s “values, norms, and practices with regard to the management and use of information”—was more important to information use outcomes than “information management”—the “application of management principles to the acquisition, organization, control, dissemination, and use of information” (Choo et al., 2002). Also writing in 2002, Hunter, Beaumont, and Lee conducted research with respect to Scottish law firms finding that, while the firms in question had deployed IT in service of knowledge management, only some of the firms utilized dedicated personnel to actively manage their knowledge management functions. Hunter et al. (2002) argue that the development of appropriately staffed knowledge management functions is needed in order for firms to effectively convert their tacit knowledge to explicit knowledge, and that industry focus on IT solutions overlooks this element of knowledge management. Forstenlechner, Lettice, and Bourne (2009) in their conclusions stress the importance of “personal know-how exchange” in their law firm research noting that the importance was due not to inadequate knowledge management technology, but to lawyers’ preference for face-to-face information exchange, noting that, although knowledge management involves, at its core, automation of knowledge processes, “it remains a discipline highly dependent on human interaction.”

Forstenlechner et al. (2009), using the results of an intensive case study of one of three largest multinational law firms in the world, address the knowledge management issue that many
practitioners might view as central: the effect of knowledge management on law firm profitability. This research supported the proposition that knowledge management increases a law firm’s fee income (Forstenlechner et al., 2009). While comparative results from other law firms would, of course, be desirable, hopefully further research on this topic will be forthcoming.

Much of this research dates from the earlier portion of the 2000s or 1999, which leads one to hope that this area will be explored further by scholars, as information technology (IT) development and implementation in the knowledge management context increases, and new knowledge management tools (such as document assembly software) become more widely adopted. It would seem likely that the large, and often multinational, law firms based in major U.S. cities, and in London, would have the most highly developed knowledge management processes and technology in the world. Given such firms’ focus on the bottom line, following the example of Forstenlechner et al., and focusing further research on the economic impact of knowledge management, would be not only a fruitful area of study, but also one where such law firms might be more eager to participate, in the hopes of gaining insights conducive to increased profitability.
Bibliography


Search Strategy: Search of Google Scholar, using basic concepts relating to knowledge management and law firms.

Database: Google Scholar

Search Method: Keyword search

Search String/Process: “law firm” “knowledge management” with the radio button for Legal Opinions and Journals checked

Abstract: Based on existing literature and empirical research, partly carried out by us in 2004 and 2005, we propose in this paper a preliminary framework that is meant to be used for knowledge management of in particular individual lawyers within a law firm. The underlying idea is to combine in our framework general taxonomies of the three core elements of knowledge management within today’s law firms, viz. knowledge, knowledge processes and Information Technology (IT). The present framework sets out in main lines what we believe would be helpful for lawyers to clarify their needs regarding Information Technology and to evaluate the actual use of IT.

Annotation: Proposes a set of three taxonomies for law firm knowledge management based on the results of surveys of Dutch law firms conducted by the authors. Also includes a suggested framework for assessing the utility of various types of IT in supporting different knowledge processes within a law firm. The authors note in passing the dearth of scholarly research regarding knowledge management in the law firm context, and hypothesize that that is due to the legal profession’s focus on individual practitioners rather than the organization. When the article was written, Apistola was a Doctoral Candidate, Faculty of Law, Vrije Universiteit Amsterdam, and Lodder was a member of the law faculty there. Article was published in an open-source journal that, according to its website, publishes peer-reviewed articles (as well as non-refereed articles), and also specifically indicates this article was peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:**
Search of Library Literature and Information Science database, using the basic concept of knowledge management in the legal context.

**Database:**
Library Literature and Information Science (Dialog File 438).

**Search Method:**
Descriptor and keyword search

**Search String/Process:**
s knowledge management
s law
s s1 and s2

**Abstract:** The paper presents a case study of a large Canadian law firm with a distinctive information culture that is vigorously implementing an information management strategy. Our findings suggest that, at least for this organization, information culture trumps information management in its impact on information use outcomes. Thus, the strongly held information values and behaviors in the firm accounted for more than one-third of the variance in information use outcomes. Employees did perceive a high level of information management activity in the firm, although information management played a smaller, perhaps indirect role in explaining information use outcomes. What might organizations do to improve information use? This study suggests that organizations might do well to recognize that, in the hustle and bustle to implement strategies and systems, information values and information culture will always have a defining influence on how people share and use information.

**Annotation:** Analyzes the results of a detailed survey of employees at one of Canada’s largest law firms, a diversified, multi-office organization offering legal services in a broad range of practice areas. Respondents included lawyers as well as support and administrative personnel. Research in connection with the survey was extensive, including not only analysis of survey responses, but also interviews of the firm’s senior management, including its Chief Knowledge Officer, regarding the firm’s knowledge management strategy. Analysis of survey results suggested that this law firm’s “information culture” plays a greater role in information use outcomes than its high level of information management activities. Survey questions were
detailed and varied, addressing a broad range of information-related behaviors. Copies of the survey questions were included, providing very helpful insight into how researchers conceptualize knowledge management issues in the law firm context. This article was authored by seven scholars working in several disciplines at three Canadian universities, including Dr. Chun Wei Choo of the University of Toronto. Article was published in a journal that, according to its website, is an international, peer-reviewed journal. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.
Search Strategy: Search of Inspec using DIALOG

Database: Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

Search Method: Descriptor and keyword search

Search String/Process: s knowledge management/de

s law()firm?

s s1 and s2

Abstract: In the practice of law the products and applications of information and communication technologies, such as intranet infrastructures; document, content and case management systems; workflow management systems; artificial intelligence technologies; and business intelligence tools are becoming increasingly important means of communication, of information distribution, and of sharing knowledge. This article examines the degree of impact the changing legal information environment has on the legal research process and to find out what benefit legal research will gain from information and knowledge management. It looks into the process of electronic or digital legal research and seeks answers to some questions with regard to the skills that lawyers, who are successful legal researchers in the print information environment, possibly will need to also be successful researchers in a digital information environment. It also reports the results of an empirical, explorative study identifying the extent as well as some barriers and concerns with regard to the utilisation of KM systems in South African law firms.

Annotation: This article is useful for its analysis of lawyers’ information access needs in the context of: primary and secondary sources of legal information; information about client cases and information about clients generated in a law firm’s dealings with them; “forms and precedents” that are used repeatedly in work for clients; and other information useful to firm lawyers, including information about the firm’s operations and administration, and about its business environment. Describes and evaluates the results of a survey of South African lawyers regarding technology and knowledge management. A high percentage of respondents indicated
willingness to use knowledge management to acquire and share information, to work remotely, and to participate in developing new knowledge, although there was a significant level of uncertainty about whether knowledge management systems were in use at their organizations, and some unfamiliarity with extranets. Also discusses librarians’ role in light of survey results: although not generally needed to assist in day-to-day legal research, librarians perform important information management functions, and (the author argues) should take on an increasing role in knowledge management. At the time of the article, du Plessis was a lecturer at the Department of Information and Knowledge Management at the University of Johannesburg, and du Toit was the Chairperson of that Department. Article was published in a journal that, according to its website, is an international, peer-reviewed journal. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:**
Search of Inspec using DIALOG

**Database:**
Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

**Search Method:**
Descriptor and keyword search

**Search String/Process:**
s knowledge management/de

s law(firm)?

s s1 and s2

**Abstract:**

Purpose - The purpose of this paper is to present the results of an empirical study to analyse the impact of the introduction of knowledge management (KM) practices on the financial performance of a multinational law firm and to refine the KM Balanced Scorecard being used by the organisation.

Design/methodology/approach - A case study approach was taken using multiple sources of evidence from within the organisation including internal surveys on KM services, performance measures, usage data for KM systems and tools and organisational financial data. Stepwise regression and correlation analyses were used to test causal relationships within the KM Balanced Scorecard.

Findings - The most important predictors for financial performance (fee income) are the value perception of KM, quality of counsel and legal opinions, ease of use of know-how systems, quality of service from the KM team, usage of news and current affairs, personal know-how exchange with peers, lawyer commitment and KM staffing.

Research limitations - This research was limited to one law firm and used the existing KM Balanced Scorecard for analysis. The results may therefore have limited generalisability to other organisations.
Practical implications - The results have been used within the case study organisation to improve KM services and to improve the ability to measure the impact and return on investment for KM activities.

Originality/value - This research provides empirical evidence for the positive impact of KM on fee income within a law firm.

Annotation: Analyzes results of research on the financial benefits of knowledge management based upon an in-depth case study on one of the three largest law firms in the world. The firm had a well-developed knowledge management function, with knowledge management staffing far above the industry average and general investment also above industry average. Results supported the conclusion that some knowledge management predictors can partly predict fee income: the value perception of knowledge management services based upon quality of personal service from the knowledge management team, personal know-how exchange with peers, quality of counsel and legal opinions, ease of use of know-how systems, use of news and current affairs, lawyer commitment, and knowledge management staffing. Given law firms’ focus on profitability, this would seem a fruitful area of research; it would also seem likely that firms would be more inclined to participate in research in this area if there are financial insights to be gained. Consistent with the focus of this article, its authors are scholars at schools of business or management in the United Arab Emirates and in the United Kingdom. Article was published in a journal dedicated to the topic of knowledge management and, according to its website, is peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Selected a more recent article to review its list of references in order to find promising articles.

**Database:** n/a.

**Search Method:** Footnote chasing.

**Search String/Process:** Reviewed reference list for du Plessis and du Toit (2006), and selected Gottschalk (1999a) based upon its title.

**Abstract:** Law firms represent an industry which seems well suited for knowledge management investigation. To examine knowledge management in Norwegian law firms, a study that involves two phases of data collection and analysis was designed.

**Annotation:** The author conducted research on the use of knowledge management in law firms by means of a study of the largest firm in Norway, followed by a survey of firms in Norway, and formulated three research hypotheses based on the results. These hypotheses are: (1) a positive relationship exists between firm knowledge and knowledge management, (2) a positive relationship exists between firm culture and knowledge management, and (3) a positive relationship exists between IT use and knowledge management. The author is by far the most prolific author of scholarly research articles regarding knowledge management in the law firm context. This article represents the beginning of a series of research articles by Gottschalk on law firm knowledge management and sets the stage for a subsequent article in the same year regarding the third research hypothesis indicated above. The research is subject to the same limitations of much of Gottschalk’s work: the law firms studied are located in Norway, and do not include any of the large multi-office (and in some cases multi-national) firms of the sort that would be found in major cities in the U.S. or Canada, or in London. Article was published in a journal that is, as its title indicates, dedicated to the topic of knowledge management and, according to its website, is peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Selected a more recent article to review its list of references in order to find promising articles.

**Database:** n/a.

**Search Method:** Footnote chasing.

**Search String/Process:** Reviewed reference list for Apistola (2005), and selected Gottschalk (1999b) based upon its title.

**Abstract:** Knowledge management is an increasingly important source of competitive advantage for organizations. Knowledge embedded in the organization's business processes and the employee's skills provides the firm with unique capabilities to deliver customers with a product or service. Law firms represent an industry which seems very well suited for knowledge management investigation. Law firms are knowledge intensive, and the use of advanced technology may transform these organizations in the future. To examine knowledge management in Norwegian law firms, a study that involved two phases of data collection and analysis was designed. The first phase was a field study of the largest law firm in Norway. The semi-structured interviews conducted in the initial field study documented a strong belief in the potential benefits from knowledge management. The second phase was a survey of Norwegian law firms. Firm culture, firm knowledge and use of information technology were identified as potential predictors of information technology support for knowledge management in law firms in Norway. The extent to which law firms in Norway use information technology to support knowledge management is significantly influenced by the extent firms generally use information technology.

**Annotation:** Considers the predictors of use of information technology (IT) to support knowledge management in law firms, based upon a study of the largest firm in Norway, followed by a survey of firms in Norway. Not surprisingly, the research found that the extent to which firms use IT generally has a significant impact on their use of IT for knowledge management. See annotation for Gottschalk (1999a) for a discussion of the author, and regarding geographic limitations of much of his research, which are also applicable here. Article was published in an open-source journal that, according to its website, publishes peer-reviewed articles (as well as
non-refereed articles), and also specifically indicates this article was peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Selected a more recent article to review its list of references in order to find promising articles.

**Database:** n/a.

**Search Method:** Footnote chasing.

**Search String/Process:** Reviewed reference list for du Plessis and du Toit (2006), and selected Gottschalk (2000) based upon its title.

**Abstract:** This paper reports results from a survey of Norwegian law firms on the use of information technology to support inter-organizational knowledge management. Two predictors of IT support were significant: firm cooperation and knowledge cooperation. Inter-organizational trust was not a significant predictor. Software and systems most frequently used include word processing, electronic mail and legal databases. It has been argued that law firms are old fashioned and not ready for extensive use of information technology. An impression is created that other professional service firms such as consulting firms are much more advanced. To evaluate the relative performance of law firms in the area of IT support for knowledge transfer an identical survey was conducted among a limited number of consulting firms in Norway. Survey results indicate that the average IT use in consulting firms was slightly higher than in law firms, but the most interesting differences were found in the different systems and software used rather than the level of IT use. Consulting firms are high-level users of general information sources on the Internet, while law firms are high-level users of structured information in databases.

**Annotation:** Provides results of a survey of Norwegian law firms regarding their use of IT in inter-organizational knowledge management. Such knowledge management involves information-sharing among members of cooperative associations including multiple law firms, ranging from formal national and international networks to informal cooperative relationships. The extent of law firm cooperation and of knowledge cooperation each had a significant effect on the level of IT use in connection with such knowledge management, although the level of trust among members of such networks and relationships did not. This article also compares inter-organizational knowledge management of law firms with that of consulting firms. Because collaboration among law firms can allow them to undertake joint representations to handle cases
they could not handle alone, and to participate in networks that can provide (among other things) valuable business referrals, this article addresses an important aspect of law firm knowledge management, which is explored further in subsequent Gottschalk articles. See annotation for Gottschalk (1999a) for a discussion of the author, and regarding geographic limitations of much of his research, which are also applicable here. Article was published in a journal that, according to its website, is peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:**
Search of Inspec using DIALOG

**Database:**
Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

**Search Method:**
Keyword search

**Search String/Process:**
s knowledge()management
s law()firm?
s s1 and s2

**Abstract:** Businesses such as law firms have recently made large investments in information and communication technology. Eurojuris is a network of law offices in Europe, covering 650 different cities/locations in 19 countries with a total of 3000 lawyers. In Eurojuris Norway, there are 11 law firms with 90 lawyers. The Eurojuris law firms have invested in information and communication technology facilitating inter-organisational knowledge management. This research investigated benefits perceived from use of the network among Eurojuris law firms in Norway. Benefit concepts were derived from value activities, knowledge categories and knowledge levels. A survey was conducted, and survey results indicate that benefits are perceived by lawyers in problem-solving, choice, access to declarative knowledge and access to advanced knowledge. There were significant differences in benefits perceived. For example, benefits perceived from access to declarative knowledge were significantly greater than benefits perceived from access to administrative, procedural and analytical knowledge.

**Annotation:** Analyzes results of research with respect to Norwegian law firms’ participation in Eurojuris, a network of European law firms that has invested in information technology (IT) that facilitates knowledge management. The research supported the propositions that IT and communication technology used in inter-organizational networks provide benefits in generating potential solutions to problems and choosing among potential solutions, and evaluating the success of the solution utilized. The research also evaluated a number of other propositions not
supported by the data. The data suggests that members of this network are not using the network to cooperate on cases or on administrative support. See annotation for Gottschalk (1999a) for a discussion of the author, and regarding geographic limitations of much of his research, which are also applicable here. Article was published in an open-source journal that, according to its website, publishes peer-reviewed articles (as well as non-refereed articles), and also specifically indicates this article was peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Search of Inspec using DIALOG

**Database:** Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

**Search Method:** Keyword search

**Search String/Process:**

\[
s \text{knowledge()}\text{management} \\
\text{s law()}\text{firm?} \\
\text{s s1 and s2}
\]

**Abstract:** This paper reports results from a survey of law firm clients in Norway. Clients' trust and confidence in law firms was measured, as well as clients' satisfaction with law firm work. The extent of information technology use in the cooperation between client and law firm was not very great. Only end-user tools such as e-mail, word processing, spreadsheet and presentation software were used extensively in client-firm cooperation. Emerging technologies such as extranets and expert systems were hardly in use. Hence, there is no empirical evidence yet of law firm clients as drivers of law firm change in Norway.

**Annotation:** Article finds, based upon a survey of law firm clients, that, at the time (2002), client demands were not driving information technology (IT) use by law firms, notwithstanding expectations in the industry that client expectations about law firm IT usage would significantly impact technology adoption by law firms. The research did, however, show increases in client satisfaction when firms have the capacity to electronically code the client information they receive, transmit information to the client by means of information technology (IT), provide the client with access to information by means of IT, and provide information to clients regarding cases and administrative matters that can be coded by the client by means of IT. See annotation for Gottschalk (1999a) for a discussion of the author, and regarding geographic limitations of much of his research, which are also applicable here. Article was published in an open-source journal that, according to its website, publishes peer-reviewed articles (as well as non-refereed
articles), and also specifically indicates this article was peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Search of Inspec using DIALOG

**Database:** Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

**Search Method:** Keyword search

**Search String/Process:**

s knowledge()management

s law()firm?

s s1 and s2

**Abstract:** Law firms represent an industry that seems very well suited to knowledge management investigation. Law firms are knowledge intensive, and the use of advanced technology may well transform these organizations in the future. This paper reports results from a survey of Norwegian law firms on the use of information technology to support inter-organizational knowledge management. Two predictors of IT support were significant: firm cooperation and knowledge cooperation. Interorganizational trust was not a significant predictor. An identical survey was conducted in Australia where knowledge cooperation turned out to be the only significant predictor of IT support. Both in Norway and Australia, mainly software and systems such as word processing, electronic mail and legal databases were used. Australian law firms seem to use IT to a larger extent than Norwegian law firms, especially electronic mail, presentations, other law firms’ web pages on the Internet, library system, law firm’s own Intranet, document systems, and other law firms’ web pages on extranets.

**Annotation:** The second Gottschalk research article focusing on IT usage in cooperative law firm networks, this article analyzes research of IT use by law firm networks in both Norway and Australia and compares the results for each country. While both the level of cooperation among firms in a network and the level of sharing of administrative, declarative, procedural, and analytical knowledge predicted higher levels of IT usage in such networks in Norway, only the latter did so in Australia. This article expands Gottschalk’s research beyond his usual focus on
Norwegian law firms to Australia, a country with a common law legal system, which may provide more useful points of comparison with American law firms. See annotation for Gottschalk (1999a) for a discussion of him; Khandelwal was with the University of Western Sydney. Article was published in a journal that, according to its website, uses a board of approximately 150 academics to review articles being considered for publication. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Search of Inspec using DIALOG

**Database:** Inspec, selected because the search described below did not produce useful scholarly results in the Educational Resources Information Center (ERIC) or Library Literature and Information Science (LLIS) databases.

**Search Method:** Keyword search

**Search String/Process:**

```
s knowledge()management
s law()firm?
s s1 and s2
```

**Abstract:** Information technology support for knowledge management can be classified into four categories of knowledge management technology projects. The first category of projects is concerned with end user tools that are made available to knowledge workers, the second category is information about who knows what, the third category is information from knowledge workers, and the final category is information systems solving knowledge problems. This paper reports results from an empirical study of law firms in Australia. While current projects in most firms were concerned with end user tools, few firms had projects storing information about who knows what, some firms were storing what they know, and few firms were implementing systems solving knowledge problems. Discriminant analysis indicates that firm size in terms of number of lawyers and IT department size in terms of number of IT personnel are significant determinants of category of knowledge management technology projects in each firm.

**Annotation:** Gottschalk continues his research collaboration with Khandelwal and explores IT usage in connection with knowledge management based on the results of a survey of Australian law firms. Article outlines a four-stage growth model for adoption of knowledge management IT by law firms. Survey sample may be more useful for comparison with American law firms than Gottschalk’s Norwegian law firm research as Australia also uses a common law legal system. See annotation for Gottschalk (1999a) for a discussion of him; Khandelwal was with the
University of Western Sydney. Article was published in a journal that is, as its title indicates, dedicated to the topic of knowledge management and, according to its website, is peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Search for other works by author of a number of relevant articles.

**Database:** Web of Science – all databases selected

**Search Method:** Author search

**Search String/Process:** Gottschalk p (in Author)  
Refined results by subject area – Computer Science, Information Systems

**Abstract:** Information technology support for knowledge management can be linked to stages of growth. The first stage addresses end user tools made available to knowledge workers (people-to-technology), while the second involves information about who knows what (people-to-people). The third stage concerns information held by knowledge management workers (people-to-docs), with information systems actually solving knowledge problems constituting the fourth and final stage (people-to-systems). A survey of law firms in Norway found 8 firms at stage 1, 1 firm at stage 11, 11 firms at Stage III and 19 firms at stage IV. Empirical validation of the stages of growth model through benchmark variables using Guttman scaling turned out to be problematic.

**Annotation:** Gottschalk and Khandelwal again collaborate on research regarding IT and knowledge management in law firms, analyzing the results of Norwegian law firms based upon a “stages of growth” model. Research results did not validate the model, and suggested that refinement and further research would be needed. Gottschalk does not appear to have published further stages of growth research in the law firm context until his 2009 article in the *Journal of Knowledge Management* annotated below. See annotation for Gottschalk (1999a) for a discussion of him; Khandelwal was with the University of Western Sydney. Article was published in a journal that, according to its website, uses a board of approximately 150 academics to review articles being considered for publication. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Search of ArticleFirst

**Database:** ArticleFirst

**Search Method:** Keyword search

**Search String/Process:** Using the Advanced Search interface, input the following in two search boxes and selected “keyword” in the drop-down field selection menu with respect to each:

- knowledge management
- law firm

**Abstract:**

Purpose – To support knowledge work by lawyers, law firms have implemented knowledge management systems. This paper aims to present a stage model for knowledge management technology (KMT) in law firms.

Design/methodology/approach – The four stages are lawyer-to-technology, lawyer-to-lawyer, lawyer-to-information and lawyer-to-application, respectively. An exploratory empirical study is carried out in law firms in Norway to determine their stage of KMT.

Findings – Most surveyed law firms are at the third stage of what-they-know systems with lawyer-to-information applications.

Research limitations/implications – The path of evolution through stages of growth cannot be verified with the collected survey data.

Originality/value – Law firms are undergoing significant changes. They are emerging as knowledge organizations in the legal knowledge business. Knowledge is their strategic resource that must be managed to achieve profitable growth. Since knowledge resides predominantly in the heads of individuals, recruitment and development of lawyers is critical for success in law firms.

**Keywords** – Knowledge management, Communication technologies, Small enterprises, Lawyers, Norway

**Paper type** – Research paper
Annotation: Gottschalk, along with another professor at the Norwegian School of Management, returns to a “stages of growth” model for examining IT usage in support of knowledge management at law firms. Article begins with helpful and updated discussions of the law firm and its ongoing transition from a professional to a corporate business model, lawyers as knowledge workers, and knowledge organizations. Article also provides a useful discussion of the stages of growth, presenting them clearly with illustrative examples. Although most of the firms surveyed (all of which are in Norway) are at the third stage of growth, the research did not confirm the stages of growth model. See annotation for Gottschalk (1999a) for a discussion of the author, and geographic limitations of his research, which are applicable here. Article was published in a journal that is, as its title indicates, dedicated to the topic of knowledge management and, according to its website, is peer-reviewed. This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.

**Search Strategy:** Browsed reference lists of articles already found to find promising articles that had not otherwise appeared in database searches.

**Database:** n/a.

**Search Method:** Footnote chasing.

**Search String/Process:** Reviewed reference list for Gottschalk (2003) and selected Hunter, H. et al. (2002) based upon its title.

**Abstract:** Law firms, as part of the professional services sector, are increasingly engaged in strategic thinking about business growth and development. The management of partners, staff and their knowledge is critical to this strategic development. This study of a sample of Scottish law firms engaged in commercial and corporate law finds that organisations are at different stages of progress, and that change has focused more on technical solutions than on organisational and HR issues. Based on evidence from partners and management, and on attitude data from salaried staff, the article suggests that, although the traditional professional firm’s interest in building and leveraging its human capital is still present, the underlying social and cultural processes involving motivation, sharing of experiences, coaching and mentoring are relatively underdeveloped. The implications for HR strategy and practice, and for the role of the HR manager, are considered.

**Annotation:** Although this article examines law firm knowledge management issues with an eye toward human resource issues, it contains research based upon surveys of Scottish law firms, which, like the Australian research described in two preceding Gottschalk and Khandelwal article annotations, provides data on common law jurisdiction law firms that may be more useful for an American researcher. In contrast to much of the other research, particularly Gottschalk’s, that focuses on the IT aspects of law firm knowledge management, this article approaches the question with a framework that incorporates concepts such as the development of human capital, tacit knowledge, and human resource management. Provides a useful perspective in an area of research—law firm knowledge management—that seems still to be in many respects under-explored. Hunter and Beaumont are professors at the business school at the University of Glasgow. Article was published in a journal that is, according to its website, peer-reviewed.
This journal is designated as an academic/scholarly refereed journal by Ulrich’s International Periodicals Directory.
Concluding Personal Statement

The search process for this project required me to research an area of study that was not as well-developed as I had anticipated. I was surprised to find, when targeted search statements began to yield some relevant results, that it was not possible to footnote-chase my way into an orderly body of scholarship with numerous articles. This is partly due, I believe, to the more practically-oriented nature of knowledge management in the law firm context; there were a number of articles that touched on topics of interest, but that were not scholarly research articles.

Notwithstanding this challenge, I ultimately began to see consistent results, meaning that the search statements I had developed that I expected to be effective turned out to be so, and began returning many of the same articles. In contrast, as my search statements went beyond the formulations that were producing consistent results, for example, by using more unusual descriptors or keywords, the search results (although they might include a promising article occasionally) became less productive. From that I made two observations: the first is that once successful search statements have been identified, particularly in a thinly-covered scholarly topic like the one that is the subject of this bibliography, the searcher eventually reaches a point of diminishing returns in terms of search statement refinement. Hopefully, of course, increasing search experience helps hone the researcher’s instincts as to when that point has been reached. The second observation is that similar or related articles tend to be found together, i.e., they are returned in the same or similar search statements, or they cite one another. These are not new observations, of course, but the challenge in this case was to be able to recognize their applicability when dealing with a limited and somewhat idiosyncratic body of relevant articles that made those patterns harder to recognize.
I found the process of writing annotations a challenging and interesting one. The project pushed me to refine my understanding of scholarly writing in order to attempt to craft annotations that captured the appropriate elements in a pithy, accessible style. Writing annotations at the highest level clearly requires mastery of the subject matter in order to convey information about the articles that will serve as useful signposts for future researchers, in a manner that will nonetheless be accessible to readers who do not, or do not yet, possess that level of familiarity with the material.

Finally, I found it stimulating to pursue an extended research project in an area in which, as it turns out, there has not been a great deal of research, not only for the search-related reasons described above, but also because, as this is an area of personal interest, it was intriguing to see how much territory remains to be explored.
I certify that:

- This paper/project/exam is entirely my own work.
- I have not quoted the words of any other person from a printed source, online source, or a website without indicating what has been quoted and providing an appropriate citation.
- I have not submitted this paper / project to satisfy the requirements of any other course.

Signature  Andrew M. Winston  
Date  December 8, 2010