Expert analysis 5: Showing the positive financial impact of KM in law firms

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The importance of showing the financial benefits of KM

Professional services firms, even large ones, are very different than manufacturing, financial services, retail and other businesses. Their assets are people. Their output is advice. At the core, their business is knowledge. So it seems obvious that such firms should invest in the people, tools, and processes required to manage their knowledge and thereby better enable their professionals to serve their clients. But knowledge management (KM), like other activities not directly related to serving clients, takes time and money. Because KM projects compete for firm resources with other potential investments, firm leaders need to assess the relative importance of those projects and make investment decisions accordingly.

Thus, while firms may vary in the degree to which they use financial metrics in approving and assessing projects, firm KM leaders will almost certainly succeed more when they measure the returns of KM projects (both at the proposal stage and after the project has been completed) and pitch and deliver projects with substantial returns. KM leaders who can support their proposals with financial metrics – and then deliver on the projections – will likely see more proposals approved, or will get faster approvals.

In this connection, prior to commencing the project, the KM leader should document the current state of affairs and take some measurements using the success metrics developed for the project. In order to measure improvement, the base case first must be documented.

This article is intended to help KM leaders by explaining how to show the positive financial impact of applying KM at one type of professional services firm – the law firm. These tips apply to firms of all sizes.

What do we mean by 'knowledge management'?

The term 'knowledge management' can mean different things to different people. For the purposes of this article, we include within 'KM' the following types of resources:

- **Work product**: Model and precedent documents that lawyers consult for guidance, or use as starting points for drafting new deal or case documents. Work product typically comes in the format of a Microsoft Word document (for forms and other models) or scanned PDFs (for matter precedents). Some firms have automated model documents using document assembly software.[1] Good models and precedents help lawyers draft new work product more efficiently with greater consistency and quality. Thereby clients receive better work faster. Note that work product can be internal (such as briefs previously drafted by the firm) or external (such as other firms' responses to regulatory inquiries, or model forms from third-party subscription services such as Practical Law Company or Practising Law Institute). Similarly, work product can be made available to a practice group, an entire firm, the firm and select clients, or the firm and all clients.

- **Matter experience databases**: Searchable descriptions and metadata of deals, cases, and other matters, combined with key matter documents. Lawyers can search these profiles to find matters similar to ones they are working on to see how 'market' terms are evolving, to get documents from past deals that may provide good starting points for research or drafting, to estimate fees for future matters, to find who in the firm has worked on similar issues, to put together a matter experience list for a new client pitch, and so forth. Matter experience databases can also be internal (such as homegrown deal databases) or external (such as searchable interfaces compiled by vendors that aggregate publicly-filed deal and case information).
- **Expertise locators**: Resources that enable lawyers to find an expert who knows something or someone. The expertise can be general, for example Swedish mergers and acquisitions law, or specific, such as recent experience addressing a specific Securities and Exchange Commission comment in a recent initial public offering. As above, these resources can be internal (such as an expertise-focused search engine or a proprietary law firm or witness database) or external.
- **Training**: Group training and individual mentoring that helps the firm's lawyers do their jobs well. This includes substantive training, such as the formal junior lawyer programs and 'adult education' training given to senior associates and partners, and the informal training that occurs at practice group meetings. This formal substantive training can be internal or external. Training for KM purposes also includes formal and informal training about how to discover and use the firm's KM resources themselves. While many law firm KM leaders would not consider training to be part of KM, others would, and we have included it here to show the returns to initiatives that blend KM and training.

Key financial drivers for law firms

Ultimately, KM projects are about improving efficiency, improving quality, or reducing risk. All of these help a firm deliver more value to clients – which should be a firm's ultimate objective. While this value is critical, and both law firm and KM leaders must continually bear it in mind, this article focuses specifically on measuring the financial returns to a firm from KM projects.

The returns from each type of KM project can be measured through the project's effect on the key financial drivers of law firm profitability, which is the most essential financial metric for any business. For most professional services firms, profitability means profits per equity partner, a concept similar to earnings per share in a corporation. (In the discussion that follows, 'partner' means 'equity partner' unless otherwise stated.)

Traditional drivers

As for any business, law firm profits equal revenues minus expenses. Profits per partner are:

Profits per partner =
(Revenues - Expenses) ÷ # Partners

Thus, a KM project can improve profitability by increasing revenues or reducing expenses.

Drivers for professional services firms that use hourly billing

In professional services firms that bill by the hour that simple formula can be expanded to a more sophisticated model with five drivers:

Profits per partner =

Realization rate (actual revenues ÷ standard rate revenues[2]) **x**

Average standard rate (standard rate revenues ÷ # hours billed) **x**

Leverage (# timekeepers ÷ # partners) **x**

Margin (revenues - expenses, as a percent of revenues) **x**

Utilization (# hours billed ÷ # timekeepers)

This five driver model is most relevant to this discussion because, at least for now, hourly billing remains the predominant approach among large and mid-sized firms. Timekeepers consist of partners, of counsel, associates, paralegals, and certain other specialists who bill by the hour, with partners (equity and non-equity) and associates responsible for the great majority of time billed. In business terms, these five drivers can be thought of as follows:

- **Realization rate** is the percentage of standard billing rates that is actually collected. It reflects agreed-upon discounts from standard rates, write-downs (fee reductions taken before sending the bill) and write-offs (fee reductions after sending the bill);
- **Average standard rate** represents the blended hourly rate for the firm that would have been realized if billed hours were collected at standard rates. Average standard rate multiplied by realization rate equals the firm's actual average hourly rate;
- **Leverage** is the ratio of fee-earners to equity owners – conceptually the associate/partner ratio. Mathematically Leverage is 1 plus the associate/partner ratio;
- **Margin** is the traditional profit margin concept – the percentage of revenues that become profit after payment of related expenses; and
- **Utilization** is also sometimes referred to as Productivity. It is the average number of hours billed by each timekeeper during the period being considered. For a firm that bills by the hour, the most productive timekeepers are those who work the most hours.

Success towards the KM goals of improved efficiency, improved quality, and reduced risk can be measured in terms of the five drivers. Improved efficiency could increase Realization Rate by reducing write-downs and write-offs, or could increase Leverage. Improved quality could increase Realization Rate or the Average Standard Rate. Reduced risk could prevent a lower Realization Rate or Average Standard Rate, or could avoid expenses that reduce Margin.

In practice, almost any action, whether or not it involves a KM project, may affect more than one of these drivers, often in different directions:

- **Rate increase**: For example, if the firm raises standard rates, Average Standard Rate will increase but Realization Rate is also likely to drop, offsetting some of the profit improvement, because the rate increases won't completely 'stick,' especially in the current economic environment for law firms.

- **Lawyer training:** As another example, if the firm increases billable hour targets for associates, Utilization will increase because most lawyers will seek to meet the new targets. However, efficiency may decrease as lawyers become fatigued, which will likely cause lower Realization Rates as clients resist higher fees for the same work. In addition, lower morale may result in associate departure, which will reduce Leverage. The net effect on profit will depend on the extent to which lower Realization Rates and lower Leverage offset the effect of higher Utilization.

Fixed fee arrangements

For fixed fee arrangements, the hourly billing model is not applicable. Instead, a firm should utilize the traditional (and simpler) revenues minus expenses model. Under a fixed fee arrangement, the firm's subsequent performance does not change revenues, which are established at the outset. Thus, an efficiency-improving KM project reduces expenses and increases profitability dollar for dollar. A revenue-generating KM project, such as the packaged knowledge discussed later in this article, brings in a known amount of revenues per fixed unit of service at an upfront cost spread over as many units as are sold. Profitability can be estimated by projecting the number of units likely to be sold.

Under fixed fee arrangements, a KM project can also favorably affect revenues. For example, a quality improvement project that allows many lawyers to utilize the knowledge of a few expert lawyers can expand the firm's ability to take on matters involving higher fixed fees (analogous to getting more premium work under the hourly billing model). Even under fixed fee arrangements, KM projects that avoid risk can protect the bottom line by preventing costs.

Applying these drivers to ROI analysis

Traditional ROI analysis computes the excess, if any, of the present value of future benefits over the present value of costs, annualized as a percentage of costs. This analysis allows the comparison of competing projects, enabling management to select the project that will contribute the most to profitability.

Combining ROI-type analysis with the five drivers, a KM leader would estimate the effect of a KM project on each driver over a number of years, compute the net change in profits per partner each year, and finally compute the total net present value of the changes in profits per partner. The effect of the project on each driver would include, for example, a Margin increase in the first year due to one-time expenses of the project. It is hoped the early year drags on profits per partner (PPP) will be more than offset by sustained improvements in it.

As previously noted, though, the future benefits of KM are difficult to estimate. A related analysis, which we believe is more helpful at the proposal stage of a KM project, is to use a breakeven analysis. The underlying math is similar to the ROI analysis. The difference, though, is that the analysis seeks to determine the future benefits required in order to just balance the costs. The question being answered is: 'How much benefit in each of the five drivers do we need to see in order to justify the costs of the project?'

Rather than try to predict the improvement in, say, efficiency of a particular task resulting from a KM project, it is easier to make the case that the efficiency improvement is likely to be more than X (with X being the break-even point).

How KM can influence these financial drivers

Revenue

While law firms have traditionally used KM to improve firm efficiency and thus focus on bottom-line returns, KM can also help grow a firm's top line. Specifically, law firms and other professional services organizations can use KM to generate revenue both directly, by selling pre-packaged knowledge, and indirectly, by marshaling knowledge to increase the probability of winning business through pitches and other selling situations. Law firms, in essence, can view themselves as content providers as well as advisers and advocates; by delivering the content in a usable format separate from individual lawyers' time, firms can grow their top lines.

Direct revenue generation

While most law firms make money by selling expertise delivered via personal consultation or representation, some law firms have packaged their knowledge into publications or a database and make money by selling copies or subscriptions – essentially, an innovative legal publishing business. Law firms can sell this content directly to clients or sell it indirectly through publishers or distribution partners. Examples include:

- **Off-the-shelf products:** An example would be the products offered by Littler Mendelson, an 850-lawyer firm with 45 US offices specializing in employment law, which is generally an efficiency-based practice. The firm's products include books, treatises, legal guides, and a labor law database.[3] The firm generates revenue by selling these and receiving royalties for the publications and subscriptions for database access. In addition to building the firm's brand, revenue from this packaged knowledge offsets the expenses of creating both internal and external content for use by the firm's lawyers and clients. Other notable examples of off-the-shelf knowledge products that generate subscription-based revenue are those provided by the UK Magic Circle firms, such as Allen & Overy's premium online products and Linklaters' Blue Flag suite.[4]
- **Standardized forms sold for flat fees:** Ater Wynne, a 50-lawyer firm based in Portland, Oregon, developed a very interesting model for selling packaged knowledge to clients. The firm's lawyers drafted high-quality standard forms for corporate formations and other relatively routine matters that the firm then sold to clients as part of a service package for flat fees. The authoring lawyer(s) of a form would get compensation credit each time a client purchased the related service package (such as one unit of corporate formation). This system encouraged lawyers to invest time in drafting and updating marketable standard forms, because they would be compensated in part based on how well the related flat-fee services sold.[5]
- **Customizable online expert advisors:** For example the resources powered by Neota Logic, an expert systems business, which typically provide advice on how to comply with regulations by asking subscribers a series of questions and using the answers to generate customized advice. For example, one firm used Neota to develop an 'EU collateral directive adviser' that

helps lawyers and staff at large banks determine whether banks will have legal rights to collateral in a transaction, and therefore the amount of reserve capital required. The firm charges each bank a fee each time it uses the adviser, thereby generating revenue for the firm. The bank is willing to pay the fee because using the adviser helps it minimize the amount of capital and related expenses required to cover collateralized positions.[6] Again, the firm is essentially selling packaged knowledge in an innovative format and generating revenue thereby.

To do this, and measure the returns, a firm would need to complete the typical steps any business would take in launching a new product: come up with the product idea, prototype it, test the market, staff the program, price the product, project revenue and income etc. There may be indirect returns as well that are harder to measure, such as closer client relationships, brand-building, new client opportunities and wins etc. The firm's calculus of the costs and benefits should also take into account whether the firm's practice is expertise-based, experienced-based, or efficiency-based.[7] While most traditional law firms do not make significant money from pre-packaged knowledge services, innovative firms with strong sector focuses should still consider opportunities to provide them, because they can clearly generate direct and indirect returns.

Indirect revenue generation

Another way to generate revenue from KM is to use it in the business development process to increase a practice's pitch win rate. For example, firms can mine KM case databases to show prospective clients the likely duration and expense of different types of actions in different jurisdictions and courts, or mine KM deal databases to show prospective clients the state of the market in non-public mergers and acquisitions or financing transactions. While this kind of aggregated knowledge can impress a client and increase the firm's chances of getting the client's business, it is probably impossible to show quantitative causation. At most, firms can show a correlation between business development KM usage and increased win rates, combined with anecdotes about how KM resources helped the pitch team better understand the client's needs and show them they would be the best people to help them achieve their goals. Firms interested in showing top-line returns from KM should seek to track KM usage in business development efforts and the related results.

Profitability

KM projects can affect any of the five financial drivers. A spreadsheet financial model for a law firm can be readily created using the five driver formula, applying actual numbers of timekeepers in various seniority categories, their standard rates, their average annual hours billed, actual margin and actual realization rate. From this base case, it is straightforward to model the effect of assumed changes in the five drivers from a given KM project, or to determine the breakeven point.

In all likelihood, the finance department of the law firm already has a fairly sophisticated model based on the five driver formula. After performing the preliminary analysis using a basic spreadsheet model, the KM leader may improve the credibility of their KM project proposal by using the firm's own financial model. The following examples illustrate how specific types of KM projects can affect the five financial drivers.

Efficiency improvements

Example 1 – KM and training to shift work from partners to associates

By developing KM tools and rolling them out with targeted associate training, the firm seeks to shift some of its work from partners to associates, in effect moving the associates up the work food chain and providing more value to clients by delivering work of equivalent quality at a lower price. For example, a firm's patent litigation practice might spot an opportunity to take on more defense cases against non-practicing entities by delegating much of the work traditionally done by partners to associates. To do this, the firm invests in the development of pre-approved templates for standard case documents, checklists, and other matter management tools to help keep the cases on track, and detailed training for associates on how to use them to achieve good results quickly for clients.

This initiative, if successful, will require hiring more associates to handle the greater workload. The goal is that partners use most of their new 'free' time to take on new work on the same basis (in terms of the five drivers) as existing work. Servicing that new work will also require hiring additional associates. Some of the partners' new free time will also need to be spent training associates, and some of the associates' time will need to be spent attending training. (This example assumes more billable work is available. If it is not, profits per partner decline marginally, and partners have more time to work on developing new business – which, all else being equal, may be more likely to come given the increased value the firm is delivering to its clients and the increased satisfaction level of those clients.)

If this program works:

- Leverage will increase because of the additional associates;
- Average Standard Rate will decline because associates are billed at lower hourly rates than partners;
- Utilization will increase because there will be more associates (who work longer hours) in the mix; and
- It is also possible that Realization Rate will increase because partners may be more willing to bill and clients more willing to pay the lower fees resulting from a greater associate mix.

The goal is that the decreases in Average Standard Rate will be more than offset by improvements in the other drivers, resulting in higher profits per partner. Using assumptions regarding the partner/associate mix, billing and realization rates, and margin and annual hours billed that would be typical for a firm of 500 or more lawyers, if:

- Half the partners shift 1 billable hour per week to preparing the KM tools and conducting the training;
- All the associates shift 1 billable hour every other week to learning how to use the KM tools and attending training; and
- The tools and training result in associates taking on 10 per cent of partner work at the rate of 1.5 hours of associate time per partner hour assumed,

then profits per partner will increase about 5 per cent (assuming no improvement in Realization Rate) and clients will see a 2 per cent fee reduction.

If, however, the associates end up taking on only 5 per cent of partner work, profits per partner will not change. Thus, taking on 5 per cent of partner work is the benefit needed to break even. The KM leader must consider whether or not it is sufficiently likely the initiative will produce results better than the breakeven outcome, and build the proposal case around that likelihood.

Example 2 – Pitch preparation

Through improved data collection about matters, the firm seeks to save partner time in preparing and revising pitch materials, allowing the partners to apply that saved time to billable work. (Again, this example assumes more billable work is available. If it is not, the project may improve the partners' quality of life but would not improve profits.) For example, the firm establishes a deal database for its transactional matters with sufficient detail to allow the marketing department to quickly and accurately show experience with specific kinds of transactions in specific industries, and a similar litigation case database containing experience with specific legal issues in specific jurisdictions (or even with specific judges). These databases are intended to eliminate the time spent by partners contacting their colleagues for this information.

If the program works:

- Utilization will increase because partners are billing more hours; and
- Average Standard Rate will increase slightly because of the greater number of partner hours in the mix.

Using the same law firm assumptions as the previous example, if half the partners save 2 billable hours per week, profits per partner will increase about 3 per cent (assuming no change in annual expenses). Somewhat surprisingly, the cost of the new data collection system does not affect the outcome very much. For a 500-lawyer firm, a one-time $200,000 cost would reduce the profits per partner benefit by only 0.1 per cent in the first year, with no reduction in future years.

Profit improvement is fairly linear to the time saved by partners. If half the partners save only ¼ billable hour per week, profits per partner improve only 0.3 per cent, which in practical terms is probably break-even point for this initiative.

Example 3 – Practice efficiency improvements

Through a variety of practice efficiency improvements, the firm seeks to reduce write-downs and write-offs by performing the same work in less time. While clients will not pay lower fees unless efficiencies are so great they cause fee reductions to exceed current write-down/write-off levels, the firm will improve relations with its clients by avoiding having to negotiate write-offs. The billable time saved would be spent working on new billable matters, so Utilization would not decline. If the program works the Realization Rate will increase.

Because in this scenario efficiency savings go straight to the bottom line (as they also would in a fixed fee scenario), the benefit can be dramatic. If 5 per cent of partner hours and 10 per cent of associate hours are currently not collected because of write-downs and write-offs, and the program cuts those non-collected hours in half, profits per partner will increase by 11 per cent. Even if the program cuts those non-collected hours by only 10 per cent, profits per partner will still increase by 3 per cent. Cutting lost hours by 3 per cent represents the approximate practical breakeven point. Costs have a similar effect as those in the previous example, suggesting that this initiative can support even significant expenditures if it is successful. (If new billable work is not available, the decline in Utilization (lawyers working fewer hours) will offset the Realization Rate improvement, resulting in no change in profits per partner. Lawyers will have more available time, however, to work on developing new business or improving their skills.)

Of course, this example begs the question of what specific practice improvements are envisioned. That is really a different subject. Depending on the nature of the practice, one example could be automating some routine drafting work, such as corporate formation documents, through document assembly software. The point is that an improvement in Realization Rate through efficiency gains has a powerful effect on profits per partner, and is an area in which it is worth focusing KM efforts.

Efficiency improvements can improve profitability even under hourly billing

A common misconception is that lawyers who bill by the hour have no economic incentive to become more efficient. The examples discussed above demonstrate that assertion to be untrue. Even in a pure efficiency scenario (with no write-offs or write-downs), as long as there is new work available to use up the lawyers' freed-up time, profits per partner will remain stable, even as client fees per matter decline. That is nevertheless advantageous because it makes the firm more fee-competitive, enables the firm to deliver more value to clients, and increases the strength of the firm's client relationships.

Even where new work is scarce for a firm, it is likely that other firms will be making these efficiency improvements, on the expectation that they can get new work through the lower fees resulting from efficiency. To remain competitive and avoid losing work, the firm without new work will still need to lower its fees. In the absence of efficiency improvements, the firm can lower its fees only through write-downs. As shown by Example 3, efficiency improvements will reduce those write-downs and make the profit decline smaller.

Quality improvements

Example 4 – Premium work

The firm seeks to attract more premium work – in other words, more complex or sophisticated work that it can bill at higher than standard rates. This is a type of project to improve the quality of the firm's work. For example, the commercial real estate group will seek to capture work as lead project counsel for major developers rather than being selected only as local counsel on projects. The firm has identified a few star partners and recent lateral hires in the commercial real estate group who could start that effort. The firm proposes a KM tools and training program for other partners in the real estate group to 'upgrade' their skills, including both classroom-type training and one-on-one mentoring. If the initiative succeeds:

- Average Standard Rate will increase, reflecting higher billing rates for the premium work; and
- Utilization will decrease slightly, reflecting the shift of billable hours to training by both partners conducting the training and partners being trained.

The goal is that increases in Average Standard Rate more than offset the decline in Utilization. Under the previous law firm assumptions, if:

- 10 per cent of the partners in a practice group devote 5 billable hours per week to training and supporting the other partners in the group;
- The other partners spend 1 billable hour per week receiving training; and
- The practice group is able to replace half its work with new work commanding

a 20 per cent premium over the Average Standard Rate,

then profits per partner for the practice group improve 8 per cent. The effect on the firm as a whole will depend on the relative size of the practice group within the firm.

If instead the practice group is able to replace only a quarter (rather than half) of its work with premium work, and the premium is only 10 per cent over the Average Standard Rate (rather than 20 per cent), then profits per partner for the group increase only 0.8 per cent, which represents a breakeven point.

Risk reduction

Example 5 – Standard forms

The firm seeks to reduce the risk of mistakes in a practice group by developing annotated standard forms for frequently used agreements. Unfortunately, the firm had a recent bad experience where an agreement from a previous transaction had been used that omitted a provision now required to address a change of law. The omission had not been caught by the partner in charge. The client suffered losses and held the firm responsible. For example, the corporate group wishes to create standard forms for various types of business combinations – mergers, asset acquisitions, divestitures etc. If the forms project succeeds, Margin will increase because the reserve for malpractice claims can be reduced. If the firm does not maintain such a reserve, Margin will not change immediately, but will be prevented from decreasing in the future by a similar mistake.

If 200 associate hours and 50 partner hours are expended on the forms each year for a practice group representing 10 per cent of the firm's profits per partner, and there is a 1 per cent annual chance of a $10 million mistake, which will be prevented by use of the forms, profits per partner for the group will be improved, but only by a relatively nominal 0.3 per cent.

A by-product of the forms project, not factored into the above financial analysis, is that the group's efficiency will also be likely to improve, which would have the benefits previously described under 'Efficiency improvements'. While modeling those efficiency gains could help sell the project internally, this article does not attempt to do that because the main motivation should be the important intangible benefits of protecting the firm's reputation and retaining client relationships that would otherwise be damaged or lost through serious mistakes.

Deciding how to prioritize KM projects

This article has presented many ideas for pursuing financial returns from KM and showing the result. How, then, should a KM leader in a law firm or other professional services organization decide which opportunities to pursue and which to set aside, at least for the moment?

One useful prioritization method was set forth by Oz Benamram and Sally Gonzalez in a 2011 article.[8] The KM team should map potential KM projects on a two-by-two matrix, with one axis being ease of implementation and the other being value to the business, as illustrated in Figure 1.

Once the KM projects are mapped onto the matrix, the team should go for the quick wins in the Field of Gain, steadily chip away at the Field of Dreams, and avoid the Fields of Pain and Distraction. One way to accomplish that is to assign a 1 to 5 rating to value (5 being highest) and ease of implementation (5 being easiest), then rank projects based on the sum of the two ratings.

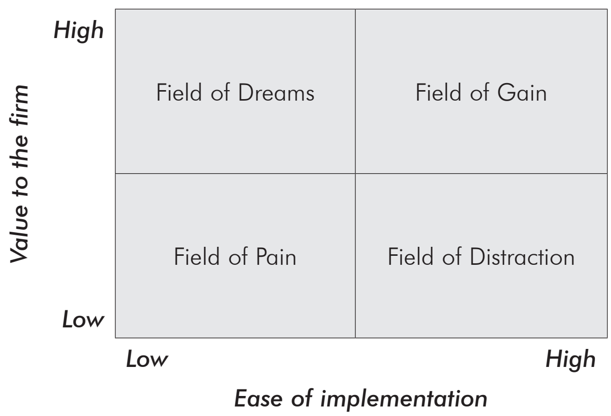

Figure 1: Two-by-two matrix to map and prioritize potential KM projects

Assessing ease of implementation should take into account factors such as:

- Management support;
- Practice group support;
- Process feasibility;
- Technical feasibility; and
- The size of investment required for both development and maintenance.

Assessing value to the business should take into account factors such as:

- The potential financial returns from the project (as discussed in this article);
- The potential non-financial returns from the project including enhancing reputation and brand (or avoiding reputational harm), improving client satisfaction, and improving lawyer morale and retention; and
- The number of people likely to use the resource to be developed, in other words, the target user group multiplied by the likely adoption rate. One way to assess this factor is to seek input at a meeting of 10–20 lawyers representing a cross-section of the affected practice group(s). This approach also aids in acceptance of the project by the group because they are more likely to buy in to its rationale and potential benefits.

Conclusion

The KM leader in a law firm who applies the financial analysis discussed in this article to KM projects will show that they:

- Understand the way senior management think about the business;
- Have carefully thought through the project and planned it out; and
- Have a reasonable financial basis to justify the project.

In doing so, the leader will in all likelihood improve the chances that the project will be approved and, if the project is successful, receive appropriate credit for that success.

References

1. See Boyd, C., 'Case Study: Using Document Assembly Tools to Improve Services to Start-Ups,' *Legal Tech Newsletter* (Law Journal Newsletters), October 2010, available at: www.wsgr.com/publications/PDFSearch/boyd1010.pdf.
2. Standard rate revenues are the revenues that would have been earned if the hours of the

various timekeepers had been billed at the firm's standard hourly rates.

3. For more details see: www.littler.com/about/knowledge-management.
4. See Susskind, R., *The End of Lawyers?*, Oxford: Oxford University Press, 2008, pp.121–123.
5. See Crow, S., 'Knowledge Management: Is the Technology Emperor Dressed Yet?', Knowledge Management White Paper (LawNet, Inc.), November 2002, available at: www.iltanet.com/WhitePaperPDFs/KnowledgeManagement_1_2.pdf.
6. For more details on the EU Collateral Directive Advisor and other Neota-driven tools, see: www.neotalogic.com/demo/.
7. Maister, D.H., *Managing the Professional Service Firm*, New York: Free Press Paperbacks, 1993, pp.23–27.
8. Benamram O. and Gonzalez, S., 'Forming a KM Strategy for Your Firm,' Knowledge Management White Paper (International Legal Technology Association), June 2011, available at: www.iltanet.org/MainMenuCategory/Publications/WhitePapersandSurveys/Knowledge-Management_1.html.