



Intranet Product Selection

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Introduction

There are currently over 60 intranet products on the market. This report explores the process of scoping, evaluating and purchasing an intranet product from the viewpoint of an intranet team. The principles and good practice are also relevant to the selection of all intranet CMS solutions.

The problem that all intranet teams face is one of information asymmetry. The team (and the IT department) will probably never have procured an intranet product before. Vendors will be skilled in the art of selling the benefits (and only the benefits) of their products. The aim of this report is to help remove this vendor advantage. In a report of this length only the principles of product selection can be covered, together with advice on best practice.

This report is a collaboration between Martin White (Intranet Focus Ltd) and Martin Tate (Decision Evaluation Ltd). Martin White is the author of *The Content Management Handbook (2005)* and a report on Intranet Platforms for the Intranet Benchmarking Forum. Since 2001 he has supported clients around the world on the selection of intranet CMS solutions. Martin Tate has specialised in selecting off-the shelf IT solutions for over 20 years. He is the author of [Off-the-Shelf IT Solutions](#), published by the published by BCS (The Chartered Institute for IT).

Intranets are different

When presentations are being made or product profiles are being written about intranets, the process of choosing an intranet CMS is rarely set out in any detail. Technically website and intranet software are similar in many respects, but the similarities also mask some important differences.

Anyone can contribute to an intranet

The most important of these differences is that website content is usually managed by a small team who spend a substantial amount of their time working with the CMS. They get used to its strengths and find ways around its weaknesses. Although others in the organisation might contribute content, this is often done by using templates that constrain the extent to which design and structure elements can be changed. In the case of an intranet, it is usually important that anyone in the organisation can contribute content. The contribution may well be on an ad hoc basis, perhaps as a project comes to an end or a new policy document is released. Content contributors need to be able to add their content with the minimum of effort and without recourse to working through the online Help Function on the CMS.

The intranet must reflect and support complex organisational structures

Another requirement is the ability to change the information architecture to reflect changes in organisational roles and responsibilities. The intranet team will probably only find out through an all-employee email that a Digital Marketing Officer (DMO) has been appointed and Marketing will now report to the DMO and not to the Sales Director. Senior managers usually have little understanding of the complexity of reorganising the intranet and just want it to happen within the next few days. In theory, the architecture should not be based around department and divisional responsibilities but that principle ignores the fact that senior managers of departments and divisions can exert significant pressure to be sub-site owners.

An intranet performs many functions – and its purpose may change

The third significant difference between website and intranet software is that the edges of an intranet are now very blurred. An intranet can be acting as an integration portal for multiple applications, providing a range of social applications and being the basis for providing collaboration support across the organisation. These roles will undoubtedly increase in range and importance in the years ahead, so being able to define, at least in outline, these requirements must be at the core of establishing the functional requirements of an intranet CMS. It also needs to be recognised that multiple functions mean multiple stakeholders and potentially conflicting requirements, a challenge both for intranet CMS technology and intranet governance.

At all costs an organisation needs to avoid the massive challenge of migrating from one platform to another to acquire a small but important feature. Migrations are inevitable but should only be undertaken when the return on the very considerable investment can be justified by the potential benefits to intranet users and contributors.

Content management technology options

Over the last two decades, intranets have been built using a wide range of content management applications, including:

- Using the same CMS as is being used for a corporate website
- Using a commercial CMS that claims to be suitable for both websites and intranets
- Developing the intranet CMS using an open source application such as Drupal or Joomla
- Using an intranet-specific application that is a productised version of an open source application
- Using an enterprise social platform such as Jive or Confluence
- Using an enterprise content management application, such as Alfresco
- Using an enterprise portal product, such as LifeRay
- Using the current version of SharePoint
- Using an intranet product that is built on a proprietary platform, such as Interact
- Using an intranet product based on SharePoint

The ten intranets profiled in the Nielsen Norman 2017 Intranet Design Awards are between them using SP2010, SP2013, LifeRay, Open Text Web Experience Manager (ex Vignette) and two custom builds. In addition, there is an equally wide range of search applications, including Google Search Appliance SP2010, PostgreSQL, SP2013, Solr, IDOL 7.5 and Office 365. This list shows that the search application in many CMS products is not as powerful as may be needed for an intranet, especially where there is a requirement to search across other repositories and databases to act as an integration platform.

Intranets tend to be owned by departments such as internal communications and human resources, where IT skills and experience may be limited. There may also be budget limits on bringing in external design consultants, especially where the view is that all that is needed is a 'basic intranet' (even if there is no agreement on what that basic intranet should offer).

In the past, the attraction of using an intranet product was driven by:

- Speed of implementation
- Pricing schemes that seemed to be transparent and flexible for future expansion
- Being able to capitalise on features developed across the user base
- Product-specific support from the vendor
- The opportunity to exchange experience with a User Group

Now SharePoint 2013 (SP2013) is proving to be a major catalyst for considering intranet product options. Using SharePoint 2007 and SharePoint 2010 for an intranet usually involved working with an external agency. The results could be very good but required a significant investment in time, money and skills. SharePoint 2013 offers more potential for intranet content management and there is often significant pressure on the intranet team from the IT team to use SP2013 for an intranet redevelopment as it will help to justify the corporate investment in SharePoint.

Development agencies are also aware that their business model is not as strong as in the past. Companies are less willing to invest in a custom intranet, which may well take 9-12 months from inception to delivery. These agencies are now taking advantage of their knowledge of SharePoint and offering a wide range of intranet products. Some of these are hybrid (cloud and on-premise) and others are cloud only, based on Office 365. Sam Marshall and his team at Clearbox Consulting have published the second edition of [SharePoint Intranets-in-a-Box](#) in which they provide detailed profiles 25 SharePoint/Office 365 products. There is a list of over 60 products on the [Intranet Focus site](#).

One result of the rise of SharePoint-based intranet products is that the entire concept of an intranet product has come centre stage. Companies offering proprietary products are finding an increased level of interest as the intranet becomes decoupled from the enterprise SharePoint platform.

Information asymmetry

The major challenge that an intranet team faces in selecting an intranet product is that the team has never done anything like it before. Almost certainly the current CMS was chosen sufficiently long ago that everyone involved in it has moved on or out. It is also unlikely that there will be any direct experience of selecting a content management product within IT even if the department has a procurement procedure for IT products. The people who have the most experience will be the sales and marketing teams of the product vendors, and this leads to information asymmetry. Without relevant experience, it is easy for the team to be so overwhelmed with what an intranet product offers them that they overlook several key gaps or problem areas. The primary purpose of this report is to redress this information asymmetry.

Selecting IT products

Many enterprise applications are elements of a master enterprise agreement with companies such as Microsoft, Oracle and IBM. Despite the range of these applications there is always a requirement to purchase IT products to meet specific requirements, and most IT departments will have a well-documented process to specify and select these products.

Although organisations often find modern software products alluring, it is a mistake to concentrate on the technology and its capabilities. Technology does not deliver benefit – people do. Any IT implementation that changes people's work pattern is effectively a change programme – albeit IT-enabled organisational change – and should be treated as such. This is a particular challenge with intranets where the user experience (and that includes treating content contributors as users) is extremely important.

Modern off-the-shelf solutions have been designed from the ground up as a software product. Their design reflects the fact that multiple people in multiple organisations will use them. One crucial characteristic is the lack of 'hard coding' – with the use of rules tables, flags and activation indicators to control processing. Modern off-the-shelf solutions are designed to be configurable. They recognise their own longevity and will often be in the customer organisation for 5–20 years. Therefore, they are built expecting there to be major upgrades during their lifespan, and these upgrades should not threaten the user data or settings that deliver a unique solution to each organisation.

Some software used for intranets was originally bought for other purposes, for instance document management or to construct public facing 'brochureware' websites. Precedents from customer experience (of other software markets that matured) indicate that investing heavily in tailoring a product originally intended for another purpose is ultimately un-productive or even counter-productive. A project cannot buy its way out of trouble – the trouble with throwing money at a problem is that most of it misses. Normally, it is better, faster and cheaper to evaluate, select and procure a software product that is directly aimed at the intended use.

Software selection projects require objectivity. They are complex because of both the business requirements and the matching sophistication of potential solutions. The core question that an organisation must address in considering any intranet product is whether the balance of benefits is in favour of IT or the users (both end and contributor). This is why it is useful to include the current platform as a candidate in the selection and scoring process.

Defining requirements

The selection project must be driven by the organisation's requirements, not by the technology of the candidate suppliers. For guidance on defining requirements read [Web Content Management](#) by Deane Barker. Published by O'Reilly in 2016, this is the definitive book on defining CMS requirements and on CMS implementation. Requirements should be for a mix of software capabilities (processing needs) and supplier facilities (services). For an on-premise 'package' installed on local infrastructure, the proportion might be 80:20 software to supplier. For cloud provision, it might be more like 60:40. This does not mean fewer software requirements; it means extra supplier tests because the customer is reliant for much more of the provision when the cloud service includes hardware and infrastructure.

Software is not just another category of Procurement. Moreover, the intranet is not really a normal category of software. For instance, an intranet will normally be extremely 'high touch' – everybody is a contributor – and there will be a wide range of content formats (e.g. PowerPoint slides, text, videoconference recordings, social media). Moreover, contributing content will often be an unstructured process. A transactional system based on a database (with predetermined screens, fields and validation) will be heavily controlled. By contrast, little structure is imposed on the user interaction with an intranet. Workflow is unlikely to be heavily controlled. Therefore, multiple users will be contributors of content, without being experienced in content management.

In the past intranet CMS selection tended to ignore the requirements for search as there would be a separate search application. Most intranet products come with a search function and the requirements for search need to be considered with the same level of attention to detail as is given to the content management and user interface requirements.

When capturing requirements, there are additional, specific techniques when the requirements are going to be used as a yardstick to buy software (rather than becoming a specification for writing special or 'bespoke' software). How these requirements are articulated is crucial. They need to be unambiguous, measurable (they will be scored for fit later), and must avoid being prescriptive as to how the requirement is met. For more guidance on requirements specification see [this article by Martin Tate](#) in Requirements Engineering Magazine.

Customer – supplier relationships

Functional requirements and non-functional requirements (such as the security model) for the software itself are only part of the evaluation. Some requirements test supplier services and capabilities. A selection of these are listed below and need to be considered during the initial due diligence considerations, and not when the decision on a supplier has been made based on meeting functional requirements.

Product functionality

Request the product development roadmap. Establish how much notice the supplier gives of changes. Verify how many versions a customer can be 'behind' if installed on-premise. With shared cloud provision the customer usually has no choice, but will automatically use the latest.

The new solution may need to link to other enterprise applications, for example for employee self-service. Find out how this will be managed. Find out if the vendor has experience with the specific software (and possibly version) in use at your organisation. A core element of an intranet is search, and most products we have seen (especially those based on SP2013) have poor search implementations. Remember an evaluation project cannot really check search effectiveness until all the organisation's content is loaded and indexed. So, establish the basis for exit clauses. Moreover, it is important not to assume that the search application can be extended to other repositories, including SharePoint.

Contract terms

Check the license model – actually models because there may be different ways of paying for the software. Study the 'small print' such as cancellation clauses.

Verify what happens to the organisation's content after cancelling the contract, if the vendor closes down or if the contract is taken over during an acquisition.

Early implementation

Establish the process for user acceptance testing (UAT) and how to determine the pass/fail criteria.

Determine whether the supplier provides a named link person during and after the implementation. If so, establish whether the evaluation team can meet them during the evaluation. If not, it might mean they are not yet on the payroll or assigned to another project and in practice not available.

Normally, avoid customised code with modern configurable software, but if genuinely needed, verify who will develop and test it. Importantly, establish who will own custom code or algorithms. The vendor may want to offer it to other customers and your organisation might even be able to negotiate a royalty.

Continuing support

Establish the procedure for escalating issues, problems, queries and bug reports. In addition, the Service Level Agreements for time to respond and time to fix need to be agreed. Establish the amount of professional service support on offer, including whether anything is included in standard price points. Find out if there is an 'ecosystem' with independent trainers and consultants, so a customer can get other support

if the software reseller hits capacity limits. Establish the role of Associates, which many suppliers use since scaling professional services is a balancing act between workload and revenue to fund people.

If operating in more than one country, find who is going to provide country-level support, such as contributor training. This may be in the form of “where is the nearest supplier office to” and list the sites for your organisation.

Find out whether there is an active User Group. This is expected as part of a well-established ecosystem. Ask whether it is under the direct control of the vendor. If there is one, consider attending a meeting during the evaluation process, as a sort of reference site.

Evaluation, selection and procurement

When procuring off-the-shelf solutions, the process involves team-to-team selling. There is considerable asymmetry between the two teams of buyers and sellers. There is asymmetric information, experience and training. In short, solution vendors are trained to sell, whereas buyers are almost never trained to buy software and its related consultancy services.

There are some common pitfalls – awareness makes them easier to avoid.

One of the most common mistakes is to assume that the process for buying software should be the same as that for procuring hand-driers, office desks and water fountains. Ordinary procurement processes intended for goods are inadequate for large software products with their associated IT services.

It is also important to explicitly address the biases in typical decision-making. They can be powerful if subconscious. Instinctive or ‘gut-feel’ decision-making (to a psychologist, System 1) is pretty much guaranteed – because of cognitive biases – not to select the best solution. It is possible with awareness and technique to overcome biases and improve the decision-making RQ or rationality quotient.

An important way to avoid confusion and bias is to resist comparing candidates to each other. Because large software products are too complex to compare with each other, the evaluation should measure all the candidates against the same yardstick of organisational need. It is important to measure consistently and one important technique for achieving this is to score the candidates by requirement or criteria. This means picking one requirement (criterion or factor) and scoring all candidates to it, then moving on to the next criterion. In a scoring matrix with requirements down and candidates across, this means scoring ‘row wise’.

A rigorous project approach has a benefit that is profound, but almost impossible to measure. Sometimes, companies selling software regard it as a Trojan Horse – they make it look cheap to win the sale and then make their money from premium products and services once the customer is locked in.

While it is easy to portray such behaviour as ‘mis-selling’ remember the customer creates the marketplace. If the customer ‘mis-buys’ the cheapest after a casual evaluation that does not discover the difference in value between the candidates, commercial incentives encourage the Trojan Horse.

It is impossible to tell at the beginning of the project whether one of the software sales executives has the 'old school' philosophy of misleading the customer into a purchase they don't fully understand. So guard against it. A rigorous process flushes out both rogues and fools – the rogues do not intend to keep their promises, while the fools do not understand what the promises mean. In contrast, a rigorous project approach tends to create a self-selecting group of honest, diligent suppliers who understand their own product, want to understand the potential customer need and are motivated by a good reference site. Also, remember that attempting to implement software that is unfit for purpose is not only painful for the customer, but also often unprofitable for the supplier.

The chart below illustrates the steps involved in evaluating, selecting and procuring IT products. The chart comes from Martin Tate's book *Off-the-Shelf IT Solutions* and the chapter numbers refer to this book. In this report it is not possible to do more than summarise the main principles that are set out in this 260 page book.

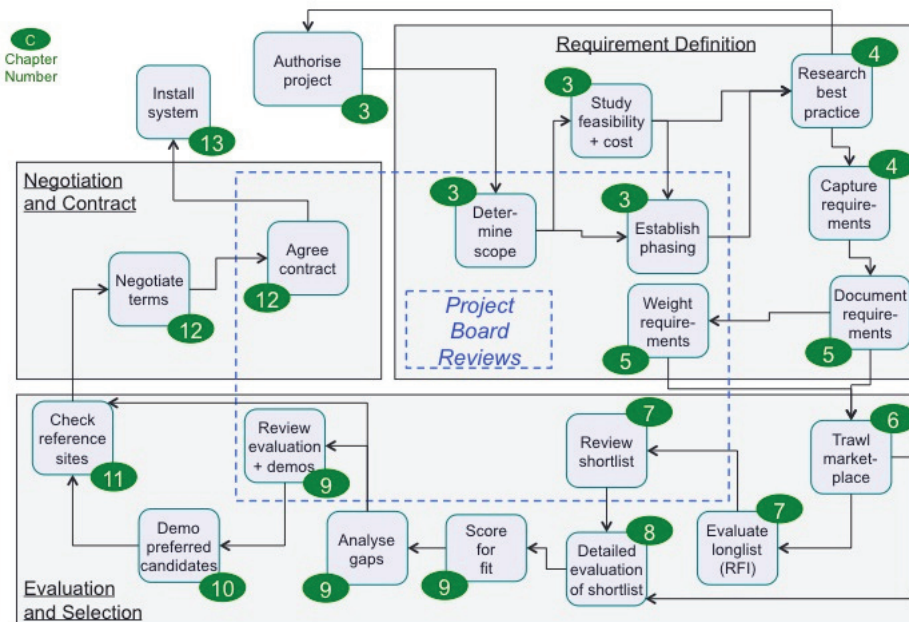


Figure 1 Overview of approach (with mapping to book chapters)

Some commentary on the method stages in Figure 1.

Determine scope - This is perhaps the most important process, because the scope or coverage of the project shapes everything else in the project – including the sponsor, budget, benefits domain, type of software, interviewee list, body of requirements, evaluation team members and implementation sequence.

Document requirements - It is important to reflect that 'buy not make' requires a different approach to defining requirements because of the constraints on customisation post installation. As normal, requirements should be weighted to reflect the scale from must have (mandatory) to nice to have.

Trawl marketplace - Remember that the eventual solution can only be as good as the best candidate entry on the longlist. Compiling the longlist should involve a wide sweep with multiple sources.

Evaluate longlist (RFI) - Selecting the shortlist uses a challenge document, often referred to as the RFI (request for information) or PQQ (pre-qualifying questionnaire). At this stage, the assessors are not trying to pick the winner. They seek to gather just enough information to proceed through a gate. It creates an understanding of which candidates are strong enough to merit the labour-intensive, in-depth evaluation deserved by those on the shortlist.

Detailed evaluation of shortlist - This is done by conducting (separate) meetings with each candidate supplier, getting a response to every requirement.

Score for fit - After all such evaluation meetings, the evaluation team scores all candidates. When scoring to establish the degree of fit (and thus ranking) the matrix that results is a huge asset and probably the major deliverable of the selection process. Producing the organisation's matrix is hard work for several people, but the due diligence will be repaid many-fold. It generates clarity and clean decisions by raising confidence amongst the evaluation team, the decision-makers and the shortlisted suppliers.

Demo preferred candidates - Holding demonstrations to prove best fit happens deliberately late in the process. The demos should only be scheduled when there are highly credible candidates. A weak demonstration of an unsuitable product can discredit the entire selection project, or give ammunition to those who oppose some of the products (or the whole idea of change). The demonstrations are crucial for building confidence – not just confidence in the solutions, but also confidence in the integrity of the evaluation process and capability of the evaluation team that marshal the evidence for the decision-makers. This feedback form should exploit the wisdom of crowds and ask demonstration attendees to score usability or UX.

Check reference sites - The mindset during the reference interviews should not be one of asking an existing customer to establish one of the solutions as fit for purpose for your organisation. Only the project team can do that. They are trying to 'access the future' and find out all the things people know now, that they wish they had known at the beginning of their project. Reference sites are an important way of judging search functionality.

Negotiate terms, agree contract - When negotiating and agreeing the contracts, it is important to adopt a collaborative approach and usually counterproductive to adopt a combative one. This is not a battle but a dance. The main objective of an IT software-plus-service negotiation is to come to agreement. Do not allow an unhealthy obsession with cost or a discount to mean your organisation loses the deal and defeats its own interests. The real prize is the significant productivity improvement of the whole workforce that is within reach if the solution that fits best makes it into service. In fact, an important aspect of the negotiation is often not 'driving a hard bargain' but simply clarifying – making sure the negotiator(s) know what is not included in the base cost at the beginning of the negotiation and is included in the agreed cost at the end of the negotiation.

Install system - When implementing, the evaluation process feeds valuable knowledge and documentation into this stage. Project working papers continue to be valuable as a record of expectations, promises and earlier decisions, for instance feeding into the implementation plan or conference room pilot. Even more important, though almost impossible to measure, are the huge change management benefits of the frequent consultation, which means the project is deeply rooted in the organisation. As well as the tangible benefit of a signed contract for a solution that is known to fit well, there is the enormous intangible benefit that (as one client put it) “nobody can say they were never asked”.

Case study

Gap analysis counters damaging ‘political’ decision

The scoring matrix is a huge asset of the evaluation project. Before contract, gap analysis avoids nasty surprises, including ones with internal origins. On one project, a departmental manager wished to avoid the corporate solution, and was prepared to use one missing feature to justify his own local purchase. His department’s absence from the new enterprise software would have massively eroded the benefits. However, when the evaluation team identified the gap and addressed it with an inexpensive add-on, this removed the ‘justification’ for not adopting the company-wide software. Of course, spotting the gap is only possible if the evaluation has gathered the requirements and measured the candidates against them – analysis that is the ‘payback’ for the up-front investment in understanding.

The project team

An evaluation project is a team effort, including team-to-team selling. The selection of team members must cover key stakeholders and the important roles.

The **project sponsor** is crucial. Any project that starts without a senior executive sponsor is pretty much guaranteed to disappoint.

Employees (and sometimes **suppliers** or **customers**) need to be consulted. Requirements-capture interviews need to cover a selection of **content contributors**.

The **evaluation team** plays an important role. There should be representatives of the organisational functions, divisions, sites and countries affected by the new solution.

Other roles include **demonstration attendees**, and this stage allows the project process to involve new people as well as motivating the audience by showing suitable products during a demonstration.

Procurement needs to be represented during the process. A procurement representative on the evaluation team will have a dual role – representing one of the types of contributors as well as the professional procurement perspective. There would normally also be a procurement representative on the negotiation team, unless on a large project the Financial Director or Chief Finance Officer took this role.

Candidate suppliers are part of the team too. Regard them as stakeholders and treat them with respect during the process. It is 'enlightened self-interest' to respect the culture, constraints and processes of each candidate supplier. To put this more bluntly, be nice to all the candidates, because it is not possible to tell which supplier is going to win and the customer organisation will soon become highly reliant on the winner.

Schedule

The selection process should be a gated one, and the method illustrated above certainly is. Structure the process for incremental effort on the part of purchaser and bidders. Decision-making should only have to deal with the essential information to pass the best candidates at each stage, while suppliers have a clear view of their risk so that they can decide the effort they will invest.

The project must deliver process integrity, with credible research fed into evidence-based decision-making. The method scales to suit. The selection project should be large enough to be credible and address the level of risk faced. The balancing mindset is that it should be small enough to be manageable. There are various scaling techniques. For instance, skipping stages such as missing out the longlist if a specific project only has three credible candidates. Alternatively, adapt the volume of content in the sense that a wide, risky project should have more interviewees, candidates and evaluation meetings than a narrow project that is perhaps bounded by a single department.

The main pitfalls with scheduling an intranet selection are underestimation and an arbitrary deadline. This selection will affect everybody's productivity within the organisation, and the organisation will probably only run such a project once every 5–15 years. Under-resourcing the project is a false economy. Start early and raise the profile of the project, so the organisation understands how important it is. If a time box is imposed on the selection project, spend 50% of the time capturing the requirements, because this is the foundation for everything else.

Case study

Credible project process 'converts' detractors

On one project, several staff members with engineering backgrounds felt they could build software that was better than any off-the-shelf product. Moreover, the divisional head thought a formal evaluation was unnecessary and preferred to trust gut instinct based on decades of experience. However, once the process started, the rigour converted people, who wanted to join the project as its reputation grew. Moreover, a software build would have been cancelled when capital allocation priorities later changed, leaving the company with no software at all, instead of the impressive solution they did buy and implement.

Recommendation

The benefits of using an intranet software product as the content management solution are well recognised. The risks inherent in the selection of any software product also need to be considered at the start of the selection process as they can have unforeseen implications for a successful implementation. A CMS solution would be expected to have at least a three-year life span, and ideally five. In any discussion with a vendor the benefits will be very clearly stated, as they will have been to many other customer prospects. Intranet managers are likely to experience information asymmetry at first hand as they try to find the best fit for their requirements without having all the relevant information available. Having to replace an intranet product within months of implementation because the benefits were not as clear-cut as seemed at the initial meeting with the vendor should be avoided at all costs.

Only through a rigorous process of defining requirements, evaluating solutions and negotiating a win-win contract with the vendor will this asymmetry be brought into balance to the benefit of the organisation, its employees and the intranet team.

The authors

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Martin White ([Intranet Focus Ltd](#)) has been involved in over 40 CMS and enterprise search selection projects since setting up Intranet Focus Ltd. in 1999. Many of these have been for global organisations. He authored The Content Management Handbook in 2005 and was the author of a report on Intranet Platforms for the Intranet Benchmarking Forum in 2012. In 2015 the 2nd Edition of Martin's book on [Enterprise Search](#) was published which includes several chapters on software selection and implementation. He is a fellow of the British Computer Society (BCS – the Chartered Institute of IT) .



Martin Tate

Martin Tate ([Decision Evaluation Ltd](#)) is an IT consultant who has personally run or rescued 54 projects to select off-the-shelf solutions, interviewed over 725 people to capture the requirements for selections and appraised over 1,000 candidate solutions. A 'poacher turned game-keeper', he formerly worked for an IT provider and was trained to sell software. The British Computer Society (BCS – the Chartered Institute of IT) made him a Chartered Fellow for eminence in evaluating software and recently published his book, a practitioner guide to procuring off-the-shelf IT.

