



Dynamic Content: Connecting Performance and Learning

Steven Shaw

Chief Learning Officer
Eedo Knowledgeware

This is the way **EEDO**[™]

WHAT IS DYNAMIC CONTENT? What role does dynamic content play in developing more effective strategies to tackle performance problems in organizations?

Traditional e-Learning: Static Content

To understand the meaning and value of dynamic content, a good place to start is a brief exploration of the contrasting, and still dominant, approach to e-learning that rests on static content. Traditionally, in the world of e-learning content has been anything but dynamic. Consider the typical scenario: e-learning courses are developed using stand-alone desktop authoring tools that “hard bake” the content into static material. Any changes or updates require a lengthy, expensive process involving developers who, most often, must have significant technical skills. If you have courses in your curriculum that share content, then the situation is aggravated.

For example, consider an airline that has produced 20 online courses. Across these courses, the image of an electronic ticket has, say, 25 occurrences. If the format of an e-ticket is changed, then a new image must replace those 25 occurrences. As a training manager, you have to ensure that all 25 occurrences are located (a manual process), and that each, separately, is updated. This task might also involve processing the original file in many different ways to fit different sizes and screen layouts.

Overall, this process is decidedly labor-intensive and error-prone. However, this is only part of the problem. Another significant shortcoming is that the time and cost associated with developing courses under the traditional paradigm rules out the option of developing variations of courses to suit the specific needs and preferences of different audiences. A one-size-fits-all approach, which serves no audience particularly well, typically is followed. Finally, overall cycle time to produce and launch a course with traditional e-learning methodologies and tools is unacceptably long. The approach falls within a traditional publishing paradigm dating back to Gutenberg, a paradigm that comprises publishing in a static format (whether in the guise of a paper-based book or an online course) and a distribution process that is, in important regards, manual in nature.

Modern e-Learning: Dynamic Content Delivery

The advent of rapid authoring tools and methodologies addresses some, but not all, of the issues outlined above. In particular, there remains the problem of maintaining content in courses that have a long shelf life, but require a high volume and rate of revision. As mentioned above, the situation is further aggravated when multiple courses have content in common.

This problem is addressed through Learning Content Management Systems (LCMS). One of the defining characteristics of a true LCMS is that it uses an object paradigm. This is quite different from document management systems. Content is stored in small, discrete components as objects within a database. These objects – text objects, graphics, assessment items, audio files, etc. – are aggregated into structures: for example, objects into pages, pages into lessons, lessons into modules and modules into courses. The advantage of the object-based paradigm is easy to illustrate. If, to return to our example

of the airline curriculum, a graphic object depicting an electronic ticket appears 25 times across 20 courses, then it need only be updated once, within a central repository, in order for all 25 occurrences to be revised. Basically, there is only one instance of the image, and it is re-used 25 times. There is, then, some degree of separation of content and structure. This is not necessarily the complete separation one finds in XML-based single-source publishing systems, but represents a significant change from the way content is assembled or “hard-baked” into packages or “blobs” by tools such as Flash.

This brings us some distance towards solving the problem of maintaining content in a reliable and efficient fashion. However, there is still the issue of the static content publishing paradigm to consider. Even if content at source can be kept up to date, access to current versions by end-users may be impeded by this paradigm. Let’s examine this issue briefly.

Until very recently, the typical scenario for an organization that has adopted enterprise infrastructure to support learning would run as follows. Content (courses, in this case) are accessed by learners through a Learning Management System (LMS). Courses may be created and maintained in an LCMS, but this content is ultimately packaged in accordance with some industry standard format (SCORM, typically) and the package is exported as a static entity to the LMS, where it is registered and catalogued for display in a portal or portlet. The processes are largely manual, though LMS-LCMS interoperability standards exist (PENS) that can facilitate automating some aspects.

Now, once revisions are made to an existing course, the course must be repackaged, and the new version is transferred to the LMS, registered and catalogued, replacing the previous version. In a typical scheme, this will involve the LCMS administrator or a curriculum manager posting the new version of the course to an FTP site, and notifying the LMS administrator so that he or she can download the relevant files from the FTP site to the LMS, and then proceed to enter the course into the catalogue, replacing the previous version. Obviously, it is not cost-effective or efficient to go through this distribution process for every single change that may occur. In practice, therefore, the courses are updated at longer, sometimes set, intervals, and may encompass several rounds of revisions that have accumulated over the period. This entails that learners do not always have access to the most recent, most correct content, even if the necessary revisions have been made somewhere on the LCMS side. This is an example of the “static” publishing paradigm. The alternative, which is becoming increasingly common with organizations that have adopted best of breed LCMS technology and implemented best practices, is a dynamic approach. In the dynamic approach, content is served up directly from the LCMS, or else the LCMS and LMS are fully integrated. In the latter case, learners will still access courses through a catalogue displayed via the LMS; however, in a process that is transparent to the user, the LMS actually reaches back into the LCMS to serve up the most recent content available to the learner. What this means is that revisions to content can be made on a continuous basis. As soon as they are approved, the revised content is immediately available to consumers.

Not surprisingly, LMS vendors have not generally championed dynamic delivery. The LMS industry often seems to position LCMS technology simply as another authoring tool: that is, as a tool set to create and edit content, the main benefit of which is that it can reduce content creation and maintenance costs. More and more, however, organizations are realizing the importance of access to current content, especially for front-line employees such as sales and customer care representatives and service technicians. Without putting up-to-date knowledge at the disposal of these individuals, a variety of business initiatives and imperatives are at risk: sales, customer retention, customer satisfaction, relationship-based sales strategies, time to market and regulatory compliance, for example. An emerging focus on content and its relationship to individual and organizational performance is now driving increased emphasis on dynamic delivery.

“Dynamic Content”: Other Nuances

The story presented above outlines the shift from a static publishing paradigm, to a dynamic one that moves content more rapidly and efficiently from producers to end-users. In the general field of content management, however, the notion of dynamic content has additional nuances or senses. It is worth exploring these briefly, as they have had some impact on expectations of LCMS and learning content management strategies in recent time.

The general notion of dynamic content in the content management sphere boils down to two principles. In addition to the notion of maintaining content in an object-based scheme in a central repository there is a notion of “effectivity”, which means that different configurations of content are generated for different users, for different purposes, and for different publishing channels.


A user profile might contain information concerning, for example, any of the following elements:

- **role or job designation**
- **identified performance gaps**
- **language**
- **region**
- **experience**
- **disabilities**
- **preferences**

“Publishing channel” could include any number of display devices: printed page, low or high resolution computer screen, PDA, cell phone, etc. “Purpose” (or maybe “information product” is a better term) might implicate different formats and configurations of content associated with say, online courses, print-based learner guides and participant guides, presentation material. In very sophisticated content management strategies, content is managed from a single source, and published according to the requirements of different user profiles, channels and product types. This is the world of true “single source, multi-channel” publishing.

Single source, multi-modal publishing is achieved through complex, difficult to implement and expensive XML-based publishing systems. Such systems require that all possible inputs and outputs, and their relations, be defined in painstaking detail and captured through XML metadata, schema, transforms and styles. Once these have been established, content producers are limited to restricted input based on specific authoring tools (possibly, an XML editor) and predefined structures. Training is required for authoring, both from a technical or tool perspective, and also in terms of implementing the approach to writing that is necessary in order to enable content to feature in different contexts without editing. Finally, any new requirements will require adjustments to schema, tagging and styles. On-going maintenance of the system, and accommodation of change, is thus usually an expensive proposition and requires some technical expertise or sophistication beyond what one typically encounters in a Learning and Development organization, for example.

Today, best-of-breed LCMS vendors have implemented some form of end-to-end single-source solution for a small number of customers – mostly in the publishing and defense industries. These are invariably unique solutions tailored to the specific requirements of individual organizations. Such solutions are costly and take time to develop and implement. While implementing a standard LCMS platform is generally an undertaking with very significant change management dimensions, putting in place a



single-source solution brings a whole new level of change and risk. In general, learning organizations (training departments, HR, learning and development services) lack the technical skills and experience that are required to drive such projects, as well. For example, developing the requirements -- an activity that needs to be informed largely by the operational and business units that experience the needs -- may be problematic. The premise that a significant proportion of content can be written in such a way as to feature in a wide variety of learning contexts, or across different forms such as technical documentation and training content, is itself a contentious notion, also. It seems intuitive that something such as, for instance, a step procedure or a system diagram might enjoy wide applicability. But, otherwise, the most effective training content is usually highly contextualized, and training and tech docs, for example, are, at a more general level, separate disciplines and genres, each with their own requirements for writing styles, standards and conventions.

Although LCMS implementations usually fall short of the true single source paradigm that is based on complete separation of content, structure and presentation, many powerful mechanisms still operate. Based on the object scheme, content at different levels of aggregation can be re-used, and maintained through one instantiation. Content can be localized in very efficient ways, and content can also be distributed, using "push" or "pull" strategies, to different user groups based on their profiles, reflecting e.g., different roles, needs, preferences. Let's see how some of these capabilities apply in practice.

LOCALIZATION. Suppose you are tasked with developing a course on best practices for performance management within a large organization. There are two major audiences to consider: managers who have direct reports, and a unionized workforce. Apart from their respective roles, suppose that with managers, performance factors into remuneration, while for the unionized workers it does not play a role.

Suppose also that, in recent history, performance evaluations have played a role in making cuts to the workforce. We can certainly presume that there will be a good chunk of content, maybe 80 percent, suitable for both audiences. But there will surely be a significant portion that ideally would be custom tailored to each audience.

Using traditional methods, it is very likely that one course would be developed to cover all audiences. In exceptional circumstances, two separate courses might be mandated, if this training is considered highly strategic to the firm, and these would be produced at considerable cost, probably as separate projects.

In contrast, using a LCMS, two separate course structures would be established, one for each audience. These structures would be largely populated with the same content, which would be developed once and stored in the repository. A smaller number of structural elements would be populated with content unique to each course: for instance, scenarios and motivational devices, such as testimonials, appropriate to each audience. The result: custom tailored content developed cost-effectively.

This example illustrates what is often referred to in the industry as "localization", that is, the process of adjusting content for the specific requirements of different audiences. One could imagine adjusting content for regional differences in policy or procedure. More subtlety, in a global organization, one might also accommodate different local practices, values, cultural references, and accepted modes of communication. With a larger variety, and more complex configurations of adaptive content, content selection could be based on multiple criteria embedded in the categories making up a user profile. For instance, policy-related content or content describing product features could be selected based on "region", if there are regional differences, while procedures concerning use of related tools, like a CRM,

might vary according to “role,” such as sales rep, account manager, or sales manager. Imagine managing content or assessments related to compliance in the US insurance industry, for example, where regulations vary across 50 states. This is feasible with a content management strategy and technology, but obviously very challenging without the benefit of the right tools.

LINGUISTIC TRANSLATION. Linguistic translation is also a form of localization, and potentially the most expensive variety. Using conventional authoring tools and methodologies, the cost of generating a second language version of a course is generally estimated in the range of 40-60 percent of the cost of the original version. This ratio may range upwards as high as 80 percent, depending on tools, methods and the complexity of the course. In essence, you have to pay for the production of the course (including the usual project management and quality assurance costs), twice, plus bear the cost of translation.

Using an LCMS with a translation facility, the cost of a second language version can be reduced to within the range of 15-20 percent of the cost of the original course, with most of these costs attending translation. How is this accomplished? Essentially, the text objects within the course are exported into a spreadsheet environment. Translation is managed and completed within this environment. Once all the text objects are successfully translated, the translated objects are pulled back into the production environment to populate a second version of the same structure that contained the contents of the first version of the course. Non-textual components are also pulled in and left untouched. In a very sophisticated scenario, translation management tools would be available to manage the on-going maintenance and revision of courses published in different languages. These tools would enable one to keep track of, and co-ordinate, changes across multilingual versions. While some best-of-breed LCMS platforms have a translation utility, none at present has translation management capability. This capability might be achieved by integrating with a commercial translation environment, or possibly by exporting data from the LCMS, to such a system, in an XML format.

LOCALIZATION ACCORDING TO DYNAMIC USER DATA. The examples above illustrate how elements of a simple user profile (role and language) can determine what content will be delivered to a learner. Both cases concern the delivery of a “course”. However, LCMS are used not only to deliver e-learning courses. They are also capable of supporting a wide variety of knowledge management and performance support strategies. For example, LCMS can be integrated with other enterprise applications. Typically, integrations involve LMS, HR systems, or ERP systems with HR components. With these types of integrations, sophisticated management of learning via learning paths or competency models may be enabled. However, in the future we are likely to see integration with other business applications in an effort to tie learning more directly to performance gaps and targets. This strategy will rely on more dynamic, time-sensitive user data, than the kinds of stable profiles mentioned above.

In this scenario, the business application would provide up-to-date (possibly even real time) performance data that determines what content is delivered or made available to an individual. Examples of candidate business applications include ERP and BI systems, CRM platforms, call-center management applications, and manufacturing quality assurance systems, to name only a few. Integration or interoperability may be achieved through various technical approaches: web services, SOAP, XML data exchange, robust APIs.

The performance data could be combined with business rules that set thresholds for what qualifies as acceptable performance. At regular intervals, any individual or group that falls below the threshold would trigger events within the LCMS. Based on categorization of both content and potential performance gaps through taxonomies and metadata, the LCMS would call up material that might be

relevant to solving the performance problem reported, and “push” this material to the desktops of the individuals experiencing the problems. The content might comprise any of a wide variety of types of material: for example, technical documentation, policy documents, FAQs, best practices, lessons learned, job aids, just-in-time learning modules or complete courses. In a very sophisticated scheme, these materials could be graded by users in terms of their usefulness and then, over time, the list could be refined, distilled or elements could be prioritized.

Here is a concrete illustration. Suppose an individual working in a customer service center for a telecommunications firm is unable to resolve calls concerning disputed long-distance charges. Let’s call this individual “Bill.” The evidence for Bill’s under performance in this category of task is provided by a call-center management application. The mean time he spends on such calls is too long, there are too many call-backs and too many calls are escalated to the next level of dispute resolution. This data triggers an event within the LCMS. A notification is generated for his supervisor, with a report available concerning the performance deficiency. The call-center management application identifies time when Bill’s volume of calls is lower and pushes to him some content that has been identified, and indexed within the LCMS, as potentially useful for resolving the problem. This material could include, for example, relevant policy or directives, a short scenario illustrating aspects of good communication within the context of this kind of call, a job aid that includes questions to pose to the customer, or a link to a complete course on communication skills.

Of crucial importance to this scenario is “closing the loop”, that is, once the interventions have been chosen, and some have been accessed by Bill, his performance needs to be checked again to ascertain whether there has been satisfactory improvement. If his performance is not improved this should trigger some other event: for example, a notification to a supervisor that will lead to an interview and subsequently some other intervention strategy.

Another example of the use of dynamic user data is a strategy to deal with revisions and updates to training courses. One of the business problems identified at the beginning of this paper was how do we update the knowledge and information of individuals who have completed courses, after new revisions to those courses are enacted? Dynamic user data can include information concerning what courses have been completed. When revisions are made to courses, this information can be used to notify course graduates concerning new material, or even to push that content to their desktops. This simplifies the delivery of what is often referred to as “bridge” training.

DRIVING KM STRATEGIES WITH DYNAMIC CONTENT PUBLISHING STRATEGIES. The preceding examples illustrate how user profiles or data and dynamic content can improve the focus and effectiveness of training interventions. However, user profiles and dynamic content distribution can also increase the power of knowledge management (KM) strategies implemented with LCMS. Let’s consider one approach to show how this works.

One KM strategy that can be implemented with LCMS technology is basic “knowledge-sharing.” Roughly, this is a strategy that works as follows. Any user can contribute a resource she has come across that she feels is useful in relation to some topic of concern to the organization. For example, I may take a course online, and then realize I have had a related experience of value I would like to share, or I have read a good journal article or visited a useful, relevant web site. Or perhaps we wish to build a database of best practices or lessons learned for some specific area. Through a portal, using appropriate templates, I can submit any of these items to the repository to make them available throughout the organization.

Normally, this would be a two-step process. I would first identify where this item would fit under the

organization's taxonomy, select from available key words or metadata for further description, and then submit the item. The submission would be routed automatically to a designated expert for review and validation. If approved, the item would be made available immediately for retrieval by anyone searching knowledge-sharing resources through the portal.

In this scenario, user profiles also could be used to streamline and accelerate diffusion of relevant knowledge. For example, learners could subscribe to a set of topics or taxonomy elements, and receive updates or notifications concerning new contributions to these specific areas or the organization might establish some initial default profiles based on employees' roles and other data (e.g. regions, markets, language...).

In a more sophisticated scenario, the system might keep track of a given user's queries or searches, and begin to provide notifications of new material related to the user's previous most common searches. Users could also rank the value they attribute to different resources, leading to prioritization of hits for subsequent searches, based on these evaluations. The system might even make use of "social data mining" techniques familiar to users of some commercial websites, such as Amazon. In this framework, an individual who has indicated an interest in subject P or who valued resource Q is informed that others with the same tastes have indicated an interest in another subject M, or a resource N. The user is then presented the option to access these further resources.

As with the training-related examples, in this knowledge-sharing scenario the power of dynamic content, metadata and modifiable user profiles to deliver the right information to the right person is clear. This is the real foundation for leveraging the "knowledge share" utility to generate something of value for participants.


In the near future, LCMS platforms are likely to integrate broader IT standards to support this kind of functionality, such as RSS. RSS is a natural fit with the paradigm of dynamic content discussed above: live, server-based content being fed to system users. The capability to syndicate RSS feeds offers enormous potential for users to gain access to information and learning content that is relevant and useful to them in a more direct and controllable fashion than simply relying on LMS or even the typical content distribution capabilities inherent in LCMS.

Keeping Content Current

As outlined above, dynamic content capability is the key to making sure that users have access to the right information, when they need it. The object-based approach to content development simplifies content management, and provides for efficient, error-free content revision. However, other elements of LCMS technology and learning content management strategy also play a key role in ensuring that content is truly up-to-date.

Technological Features to Consider:

RAPID AUTHORING CAPABILITY. This refers to an intuitive, user-friendly authoring environment with all or many of the following features: integrated storyboards; PowerPoint and Word file conversion utilities; support for distributed teams in the form of collaboration, workflow and project management tools; templates and performance support for instructional design tasks. Collaboration tools are key, and also afford the ability to manage print documents as well as electronic material.



POWERFUL SEARCH AND RETRIEVAL TOOLS. Separation of structure and content allows for efficient content re-use strategies. But content can only be re-used if it can be discovered or located. Taxonomies and metadata schemes support effective search and retrieval strategies, both for learners and content developers. Other tools include taxonomy and metadata management utilities, thesauri and full-text search. Best-of-breed LCMS may also feature a portlet for end-user search to support just-in-time and on-demand learning strategies. Such a facility allows an end-user to search for learning objects that meet specific needs, directly in the repository. The key here is good metadata and appropriate standards and practices around the content architecture (building content in a disciplined modular fashion).

WEB-BASED CONTENT DEVELOPMENT. Web-based systems allow for content access across an organization, through the browser. This ensures wide accessibility to courses, learning objects or performance support material, typically through a portal. Accessibility is important not only for users, but also for developers working in distributed teams, subject matter experts, legal department, and others who may review and approve content in development. Web-based systems also allow for rapid deployment of content once a production version has final approval. There is no need for IT services to mount the course directly on a server, or to publish the course to an LMS catalogue, where, in the absence of a tight integration of LMS and LCMS, it would once more be rendered static content. There is similarly no need for IT services to provide client-side plug-ins, readers or apps.

VERSION CONTROL AND VERSION HISTORY. With better tools to support access to content and content development, maintenance is greatly facilitated. However, in the absence of tools to keep track of versions and, if necessary, roll back revisions, content in a repository can quickly become a quagmire. Not only must the most recent, most accurate, content be present and available in the repository, we must also have the tools that allow us to verify whether we are indeed operating with valid content.

Turning away from technology for a moment, to address organizational and conceptual issues, learning content management strategies include three key points:

- **Taxonomy and Metadata Development.** As emphasized above, the availability of dynamic content has value only if content can be located easily. This depends on the quality of the taxonomy and metadata schemes under which content is stored. In fact, as explained in this document, taxonomy and metadata may, in effect, be applied not only to content but also to users and to performance problems.

Development of effective taxonomies can be a time-consuming, iterative process that requires extensive consultation across an organization. However, it is a critical success factor.

- **Content Ownership.** In many organizations content is owned by a training or learning and development department. Typically, these elements in the organization are run as cost centers, with fixed budgets and competing requirements. Therefore, their ability to respond quickly to requirements for new content development or for maintenance of existing content is usually limited. In many cases, this is the primary bottleneck, rather than limitations of the technology used for e-learning development. One solution is to transfer some degree of ownership of content and related roles and responsibilities for content maintenance, and even development, back to the business units where the content is generated. With web-based LCMS that feature rapid authoring capability as described above, this is realistically feasible from a technical perspective.

- **Re-use Strategies.** Content re-use, where it applies, does not just occur through happenstance. An explicit analysis of curriculum and other content must be undertaken, and a strategy for re-use defined. A good way to start is with a comprehensive training audit to identify existing types of training content. Thinking systematically about re-use may lead to a re-thinking of high-level design strategies and the elaboration of a curriculum structure that can best facilitate re-use. Although there is much literature concerning the concept of “re-usable learning objects”, experience shows that most re-use involves leveraging lower level media assets, such as graphics (charts, graphs, illustrations, logos, photos). Re-use at this level is highly dependent on file naming conventions, as well as taxonomies.

Conclusion


Dynamic content strategies, delivered through rapidly evolving LCMS technology, are revolutionary in the sphere of e-learning, despite the fact they have existed for some corners of the enterprise content management field for many years. LCMS vendors are simplifying the task of implementing dynamic content strategies. While there are some trade-offs in functionality and capability, the compromises respond to the constraints and needs of the e-learning, human performance technology and knowledge management markets.

Dynamic content, backed up by technology and strategies that ensure rapid development and initial deployment of content, responds to the central business problems that traditionally confront the field of training. These include the following:

- **How can we ensure that course materials are customized to different audiences so that their needs are met, and what is learned can be transferred back to the workplace?**
- **How do we connect people with content (not just courses, but all types of content) that can support learning and performance, and how do we do implement just-in-time strategies that can accomplish this goal?**
- **How can we better connect learning and performance support strategies with real gaps in performance that stand in the way of achieving business objectives?**
- **How can we capture knowledge rapidly and make this available more generally where and when it is needed?**

Dynamic content can provide the basis for meeting all of these challenges more effectively than ever before in the history of computer-based learning and instruction. However, the technology alone cannot supply the answers. Significant investment in development of different components of a learning content management strategy is also required. Components of this strategy include, but are not limited to:

- **taxonomy and metadata design**
- **high-level curriculum and learning strategy design**
- **work-flow and job design**
- **content re-use strategy definition.**



Developing and implementing this strategy will require significant individual and organizational development, and a coherent change management strategy to ensure success. That said, deployment of such a strategy will be well-rewarded with reduced costs, achievement of business goals such as, for example, faster time-to-market or regulatory compliance, and improved individual, group and organizational performance. More generally, the move to servicing the need for on-demand learning is part of a larger movement in our field that recognizes the need for mechanisms to support informal and life-long learning. In the long term, we will see further blurring of the distinctions among learning, performance support and knowledge management, both from the perspectives of technology and organization. The future lies not with static content delivery, but rather with streaming, on-demand delivery of dynamic content (which will feature information and learning objects and referenceware as prominently as conventional courses). The future, in other words, lies not with the Gutenberg paradigm, but rather with the experiences and capabilities reflected in Google and YouTube. Cutting edge LCMS technology will evolve in this direction. The evolution will not be completed overnight. It also had dependencies with the further maturation of non-elearning standards and technology – from text-to-speech engines to standards for mobile phones and operating systems and apps for PDAs, for example.

Steven Shaw is chief learning officer for www.eedo.com, a leading provider of learning and knowledge management systems to drive productivity and efficiency.

EEDO KNOWLEDGEWARE CORPORATION

Eedo Knowledgeware is a leading provider of learning and knowledge systems to drive productivity and efficiency. Eedo offers a set of powerful, adaptable and easy-to-use tools for business people and learning experts, addressing practical knowledge management requirements including; learning content management, dynamic delivery, rapid authoring, assessment, knowledge sharing, performance support and indexing and search. Eedo's award winning products are utilized in a broad range of industries and enterprises such as American Management Association, Convergys, Internal Revenue Service, Foreign Commonwealth Office, and Lufthansa. Eedo is privately held, with offices in the U.S.A., Canada, Germany, the Netherlands and the United Kingdom.

Eedo Knowledgeware

76 North Eastern Blvd.
Suite 29A
Nashua, NH 03062
T 603 889 3784
F 603 595 7932

15 rue Buteau
Suite 100
Gatineau, QC J8Z 1V4
T 819 775 9494
F 819 775 9495

Contact an Eedo representative today
for further information or an online
demonstration.

888 THINKEEDO
888 844 6533
eedo.sales@eedo.com

www.eedo.com

United Kingdom

Eedo Knowledgeware (UK) Ltd
2 Queen Caroline Street
London, W6 9DX
T +44 (0) 20 8323 8026
F +44 (0) 20 8323 8305
E uk@eedo.com

Germany

Eedo Knowledgeware Germany
Franzsische Straße 24
10117 Berlin
T +49 (0) 30 20648551
F +49 (0) 30 20648556
E germany@eedo.com

The Netherlands

Eedo Knowledgeware BV
Laan van vredenoord 33
2289 DA Rijswijk
T +31 (0) 70 3192702
F +31 (0) 70 3268086
E netherlands@eedo.com