



White Paper: *Knowledge Management and the law firm of tomorrow*



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Introduction

The law firm of tomorrow will have to leverage knowledge management technology in order to be competitive. The correct implementation of new technology into existing processes has always been a differentiator in the market place. It is wise to view technology as a tool, something to be leveraged. The pain of adoption comes from the new processes that may have to be deployed in order to take full advantage of the new technological capabilities. This white paper summarizes the current state of knowledge management technology and its application to the law firm of tomorrow.

Whether managing content across offices or continents, you need a way to efficiently manage content for your firm as both the amount of content and the way it is accessed changes — and to do this while maintaining your current level of service to your clients.

Technology is a great unifier. The role that technology is playing is not only growing in magnitude, it is also changing the way in which law firms compete in the marketplace to maintain existing and grow new business. As a result, none of the "back-office" functions in law firms are exempt from the reach of new software and hardware, the Internet or from the vast increases in communications due to Intranets, Extranets and sophisticated Email and wireless systems.

Specialized Knowledge

The following is a brief list that just scratches the surface of the types of "specialized knowledge" that each department in a law firm may possess through their own technology. Each of the following examples provides a piece of information usually housed in that department, but suggests how another area could benefit by having access to or knowledge of parts of that department's technological resources

Accounting

Client information including contact data, billing and payment history and information about parent companies and/or subsidiaries for cross-selling purposes often exists in a variety of forms in accounting. Marketing could use this information when determining how to best cross-sell services and gain entry into related companies even if there is no firm-wide relational database.

Human Resources

Information about personnel, frequently gleaned when staff and lawyers first start, could include additional information useful to other departments such as additional languages spoken, additional areas of interest (for internal transfers i.e., a secretary who has some marketing or special events experience), or contacts in other law firms. Virtually every other department could benefit by knowing additional information about the firm's most valuable resource, their people.

Library

The library can be far more than a passive bastion of static information. The disparity between firms that have proactive libraries and more conservative, traditional ones,

is enormous. The library is no longer only a resource for legal needs. It should be utilized as a true communications center working in conjunction with marketing to provide timely business information that can enable the lawyers to walk into any client situation better prepared to pitch for new work or deal with a client's concerns.

Marketing

In many marketing departments there are graphics experts or presentation capabilities that do not yet exist in other areas of the firm. If marketing could work with the other departments to improve the internal presentations that were done by recruiting or accounting for example, the partners would be educated about the technology and would, ideally, receive the information in an enhanced framework. Additionally, the other departments could then incorporate these software programs into their areas and utilize them for their primary functions.

Office Services

Frequently new systems, such as voicemail, will be installed firm wide and after the technical aspects of the installation are complete, the manuals will be distributed and the lawyers and staff will rarely be given guidance as to how to best use this new technology. Oftentimes the "experts" for a new software product do not reside in MIS, or in word processing, but in a different area of the firm. Communicating who can help the users best leverage the technology is a commonly ignored detail in law firms. Office services could create a pocket guide, if one does not come with the equipment, and coupled with a script from marketing about client communications, this could be a powerful mini-tool to be utilized by lawyers and staff.

Recruiting

Many recruitment departments track where lawyers go when they leave the firm. Some create sophisticated Alumni Books that include rich information including undergraduate and graduate institutions, current job, hobbies, years at the firm etc. Frequently this tool is used as a subtle marketing tool; however, its power could be trebled if this information was cross-referenced with any existing data in marketing and accounting to determine where pockets of contacts already existed.

Word Processing

Documents created and transferred between partners and outside sources may not be in an understandable format. This is not a computer problem. This is a communications issue. To send information electronically, lawyers have to understand their own firm's systems first and then how to request or send information so that the transfer is seamless.

Think about how each of the other areas in your firm could benefit from the technical knowledge you have in your department, and think about how your increased knowledge of the other areas could sync with the work you are already doing. Think about the combined power of the information that currently exists in your firm in different places. This is the unleashed power of technology and you hold part of this power.

Challenges

Law firms are placing increasing importance on their internal professionals who, although are frequently non-lawyers, have growing responsibilities that influence the success or failure of their firms' from both a practice perspective and from a business development one. These legions of experts in their respective areas including: information technology, library science, marketing, recruiting, finance and administration have, at times, faced challenges in relation to their respective roles within law firms.

The situations that have led to these conflicts are usually political, frequently territorial and always, at best, complicated. At many firms, both large and small, senior management has not always seen the need to encourage regular meetings or open communications between support staff. Set-up similarly to practice areas, each support area may have a champion, usually a partner or executive director, entrusted with the effective management of that department. The open flow of information has rarely been fostered and oftentimes even discouraged depending upon the political climate of the moment.

Many firms believe that a librarian may have little need to understand how and what the recruitment department is doing to attract new recruits, while the accounting department may have no involvement with the marketer and his staff, unless they meet to discuss the database that may affect both departments. The Chief Information Officer may not even be introduced to the Human Resources Team, other than during an initial. An effective manager will usually benefit from understanding the "larger picture" and by relating the objectives of his department into this greater whole. While this is certainly not a revelatory concept, for law firms it is sadly not the norm.

With the advent of technology however, this group of support staff underdogs has the best reason in the history of law firms to unite. Their understanding and use of technology, and their ability to teach the lawyers how technology can assist them, will become the strongest competitive advantage each law firm has, without spending any additional capital expenditure. The technical knowledge that these support groups possess are not just useful for a librarian or a marketer. Lawyers will need to understand the tools and resources now available in their firms to make better-informed business decisions about a myriad of areas they were perhaps only tangentially involved with before. In order to achieve this however there will be a new level of effective communications needed between internal "support" functions and between the support groups and the attorneys

The challenges are how do you efficiently provide access to content for offices spanning several offices or continents. Add to that complexity, dozens of different practice areas. Controlled replication or duplication of information becomes a real challenge.

Functional areas that produce mind share that can be leveraged are:

- Litigation Support
- Document Assembly
- Client Information
- Legal Research
- Time & Billing

- Email
- Conflict Checking
- Scanning Images
- Accounting
- Calendaring
- Voice Recognition
- OCR Scanning

Technology must ease expansion of the firm, as well as its Internet and extranet client services, regardless of language barriers. Solutions must revolutionize legal services by developing a new business model that provides traditional legal services over the Internet. Systems must maintain, add, and track content going in and out of large content databases.

Solutions

Three separate developments are coming together that may make true knowledge management a reality. The changes are coming in the areas of document management, database analysis and text processing. Knowledge management will enable workers to tap into a company's collective store of information. But building knowledge management housing is a massive undertaking.

The framework of information exchange requirements are the same for any law firm, whether on the global scale with thousands of lawyers or on the local scale with two or three partners. A global law firm with thousands of employees may provide advice to some of the world's largest companies and financial institutions on all areas of commercial law. Any size firm can provide traditional legal services over the Internet, ranging from advice and counseling to producing legal documentation and managing legal transactions.

The solution architecture is the same for any firm that wishes to maximize the impact of technology and fully leverage the inherent functionality. The framework of a total solution will have components of the following:

- Database Analysis
- Back Office Automation
- Text Processing
- Document & Content Management
- Flexible Client Access

The degree of adoption and complexity of integration is directly proportional to the scale of your enterprise. Small firms will be able to utilize smaller Windows based web applications or Application Service Providers. Large firms have the complexity of scale that requires the integration of enterprise solutions that can be integrated into the existing I/T infrastructure or deployed in a hosted environment.

"We're getting rid of the islands of information, the brick walls, that exist in a corporation," says Tayloe Stansbury, vice president of document management systems at Xerox.

Database Analysis

Database searching and analyzing tools and their more complex big brothers, sophisticated data mining tools are an integral component for true knowledge management. Data mining differs from traditional database queries in that it tries to picture, often in three-dimensional form, complex relationships among many more variables - for example, sales by product, by category, by time and customer.

The first generation of these tools for the Internet merely put a Web front end on client-server applications that were still designed for highly trained power users. Now, vendors such as Cognos Inc. are adding the second generation of Web-based database search tools.

Cognos' Impromptu Web Query is designed for the general corporate intranet user. It uses the intuitive model with which Web surfers are familiar, with each search leading into a more narrowly defined set of documents to search.

"They've done some good work on the interface,"
Says Peggy O'Neill, an analyst at Dataquest Inc. "In
a sense, the Web has become the standard for
delivering information inside companies."

The ability to act quickly and decisively in today's increasingly competitive marketplace is critical to the success of organizations. The volume of information that is available to corporations is rapidly increasing and frequently overwhelming. Those organizations that will effectively and efficiently manage these tremendous volumes of data, and use the information to make business decisions, will realize a significant competitive advantage in the marketplace.

Data warehousing, the creation of an enterprise-wide data store, is the first step towards managing these volumes of data. The data warehouse is becoming an integral part of many information delivery systems because it provides a single, central location where a reconciled version of data extracted from a wide variety of operational systems is stored. Over the last few years, improvements in price, performance, scalability, and robustness of open computing systems have made data warehousing a central component of IT strategies.

Building a data warehouse has its own special challenges (common data model, common business dictionary, etc.) and is a complex endeavor. However, just having a data warehouse does not provide organizations with the often-heralded business benefits of data warehousing. To complete the supply chain from transactional system to decision maker, IT organizations need to deliver systems that allow knowledge workers to make strategic and tactical decisions based on the information stored in these data warehouses. These decision support systems are referred to as On-Line Analytical Processing (OLAP) systems.

OLAP systems allow knowledge workers to intuitively, quickly, and flexibly manipulate operational data using familiar business terms, in order to provide analytical insight. For example, by using an OLAP system, decision makers can "slice and dice" information along a customer dimension and view business metrics by product and through time. Reports can be defined from multiple perspectives that provide a high-level or detailed view of the performance of any aspect of the business. Decision makers can navigate throughout their database by drilling down

on a report to view elements at finer levels of detail or by pivoting to view reports from different perspectives. To enable such full-functioned business analyses, OLAP systems need to (1) support sophisticated analyses, (2) scale to large numbers of dimensions, and (3) support analyses against large atomic data sets.

OLAP systems need to be dimensionally scalable. Knowledge workers analyze data from a number of different perspectives or dimensions. A dimension is any element or hierarchical combination of elements that can be displayed orthogonal to other combinations of elements in the data model. Taking a particular scenario, if a report lists new clients by week, practice area, location, and attorney, it would be a four-dimensional slice of data.

The number of dimensions in OLAP systems ranges from a few dimensions to hundreds of dimensions. Organizations typically have large numbers of dimensions in their data models. OLAP applications need to scale to handle this dimensional richness.

OLAP systems need to support large atomic data sets. Atomic data refers to the lowest level of data granularity required for effective decision-making. In the case of a retail merchandising manager, atomic may refer to information by store by day by item. For a banker, it may be information by account by transaction by branch. Most organizations implementing OLAP systems find themselves needing systems that can scale to tens, hundreds, and even thousands of gigabytes of atomic information.

As OLAP systems become more pervasive and are used by the majority of the enterprise, more data over longer time frames will be included in the data store, and the size of the database will increase by at least an order of magnitude. OLAP systems need the horsepower to be able to scale from present to near-future volumes of data.

Back Office Automation

There are many excellent solutions available for the automation of the back office. Many of the existing office platforms that permeate many firms, such as Microsoft and Lotus, have built in or extensible functionality to accommodate the automation of the back office. Common attributes are:

- Billing
- Payroll
- Project Management
- Information Management
- Time Entry
- Expense Entry
- Punch Clock and Start/Stop Timer
- Look and Feel
- Groups
- Projects, Clients, Costs and Billings
- Reporting
- Integration
- QuickBooks Pro Integration
- Security
- Product Administration

Journyx is one of many solutions that provide innovative, web-based, e-workforce management solutions, including applications for tracking time, costs, expenses, and projects. This allows you to save time & money by optimizing your most important resources - people.

Coordinate project time & expense for informed decision-making by allowing project team members to enter real-time project data from any location. Managers can access project cost & labor utilization data that integrates with MS Project.

Automate & improve your payroll processing by collecting time & attendance data that can be automatically transferred to your critical payroll & HR management systems. Automated approvals further streamline the process.

Collect accurate, real-time data for invoicing. The timely & accurate collection of time, expense & rate information gives you the ability to manage cash flows through billing schedules. Clients may also have access to historical billing records for improved relationship management.

Billing:

- Generate invoices based on up to the minute employee hours, billing rates, and expenses by client or project
- Customize data tracking fields on the expense entry screen
- Track client billing information in customizable fields
- Enter multiple billing rates for a single employee
- Define client access to project time and expense records
- Mark individual entries with appropriate accounting codes
- Create rules to favor project and/or employee billing rates

Payroll:

- Automate workflow of timesheet approval
- Approve entire timesheet or individual time entries line-by-line
- Coordinate timekeeping through automatic e-mail reminders and notifications
- Customize pay period calculations to fit your company's payroll process
- Enter multiple pay rates for individual employees based on the type of employment or work
- Define business rules for managing specific classifications of work
- Make adjustments to prior periods while maintaining historical data integrity
- Define default schedules & automatically populate groups of timesheets
- Approve open timesheets in administrator-defined batches
- Create rules that favor employee and/or work type pay rates

Project Management:

- Access accurate project information from remote locations
- Create additional, reportable project fields for free-form text, numbers or populated drop-down menus
- Store project contact data in customizable fields
- Exchange data through bi-directional MS Project integration

- Achieve accurate historical data with globalized activity & task descriptions
- Provide up to the minute estimates of project completion
- Tie a project to its own unique list of tasks, pay types, etc.
- Run project rollup reports that capture hierarchical relationships
- Manage projects using an improved project interface

Information Management:

- Receive notification via email of time, expense & mileage submitted for approval
- Sort and search through time, expense & mileage awaiting approval using a web interface
- Approve time, expense & mileage by batch or on an individual basis
- Define repetitive employee schedules by individual or group
- Notify employees of entries that have been rejected or are in need of correction
- Organize all Timesheet data for analysis using flexible reporting tool
- Add customized user fields for storage of any employee information

Time Entry:

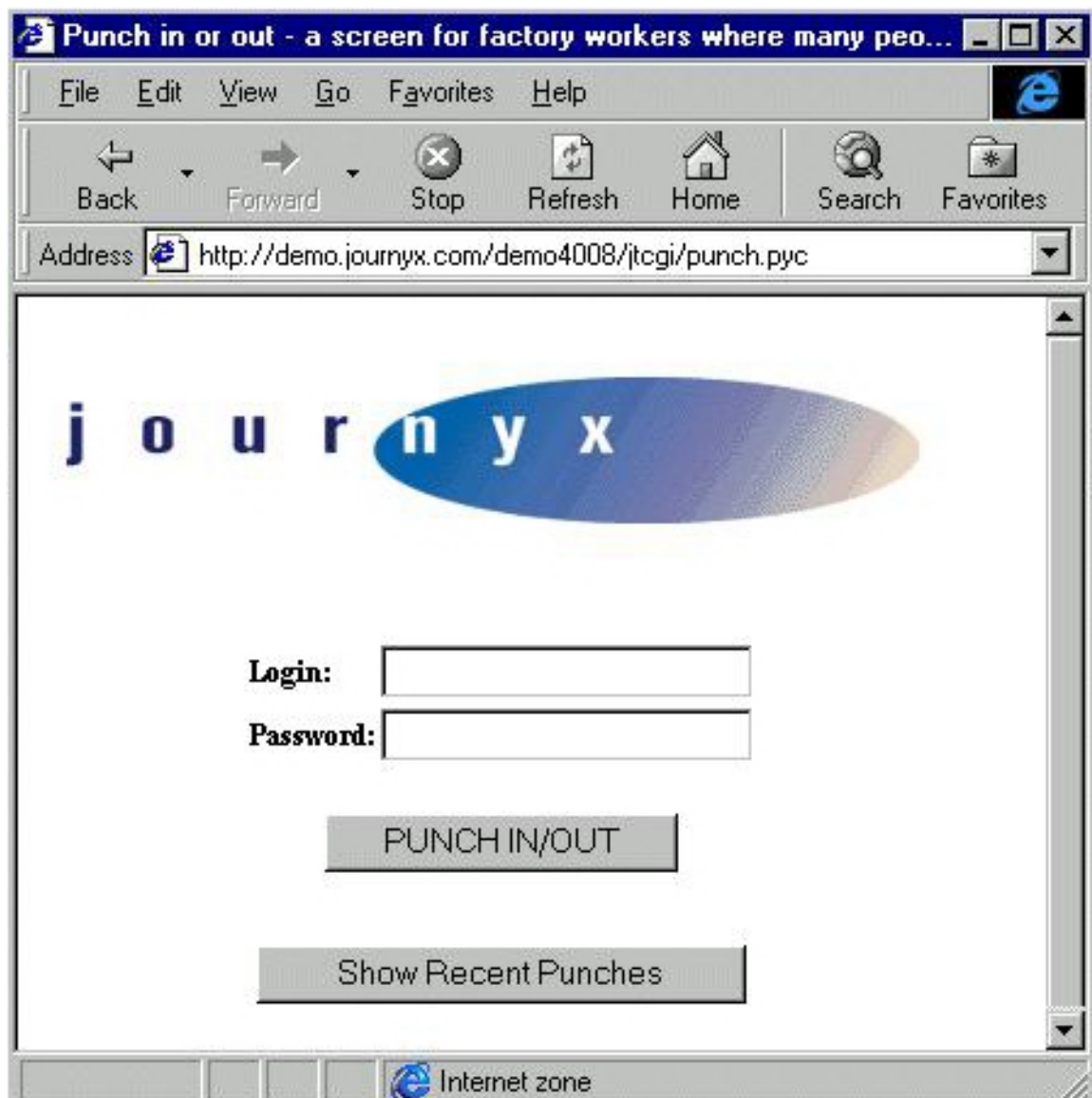
- Customize Time Entry screens for individual users, specific groups, and the entire company
- Keep track of all plans, notes for specific projects, documents, etc. using project journals
- Standardize task descriptions for work groups or company-wide
- Create Memorized Entries to simplify time entry
- Easily access Expense Records associated with Time Records
- Create groups customized to individual worker responsibilities
- Display employee accrual balances on time entry screen
- Provide employees with the ability to create & load their own schedules
- Tie rules to time for auto-population of accrued balances such as flex time

Expenses:

- Customize Expense Entry screens for individual users, specific groups, and the entire company
- Associate Expense entries with particular clients and projects
- Allocate Expenses to specific funding sources
- Define currency by default or per entry
- Report expenditures in multiple Currencies
- Track mileage and convert to currency based on historical rates
- Convert from one currency to another based on historical rates
- Upload receipt images for specific expense entries
- Upload credit card statements & include with expense reports

Punch Clock:

- Meet the Time Entry needs of hourly, billable, and salaried employees with one program
- Ensure quick and accurate actuals with the use of Start/Stop Timer
- Allow basic clock-in and clock-out for hourly employees using Punch Clock
- Tailor Punch Clock interface to meet your company requirements



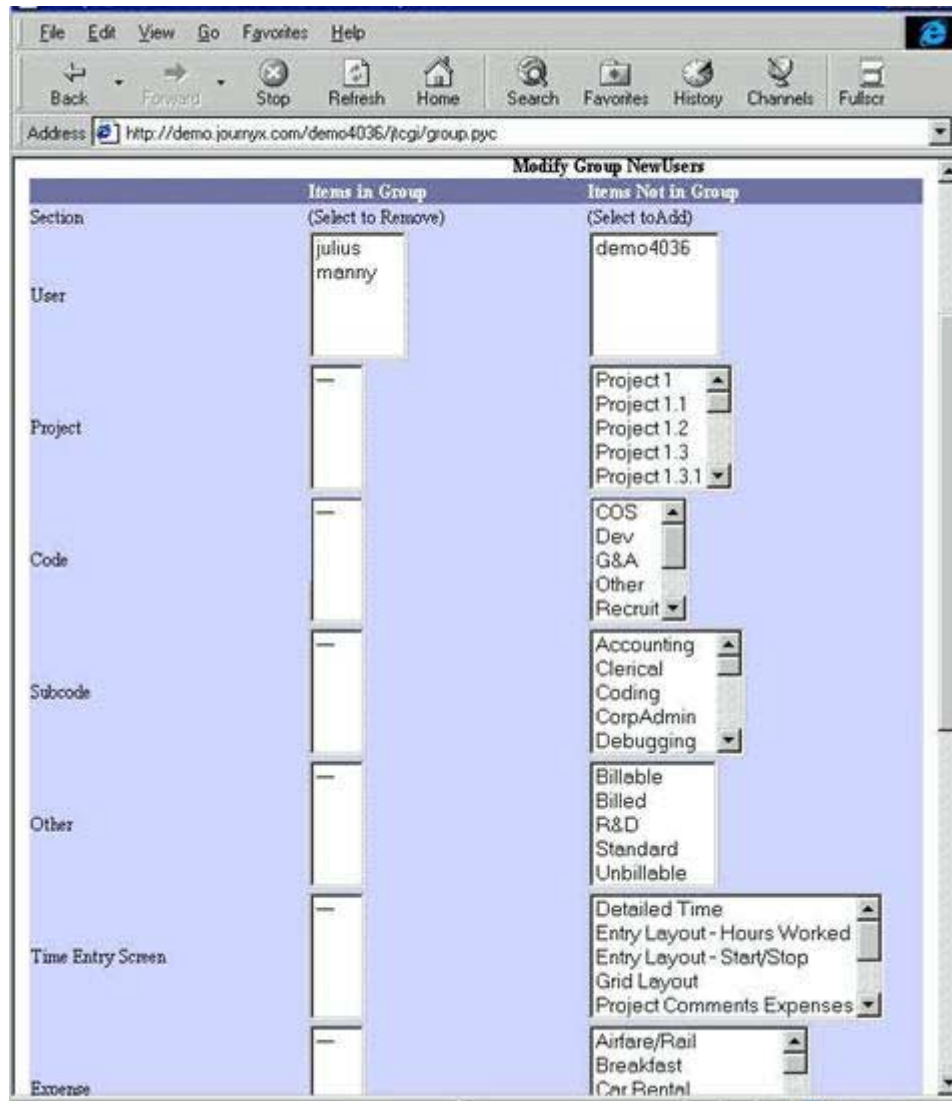
User Interface:

- Customize the Timesheet color scheme for your company
- Modify Timesheet to display company logos
- Include daily employee reminders and helpful links on the login screen
- Customize time entry screens for particular users or groups
- Rename, re-populate, or remove fields as appropriate for individual employees or the enterprise

Time Entry		Value
Number of blank rows appearing on time entry screen	<input type="text" value="3"/>	
Number of Date Columns on time entry screen (overridable)	<input type="text" value="7"/>	
Are Blank or Unentered Comments OK?	<input type="text" value="No"/>	
Default comment on time entry screen (if applicable)	<input type="text" value="EnterComments"/>	
Should expense records have comments?	<input type="text" value="No"/>	
Project Access		Value
New users get default access to all projects, codes etc?	<input type="text" value="Yes"/>	
Can users add projects?	<input type="text" value="No"/>	
Security		Value
Idle time before a user is forced to relogin (minutes)	<input type="text" value="1720"/>	
Number of Days before password is invalid	<input type="text" value="360"/>	
Minimum number of characters a password can be	<input type="text" value="1"/>	
Number of old passwords to save and disallow	<input type="text" value="1"/>	
Require mix of letters and numbers in password?	<input type="text" value="No"/>	
Time record column names		Name
The name of the hierarchical time record field	<input type="text" value="Project"/>	
The name of the first dropdown time record field	<input type="text" value="Code"/>	

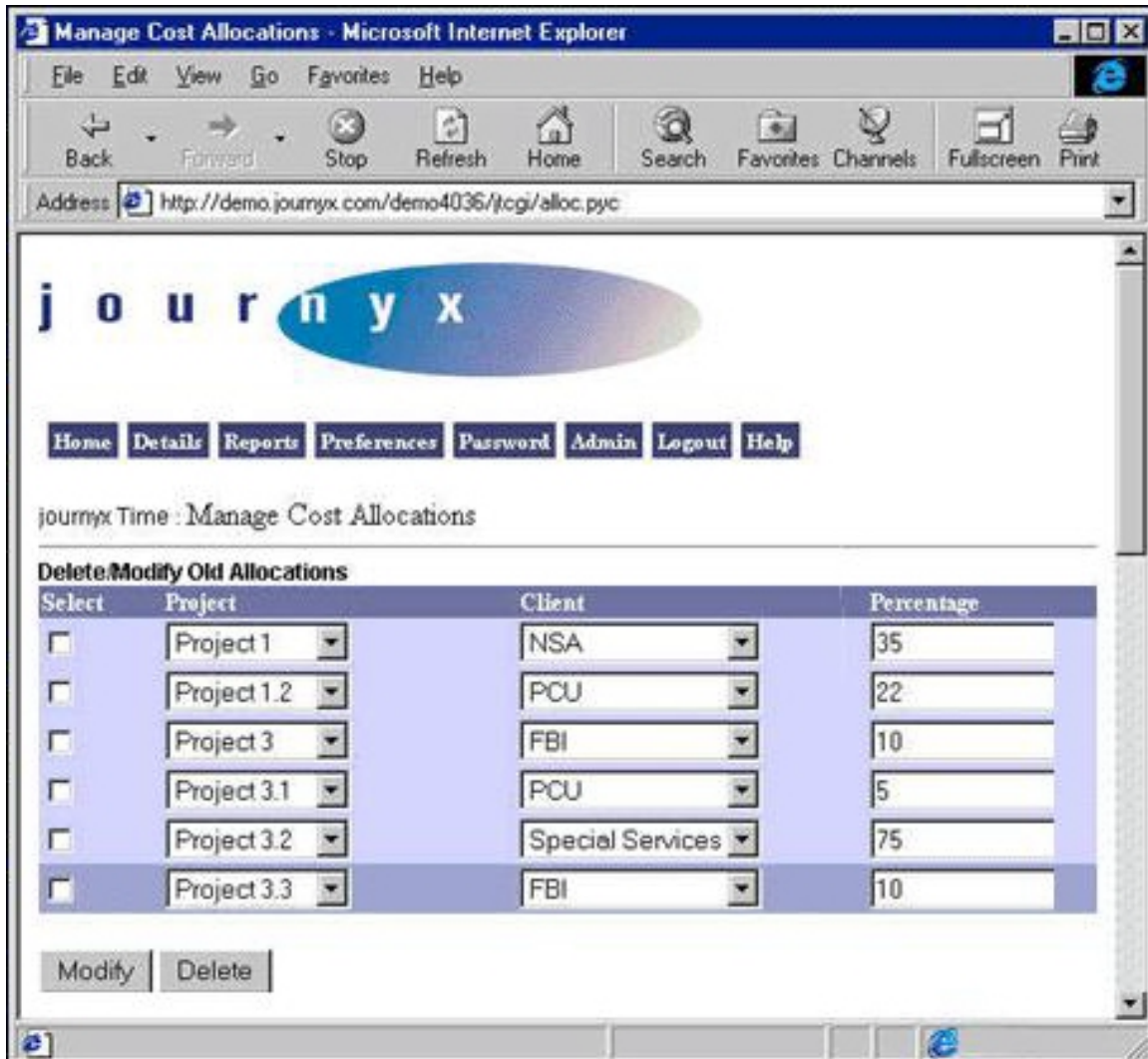
Groups:

- Ensure employee access to appropriate time, expense & mileage entry environments through use of groups and roles
- Create time, expense & mileage entry environments specific to individual users or entire groups
- Organize users into groups for projects and then job activities to simplify project reporting and new user creation
- Customize time entry screens for individuals based on job description
- Easily compare contributions of specific groups



Clients:

- Compare budgeted versus actual hours per project and activity
- Allocate project costs to specific clients
- Track completion per project or client
- Log and share detailed project notes
- Maintain loose document tracking and running status reports using project journals
- Create hierarchical projects to track completion of specific efforts or the entire project
- Track client billing in customizable fields
- Tie a project to its own list of tasks, pay types, etc.

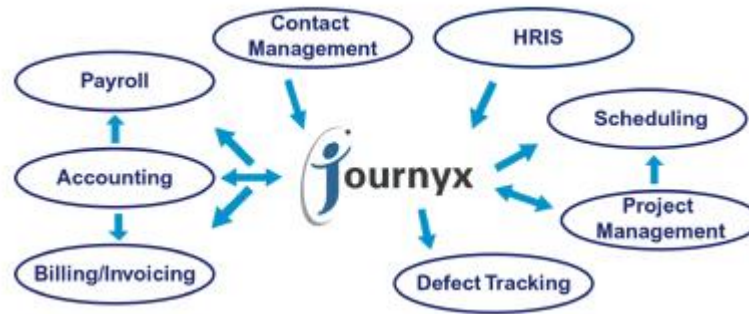


Reporting:

- Over 25 standard internal reports including QuickBooks Timesheet
- Maximum reporting flexibility achieved through the use of Crystal Reports™ or SQL queries
- Easily export reports into most popular accounting, payroll, and project management software
- Run and email reports at Administrator defined intervals
- Track Project status, Time and Attendance, Activities, Clients, Billings, and much more
- Send/receive email reminders of important deadlines
- Define user access and roles per group

Integration:

- Easily export information into existing payroll, project management, and accounting software
- Journyx Timesheet ships with a default database; however, integration is available with all ODBC compliant databases
- Integration is available with all existing corporate systems



Text Processing

There is a new class of text tools. Software from vendors such as Autonomy Inc. features intelligent agent technology to get around the principal barrier to knowledge management applications - the fact that people don't want to interrupt their busy workdays to feed knowledge management applications with the necessary information about their areas of expertise or their solutions to a particular problem.

"It's unrealistic to expect employees to spend a lot of time categorizing or tagging documents that others might find useful or filling out elaborate questionnaires identifying their areas of expertise," says Autonomy Chief Executive Officer Michael Lynch. "Our goal was to make the processes so automatic that effective knowledge management becomes almost a byproduct of normal business functions."

To make each employee's knowledge base accessible to others, Autonomy's Knowledge Suite uses a profiling system that automatically identifies an employee's area of expertise based on the issues that person has researched on the intranet, the ideas in the documents and e-mail messages the person has submitted to the system and the topics followed in Autonomy's filtered news feed.

The result: A search using Autonomy tells the user who in the company might be working on a similar problem or might have solved it.

"I think Autonomy has something," says Jim Bair, a Gartner Group Inc. analyst. "They have one of the best combinations of the technologies needed to make sense of the junk out on the intranet and the

Web, and it seems to be low maintenance from the user standpoint."

Document & Content Management

Once data has been warehoused and mined, documents produced and tracked, you then need a mechanism and process in place to make the information available to the end-user via your Intranet or Internet.

Global scalability requirements can be addressed with solutions framed around products such as Documentum and Interwoven. Enterprise solutions such as this allow you to realize greater internal efficiencies and offer new e-services and personalized content, thus improving the experience of your clients and employees.

Document management solutions comprise a group of 50 document management vendors. These vendors and large customers agreed on a standard that will let any user on a corporate intranet view a document in any proprietary document management application. Conflicts arise if the accounting department uses a different application, for example, to control which versions of a document a group is working on, and the legal department uses a different application. They can't view what the other department did.

The Document Management Alliance's 1.0 specification, sets a common look to all elements of a document when viewed through a browser, an intranet user will be able to do a search across any document management application that's likely to exist on the corporate network.

Documentum

Documentum manages content for the entire enterprise, storing all content involved in all legal transactions throughout your firm, as well as standard office documents in one centralized repository. You can then deliver web content worldwide — including components of your Internet service and client extranet service. The system will track and record all legal transactions as the foundation for a global knowledge management system and a global transaction indexing system.

Serving the content management needs of more than 1,100 Global 2000 organizations, Documentum is the industry standard for managing and distributing large volumes of content within and beyond the enterprise. Based on long-standing expertise for managing electronic content, Documentum provides an open, scalable, and completely reliable platform for building and deploying e-business solutions, enabling collaborative portals, meeting regulatory requirements, and powering global Web sites. From creation through delivery, Documentum manages the content your business depends on.

Recent enhancements to Documentum further automate the production and exchange of enterprise content, allowing easier delivery of trusted, accurate, multilingual content on a global scale. Enhancements include connection pooling, universal language support, single-field search, and fault tolerance.

As the industry's most scalable solution for enterprise content management, Documentum enables an unlimited number of content contributors, manages massive quantities of content, and delivers content to high-volume sites with the

integrity and security required by today's largest global organizations. Documentum enables federations -- or multiple repositories linked across logical and geographic boundaries -- to provide seamless access for distributed users. Connection pooling and fault tolerance capabilities support increased numbers of users, while reducing hardware requirements and system resources, decreasing network load, and providing continuous high system availability.

Documentum takes the integrity of your content seriously and protects it through a combination of user- and role-based security, as well as extended permissions that control how content is accessed and modified. Documentum supports LDAP, along with SSL, digital certificates, and electronic signatures for approving and routing content and meeting regulatory requirements.

Strict adherence to open standards allows seamless integration with existing e-business infrastructure, enterprise systems, authoring applications, and development tools.

Documentum manages content over the entire lifecycle from content creation, testing, and staging, to approval, deployment, and archive. Easy-to-use, graphical lifecycle and workflow services also promote content integrity and security with audit trails and sign-off capabilities. Robust version capabilities control attributes, content, and relationships between content while storing a record of all content iterations.

Documentum provides powerful content-tagging and attribute-setting features that improve the relevance of delivered content. These features improve accuracy and consistency by automatically analyzing content for concepts and keywords, storing the results as tags, and organizing content in logical structures. Consistent, contextual-based tagging aids personalization engines with faster delivery of targeted content.

With Documentum you can create and deploy content across geographic boundaries to keep customers, partners, and employees up-to-date with timely, accurate content delivered in native languages. Documentum features a foundation of internationalized software that handles content and metadata in virtually all languages and enables quick translation of the user interface. Primary languages supported out-of-the-box includes English, German, French, Japanese, and Korean with Spanish soon to follow.

As the industry-leading XML-based content management platform, Documentum provides end-to-end capabilities for creating, managing, and delivering XML content enabling new opportunities for business-to-business content exchange. Documentum unlocks the power of XML, fueling an evolution in inter-enterprise content management.

Documentum leverages XML for content transformation and multi-channel delivery to any device, including cell phones, Web, print, CD, and wireless devices. By creating XML content once and leveraging it everywhere, you ensure message consistency and relevance across all channels of communication.

Out-of-the-box, Documentum supports more than 50 formats that can be extended, as needed, to support additional content types. For certain formats where unique services are needed, such as XML, Documentum provides specialized functionality.

Documentum integrates with popular commerce servers, portals, and delivery networks. In addition, business users can author content in familiar applications such as Microsoft Word, PowerPoint, or Excel.

Integrations include:

- Application and commerce servers: ATG Dynamo, BEA WebLogic, BroadVision One-to-One, IBM WebSphere, Sun iPlanet, and Comergent
- Portals: Plumtree, Epicentric, Verity, Autonomy & Web authoring tools: Macromedia Dreamweaver
- ERP: SAP, PeopleSoft
- Personalization engines: E.piphany, Net Perceptions
- Authoring tools: SoftQuad XMetaL, Arbortext Epic, Microsoft Office, any ODMA application, CAD packages

Documentum enables rapid application development by providing a powerful robust development environment for development and deployment of e-business applications. Documentum extends application-level access to all content management functionality while supporting industry-standard development environments, techniques, languages, and directories.

Interwoven

Interwoven is a leader in content management solutions for the enterprise.

Release 5.0 builds on TeamSite's award-winning design by offering a host of productivity improvements unmatched in the industry. TeamSite software platform offers the ideal environment for creating, managing and deploying the enterprise-class, business-critical Web content you need to maintain a competitive advantage.

Interwoven PortalReady software delivers a comprehensive infrastructure that meets the demanding requirements of enterprise portals. Built on an open, standards-based extensible framework, PortalReady enables businesses to fully harness their information technology to improve the efficiency of their workforce by enabling businesses to quickly and easily integrate enterprise portals with Interwoven Content Infrastructure.

OpenDeploy is enterprise-class content replication software for the Web, giving organizations a secure, flexible and scalable solution for cross-platform, transactional content transfer to multiple servers. OpenDeploy automates deployment, helping get you to market faster and more efficiently than ever before.

TeamSite Templating is an XML-based publishing solution that empowers all members of your organization to contribute to the Web through templates that are both easy to create and easy to use. The result? You'll launch on the Web faster, and stay ahead of the competition.

Office users must easily contribute to the Web with the tools and interfaces they are most familiar with. TeamSite Front-Office provides Web contributors with an easy-to-use interface for creating and publishing content directly to TeamSite.

Interwoven Turbo is the key to quickly and efficiently deploying the types of dynamic applications your eBusiness needs to get to the top. Turbo accelerates TeamSite's integration with application, personalization, and commerce servers.

TeamCatalog automates the management of catalog content and produces customizable "transaction-ready" eCatalogs that are the cornerstone of successful eBusiness initiatives. Ideal for global enterprises, wholesalers, distributors, retailers and electronic marketplaces, TeamCatalog provides highly scalable product catalog aggregation, categorization, normalization and distribution capabilities.

Interwoven MetaTagger automates the process of applying complete and consistent metadata to enterprise content assets. Based on industry-standard or custom controlled vocabularies, MetaTagger suggests appropriate metadata for content assets that can then be stored, versioned, managed, and deployed using TeamSite.

Interwoven DataDeploy 5.0 software offers the ability to synchronize XML content and metadata from the Interwoven TeamSite repository to industry-standard relational databases. DataDeploy empowers Web application developers with access to up-to-date product content in the database through automated content publishing and seamless integration with TeamSite.

Interwoven OpenChannel enables enterprises to reuse and leverage content across multiple channels. Using standards-based XML, this product allows content contributors to quickly, easily and accurately develop content for multiple output channels including the Internet, syndication, wireless devices, and print.

Interwoven OpenSyndicate™ provides enterprise-class content syndication based on business rules driven by content metadata. OpenSyndicate enables global enterprise customers to deliver content to a network of partners, suppliers, distributors, and geographically located content subscribers. With OpenSyndicate, enterprise content owners will have better flexibility to deliver the right content to the right audience without loss of control.

TeamXML is the next generation XML object management software that enables enterprises to create and store business critical content as a collection of XML component objects that can be re-used for multiple initiatives. TeamXML provides element-level asset versioning and search to enhance collaboration and content reuse across the organization.

Flexible Client Access

The final key that makes your knowledge management system complete is the ubiquitous access your end-users have to the information you have provided. Consideration must be taken into account with bandwidth. Slow disruptive wireless connections all the way up to high speed T1 network access should be considered when deploying your solutions. Devices range from the desktop system on down to the hand held PDA. The amount of real estate you have to present information can vary widely. A complete delivery system takes into account the conduit for client access and adjusts accordingly.

Conclusion

Large firms can end up managing extreme amounts of content. One firm can end up handling 2 million compound documents per year, which can total more than one terabyte of content. The amount of content, coupled with its storage in several discrete locations around the globe, can require an ultra-powerful content management solution. Current enterprise solutions allow you to easily maintain, add, and track content going in and out of this immense repository.

You are then allowed to grow the business via new Web services offering. With a content management infrastructure for Internet service, you can securely deliver legal e-documents and the business processes necessary for the completion of legal transactions surrounding those documents. The benefit is lower costs and faster time to completion. Compared to traditional offline legal services, business conducted using Internet services can significantly reduce administration costs and takes less time to complete.

Enabling globalization capabilities has never been more expedient. Business today demands global execution, yet local context. Enterprise knowledge management systems enable you to have global content contribution, global content management, and simultaneous creation of content in multiple languages. You can manage content in the local context of every client.

The firms that share information will be the firms that flourish in the next millennium. You can help by building a bridge to your internal resources. Technology is the conduit and the time to integrate it is now.