

iManage WorkSite™
**Realizing the Potential of
E-Collaboration**

A White Paper By

**Collaborative
Strategies LLC**

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Executive Summary

The world is moving from the age of personal productivity to the age of interpersonal productivity, where value is principally created through relationships and networks, and what an organization has, rather than what it produces alone. We at Collaborative Strategies (CS) see relationships, rather than a specific type of collaborative technology, as the only sustainable competitive advantage as the world moves into the Information Age. In order to forge and sustain these relationships at a lower cost and a higher level of interactivity (or service), companies are turning to the Web. What this requires is the ability to use the Internet to do more than just publish and display information, but rather to collaborate and leverage the knowledge of employees, partners, suppliers, and customers on an on-going basis. Some of the most innovative companies are using the Web to get work done by transforming intranet and extranet Web sites to interactive “work sites”. We believe that those companies that can successfully use the Internet to facilitate inter- and intra-enterprise collaboration will gain significant and sustainable competitive advantage.

In this white paper we examine some of the trends and financial pressures driving corporate users towards this virtual work site concept and how one vendor, iManage, Inc., is providing a suite of tools to meet these emerging business needs. The three parts to this paper examine the business case for Web-based collaboration, develop an ROI model for collaboration, and offer examples from iManage’s WorkSite™ to illustrate points and show how such technologies can be applied successfully.

The Evolution of Collaborative Technologies

Collaboration is a behavior, and not a new behavior at that! Humans have used tools to collaborate since the dawn of time (smoke signals, carrier pigeon, telegraph, telephone), so what is different now? Infrastructure. The Internet has enabled us to both communicate and collaborate over time and space at significantly lower cost and with greater speed while supporting a wider variety of mediums (audio, video, and data) to enable the increasing complexity inherent in interactions within and between today’s global enterprises. Time, cost, and complexity have always been barriers to effective business, and as shown in the Figure 1 below, each technology shift has brought at least an order of magnitude improvement in business productivity. The Internet, by providing a standard and ubiquitous interface and communications protocol, allows anyone with a browser (and permission) the ability to access specific content and work with others on complex problems, issues and projects. This infrastructure when combined with rapidly evolving collaborative technologies, can introduce an order of magnitude improvement in collaboration and coordination, permitting any number of people or groups to collaborate on a specific object (document, graphic, presentation, etc.), objective, process or project.

Figure 1: Collaborative Technologies Drive Business Productivity



Technology	Postal Service	Telegraph	Fax	E-mail	Internet-based collaboration
Date of Introduction	1700s	1800s	1980s	1990s	2000
Type of Interaction Supported	One-to-one communication	One-to-one communication	One-to-one communication or one-to-many communication (broadcast)	One-to-one communication or one-to-many communication (broadcast)	Many-to-many communication for groups or virtual teams
Enabled	Standardized and secure service for delivery of written communication over large distances in days or weeks	Standardized and secure service for delivery of written communication over large distances in hours and minutes. Enabled not only communication but coordination	Faster delivery of written communication across large distances in hours and minutes	Fastest delivery of digital file across large distances in hours and minutes	Simultaneous access to single (master) copy of critical information stored in a secure repository. Interactions measured in minutes or seconds
Limitations	Slow delivery Sequential communications makes collaboration difficult	Endpoint not ubiquitous, security easily compromised No ability to broadcast (one-to-many) Limited alphanumeric messaging	Sequential communications, editing, and changes difficult to track and share Each copy degraded the quality of the information (fax of a fax problem) Color not available	Limited access control to critical information (security issues) Sequential editing, does not support group editing Requires workflow for routing. Proliferation of information overload through "cc"	Enables group communication and coordination but does not target critical processes

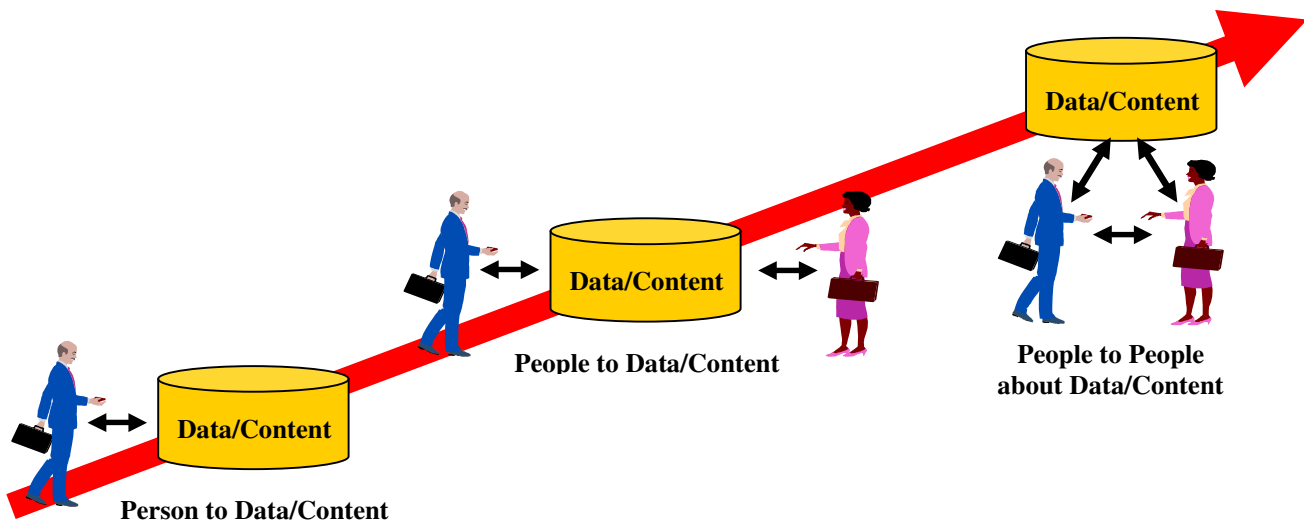
Today's market leaders are using these new collaboration technologies to improve specific projects and processes, as well as to distill mission-critical knowledge from these work products and make it easily accessible for reuse by employees, partners, suppliers, and even customers (often referred to as the value network or the extended

enterprise). This process of information re-use is often called knowledge management (KM) and is a critical piece of the ROI case for collaboration.

The Case for Collaboration

Collaboration is a term that is often misused as a technology and marketing “buzz word”. To date, CS has tracked over 1000 vendors that use this term to describe their product or service offering. This has generated a great deal of confusion in the marketplace, as many of these tools do not support either collaboration or coordination but often only different types of communication or only the ability to access specific data. CS defines collaboration as an inter-personal process, one that requires interaction between two or more people (not two or more computers), and includes the ongoing (two-way) transfer of complex information for some common goal. This means that collaboration is more than just the ability for one or more people to access data or status information, which is shown as the first step in the evolution of interaction on the Internet in Figure 2 below. This diagram looks at the evolution of interactions and shows how we are changing our behavior from that of interaction only with data/content to interaction with others around content.

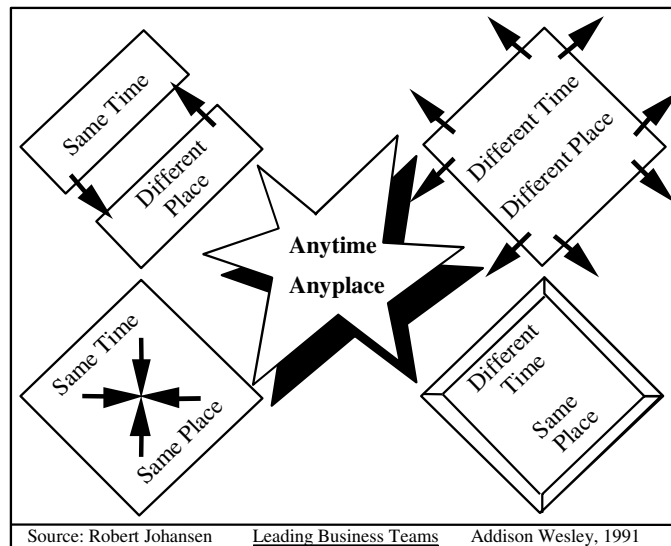
Figure 2 - The Evolution of Interaction



In 1991, Robert Johansen, in his book Leading Business Teams (Addison Wesley Publishers), looked at a variety of types of communication and collaborative interactions and classified these interactions based on the distance between those involved in the interaction and the time it took for the interaction to occur (see Figure 3). Facilitating anytime/anyplace collaboration between all necessary parties is the logical end game of this classification scheme, and the place where the greatest productivity gains can be had. Based on our experience with collaboration tools and their deployment over the

last 10 years, we have found that no matter how good these technologies get they are not a substitute for face-to-face interactions, but rather they are great tools to augment these interactions after they have occurred. Once we as humans, have established a context for our relationship and a level of trust, it is much easier to carry on that relationship electronically.

Figure 3 - The Four Modes of Anytime-Anyplace Collaboration/Communication



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“Different time-different place” communication and collaboration is often facilitated by e-mail, groupware (i.e., Lotus Notes, Microsoft Exchange, Novell GroupWise, etc.), and electronic bulletin boards or Internet newsgroups. While in-person meetings fall into the lower left quadrant, the telephone, or even instant messaging or online chat, fits squarely into the upper left (“same time-different place”). Tools to facilitate in-person meetings, such as electronic agendas, brainstorming tools, or anonymous voting/polling tools, would fit into the lower left quadrant. However, the Internet as a pervasive infrastructure finally moves us into the center quadrant where we then have the ability to collaborate with anyone, anywhere, anytime about anything! However, much of what we do in our everyday work does not require collaboration; much of what we do is access data or information of one type or another. Collaboration is critical when there needs to be an ongoing exchange of complex information between two or more people. Some of the characteristics of collaboration include:

- Mutually-defined and explicit goals for all those involved in the interaction
- Usually occurs in a group or team of between 2-20 people
- Uses more than one electronic medium (audio, video, data) to aid in the transfer of complex information and concepts to team members
- Often implies an ongoing interaction (relationship) and some level of trust between all of the parties interacting
- A way for people to get up to speed quickly and be able to understand the past and current context of the interactions

- Usually uses one or more medium to transfer complex information (audio, video, data)

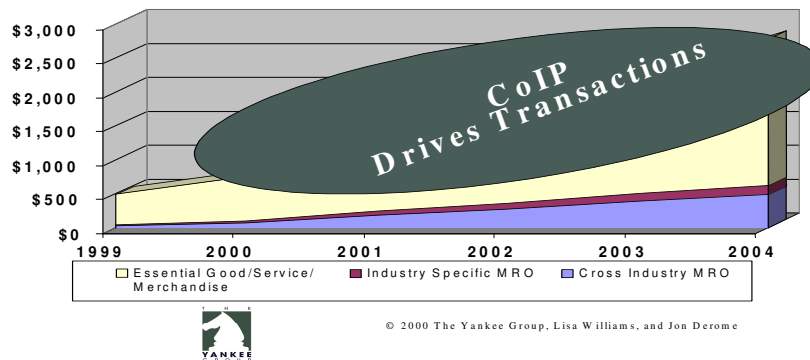
Managers today can spend up to 80% of their time interacting and communicating with others. If the level of inter-personal productivity for these interactions can be improved by just 10%, the cost savings and productivity increases are staggering. That is why there are so many tool vendors offering software to aid collaboration, not only the vendors but users of collaborative tools are starting to see this huge opportunity. Unfortunately, many of the vendors that offer collaboration tools only provide a common context and medium to enable the exchange of information, which is only about 20% of any collaborative solution, and does not address the issues of content and process (more on this later).

Effective collaboration represents the most valuable, top-line gain for organizations today. It can unlock the potential of the collective knowledge and intellectual capital of a given organization, as well as its value network. The synergies achieved through collaboration empower people to achieve goals beyond which they could not reach individually. The increased abilities of these high-performance teams provide a sustainable, competitive advantage that occurs through the interaction of technology and relationships.

Inter-organizational communication and collaboration also is on the rise. According to the U.S. Bureau of Labor Statistics, interactions between companies represent 51% of the dedicated time of the U.S. labor force, a figure that is increasing. In the business world, collaborative processes are often highly negotiated, geographically distributed, and highly sensitive. These basic traits result in processes that typically consume more time, effort, and resources than their non-collaborative counterparts (i.e., simple e-commerce transactions) and thus are more vulnerable to errors in execution.

Analysts at the Yankee Group feel it is these non-transactional processes, which they called “collaboration-over-IP” (CoIP), that will eventually will drive transaction-oriented e-commerce (see Figure 4).

Figure 4 - CoIP: Driving Online B2B Transactions



Failure to effectively collaborate often can be very costly. Today’s business managers regularly need to share and manage information and automate business processes. However, many of these managers often spend an inordinate amount of time looking for

information/documents/content and people/expertise, as well as coordinating teams and requesting project status. These challenges should all be recognized as collaborative problems. Several trends that have played themselves out over the past century suggest that in the future, the winners will be those enterprises that effectively collaborate both internally and externally to deal with such challenges. Organizations that realize the value of intra- and inter-business collaboration will gain a sustainable competitive advantage and can avoid the painful and costly problems in productivity that poorly collaborating organizations have. One may argue that, in the not so distant future, *collaboration will no longer be a luxury or ancillary business function, but rather a core competency that binds critical processes within the business world.* This should occur as more and more organizations adopt the collaborative paradigm, and collaboration shifts from being a “nice-to-have” to a “must-have”.

Some of the continuing business benefits collaboration offers are that it:

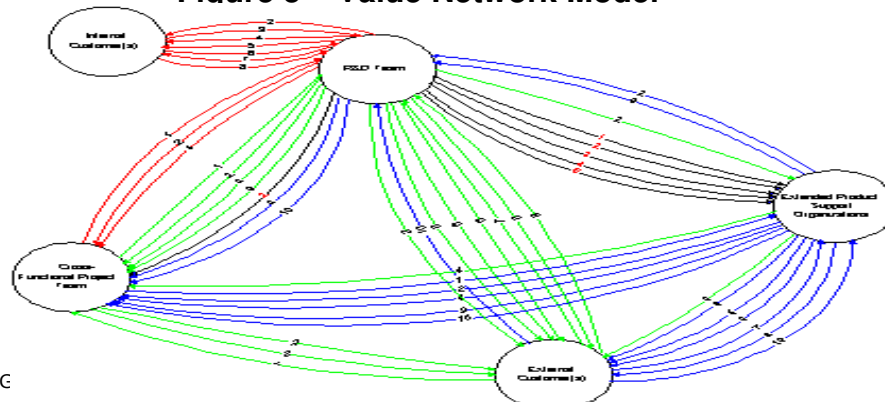
- allows teams and organizations to achieve outcomes not otherwise possible,
- mitigates geographic distance barriers and time zone differences,
- drives process efficiency through enhanced coordination,
- avoids significant coordination pains, and
- saves time, effort, and resources.

Having established the value of collaboration to business, let’s now consider how organizations have historically tried to address it. As we will see, collaboration can be hard to establish but brings concrete rewards when addressed properly.

The Rise of the Digital Workplace

Today, the Internet connects people with people, corporations with corporations, and corporations with their partners, suppliers, and customers in a way never before possible and at a lower cost than ever before. This network of relationships is called a value network, as there are goods, services, and information exchanged in such a network creating value for each the participants in the exchange (see a model in Figure 5).

Figure 5 – Value Network Model



From Verna Allee
Integral Performance C

No longer hindered by the real-world business constraints of time and geography, information flows in cyberspace across diverse business functions, between businesses, and across geographic boundaries. The Internet is forcing organizations to rethink their business models, processes, strategies, and product offerings.

The Internet has provided low-cost instantaneous access to data and information through a communication-oriented infrastructure that, though ubiquitous, has swamped us all with data, cluttered corporate networks and compromised security. Dealing with these issues and providing an infrastructure that can support easily accessed and secure content is a prerequisite to collaboration. With such an infrastructure, information can be shared at anytime and from anywhere in the world. No conventional method of communication can compete with the almost instantaneous, low-cost delivery of information via the Internet. These factors are rapidly bringing about the need for digital workplaces, secure Web-based sites where team and group communication and collaboration may occur, both of a transactional and non-transactional nature.

CS' research suggests that three elements must converge in these digital workplaces if the benefits of collaboration are to be realized: **content, context, and process**. It's critical to stress that these elements must be considered holistically, and that this holistic approach to collaboration will be the driving force of business success in the 21st century.

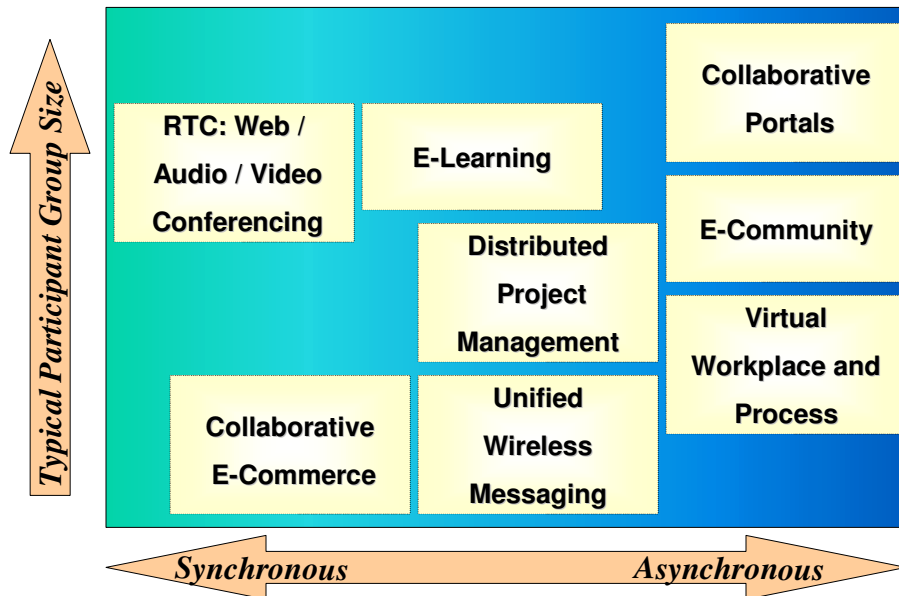
Without a common **context** or conceptual framework and language, it is very difficult to transfer information through interpersonal interactions. There also has to be a reason and a way or **process** through which all parties can collaborate/communicate, and usually we do so about some specific **content**.

Although collaboration is often seen as a secondary benefit, it is a benefit we know intuitively as important. The issue is not convincing someone intuitively of the value of collaboration, but rather the difficulty in tying collaboration directly to an explicit business process to clearly show the value. Collaboration only begins to have a clear value when it occurs around specific content, when those collaborating have a common context, and when there is a process to collaborate within that defines the order and steps for coordination in the interaction. Only when these things occur simultaneously is it possible to measure the value of collaboration and have those involved see and be able to quantify the benefits of collaboration for themselves.

CS' research also suggests these three elements are critical in shaping successful digital workplaces today. This holistic examination of these three factors will help many organizations to create and maintain effective virtual workplaces for their employees and other parties within their value chain. It is beyond the scope of this white paper to describe in depth strategies for assessment, benchmarking and enhancing the process and people sides of the collaborative equation. The technology component is a critical piece of this puzzle, and it is to this area that we now turn.

Collaborative Tools and Infrastructures

We believe there are eight related software technologies that comprise today's e-collaboration and KM technology marketplace. This taxonomy is outlined in Figure 6.

Figure 6 - Collaboration and KM Taxonomy

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Examples of vendors in each of these sub-markets in this collaboration taxonomy may give you a good idea of how this functional taxonomy works. Of course, there is a blurring between these categories in practice as vendors evolve and change their feature and function mix, so we have tried to place vendors in a category based on their major functionality.

- Some of the real time collaboration (RTC) tool vendors include WebEx and PlaceWare (data conferencing companies), as well as FVC/CUseeMe and AT&T (video and audio conferencing companies).
- Collaborative e-commerce tools include CRM vendors like Siebel and Remedy, as well as companies such as Kana, eGain, Agile, and MatrixOne. These tools do not have transactional capabilities but rather offer e-mail, text chat/IM, VoIP, callbacks or video interactions to support real time collaboration with the customer or client.
- A few of the e-learning/training leaders include Mentergy, Centra, and IBM/Lotus (LearningSpace and MindSpan).
- Project-focused offerings come from Microsoft (Project Central), eProject, and Primavera.
- Leading portal players, sometimes called EIPs, include Plumtree, TopTier/SAP, KnowledgeTrack, and Microsoft (SharePoint).
- Virtual workplace and process tools include the traditional groupware vendors (like Lotus and Microsoft) as well as vendors of document/content management tools that support collaboration (like Documentum or FileNet); this market also includes iManage (Worksite), eRoom, and Intraspect, all of which provide virtual team spaces for improved productivity.
- Community vendors include Participate.com, Orbital, and Mongoose Technologies (who merged with Realcommunities.com).

- Unified wireless messaging and infrastructure vendors include Novell and Cisco.

Project vendors have begun adding RTC features (instant messaging, chat, etc.), and there is also quite a bit of interplay between the portal players, e-community, and virtual workplace/process providers. The technological taxonomy above represents our estimation of the core value proposition offered by tools in the markets indicated. Let's now consider one particular offering that fills the e-collaboration needs aligned along the right side of Figure 6. As we shall see, iManage offers a very strong set of enterprise tools that address these collaborative requirements. Perhaps more importantly, their tools are designed to facilitate the interplay of people, process, and technology from a holistic perspective.

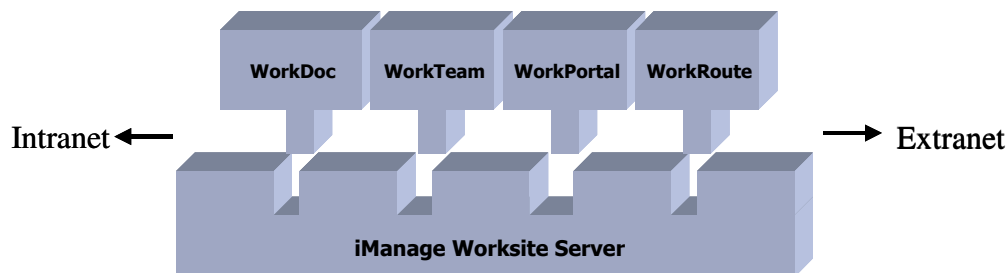
iManage Worksite™: The Intelligent Digital Workplace

The iManage WorkSite™ suite provides a robust and secure enterprise server platform, and four Web-based application modules that allow enterprises to manage critical business interactions (see Figure 7). iManage's integrated solution empowers companies to create a central space where the members of their value chain can securely interact with the people, information, and applications they need to accomplish their day-to-day business with rapid speed and very high efficiency.

The iManage Worksite™ suite of products allows an enterprise to securely extend their Web sites into productive and interactive workspaces. iManage WorkSite™ provides a platform to develop applications rapidly for any business process that requires coordination and information exchange across multiple parties within or across firm boundaries. The Worksite™ platform has been designed for scalability and reliability through a modular and flexible architecture. This architecture also has the ability to reduce dramatically the time and risk in developing collaborative applications.

Figure 7

iManage WorkSite™ Product Suite



The WorkSite™ suite offers:

- smooth integration of asynchronous and real time processes,
- integration with critical transactional and non-transactional business processes,
- the ability of employees to work intuitively, the way they want to,
- a low learning curve for rapid productivity,
- a team or group focus, facilitating KM with relative ease, and

- a holistic approach to the challenges of collaboration (people, process, and technology).

The iManage WorkSite™ server has built-in capability for clustering to provide fault tolerance and load balancing which allows it to support tens of thousands of concurrent users. It is highly optimized for distributed operation (server to server proxy to access remote data) and has intelligent caching for rapid access to remote data. Moreover, it facilitates user and group management by integrating with multiple LDAP servers (Active Directory server, Novell NDS, Netscape LDAP server, etc.). Existing organizational structures can be copied into the WorkSite™ repository, or the WorkSite™ organizational tree can be linked to external, LDAP directories for simplified user maintenance.

Security across these inter-organizational workplaces is often a key concern. To meet this challenge, the iManage WorkSite™ server provides an array of flexible and security features, such as:

- policy-based security (objects in the WorkSite™ repository can be secured using security policies),
- features for controlling access to system functionality based on password-protected user roles and privileges,
- all communication from users through the browser always encrypted and secured by SSL, and
- secured workspaces within a WorkSite™ repository (partitioning).

The components of iManage WorkSite suite are:

1. **WorkSite™ Object Model** - The WorkSite™ Object Model serves as the foundation for quickly building and deploying collaborative applications. WorkSite™ objects allow iManage customers to quickly assemble and deploy collaboration services using a variety of scripting environments, including Java Server Pages (JSP). The WorkSite™ platform is unique in its extensive support for both Java and .NET development environments.
2. **Data Modeler** – The XML-based WorkSite™ Data Modeler can be used to extend the properties of the base object model and to define entirely new object types. The WorkSite™ server is capable of storing objects with an arbitrary number of properties.
3. **Versioning and Audit Trails** – The iManage WorkSite™ server provides automatic content versioning and maintains a sophisticated audit trail of activities performed in the system.
4. **Powerful Search Mechanisms** – The iManage WorkSite™ server provides highly sophisticated searching capabilities, including combinations of attribute-based searching and full-text searching of the content in a repository. The iManage WorkSite™ server supports natural language and concept-based searching for text queries. The full text search includes not only document but also all objects (e.g., tasks and calendar events). It also provides searching across multiple projects.
5. **Notification Engine** - The WorkSite™ Notification Engine can route events or actions on objects to server-based rules handlers for auto-notification and publishing. The WorkSite™ Notification Engine supports both system-defined and

application-specific events. Additionally, it provides support for immediate or delayed processing of server side rules when an event is triggered.

The iManage WorkSite™ suite supports a wide variety of functions that provide both the infrastructure and applications for collaboration. For example, pure portal players (sometimes called EIPs) may be very good at aggregating and displaying data from a variety of data sources such as: files, databases, e-mail or ERP, and CRM systems; however, the portal approach is primarily used *to provide personalized information to an individual*. While some portal players offer the concept of community pages or a page shared by a group, they don't really provide a process around this data to enable the group or team to work effectively with it. Other than by providing visibility to the various systems, portals do not reduce a firm's reliance on fax, phone, or e-mail to get work done or make business decisions. Thus, portals fail to facilitate collaborative work in all its forms.

Another drawback of portals is their inadequate document management capabilities. While a portal "crawler" may find a document on a user's hard drive, there is often no version control or audit trail available around it (security may also be an issue). Plumtree's latest offering, the Plumtree Corporate Portal 4.0i, for example, does not index discussions or other content based on time, date, people involved, keywords, relationships with other discussions/content, etc. Without robust document and content management features, sharing business information with customers, partners, and suppliers in a portal-only environment can lead to serious conflicts.

From the document management side, vendors like Documentum are fantastic at content management and are not designed to support the way distributed teams actually work. The Documentum 4i eBusiness Platform offers very little in the way of personalization, for example. Its calendaring and scheduling functions are also particularly limited, as are the offerings from IntraNet Solutions (Xpedio CMS 4.5) and Intraspect (c-business Platform). So while these types of systems are great for internal KM efforts, they are not ideal for value chain collaboration.

Another type of tool is designed for relatively small teams to work online. Lotus (QuickPlace) and eRoom are vendors of these types of tools. To be sure, these applications are good in managing distributed teams for collaborative work. They provide project spaces that support select membership, discussion threads, task lists, calendaring, and document repositories. However, the tendency of these applications is that they are packaged applications and hence offer a limited opportunity to customize or extend their functionality. Secondly, these applications "grew up" from departmental use and so may encounter scalability issues, both in terms of the number of people and projects they can support, as well as in back-end server data replication, etc.

By their nature these virtual team tools often lack an enterprise-level document management system that manages content and builds best practices and KM repositories. They also lack some of the portal data aggregation capabilities that provide visibility to other data sources as part of project work. The iManage WorkSite™ suite offers can provide value in small group collaboration up through enterprise-level content and process management. The suite is specifically designed for project- and process-centric value chain collaboration and as a whole also offers enterprise

scalability, security, and data aggregation. The suite provides the most value in processes that last from 1 month to one year. The iManage vision is to provide a technology framework that enables corporations to streamline the flow of information, ensuring that the right individuals and teams spend less time getting to information and thus can make smarter and more informed decisions. The basic metric to determine productivity in this case is decreased cycle time, and this metric is also appropriate to determine collaborative productivity.

One of the issues that often arises in association with the concept and practice of collaboration is that of return on investment (ROI). Let's now consider how you can estimate the economic return that tools such as the iManage WorkSite™ suite may bring your organization if implemented successfully.

Determining Collaborative ROI

How do we quantify the value of collaboration? Reduction in cycle time and attributed man-hour costs is a possibility, or elimination of a majority of travel time and costs associated with face-to-face meetings. However, these simple metrics do not cover the total value of collaboration. There are tangible and intangible values of collaboration, and the intangible values are not easily measured.

In some respects, a business manager trying to measure collaborative ROI is like an astronomer trying to identify a black hole. You can't actually see a black hole because it absorbs light, but that does not mean it is not there. The way astronomers discover a black hole is by measuring its effects on the astronomical bodies around it and the differences in behavior these things show because of their proximity to the black hole. Similarly, in looking for the value of collaboration within an organization, you have to look at measurable artifacts (time and money) that are affected by changes in behavior due to collaboration.

Collaboration itself is, ultimately, a *human behavior*, so what we are trying to measure is the indirect effects of this behavior, as well as its cumulative effects, across the organization or within a value network. The key is that you must first establish the change (delta) that can be attributable to collaboration.

In order to establish change, there must be before and after measurements. When we assess an organization for its "collaborative tonus" (a snapshot of where their current perceptions of collaboration in their organization today), CS looks at four factors: **t**echnology, **c**ulture, **e**conomics, and **p**olitics (TCEP). Specifically, we measure people's perception of how these four factors impact collaboration on a 1-10 scale. We then weight each factor, and total scores range from 10-100. We also do "before and after" measurements with this metric. If we assume that for every point on the weighted total score scale, there can be some dollar value assigned, we would have a rapid metric for measuring the economic impact of perceptions of collaboration. We'll come back to this a bit further on.

One of our clients has used the metric of employee morale improvement. We need to determine if that is attributable to collaboration, or the daily stock price of the organization, or any of 100 other factors. Recent research by Dr. Nick Bontis of

McMaster University in Canada on a large number of financial institutions shows that there is not a direct correlation between knowledge sharing and employee morale.(1) What this research was able to show is that there is a correlation between employee retention and knowledge sharing or collaboration.

Another approach is to look at employee turnover rates. Dr. Bontis's research has shown a -0.233 gamma path (in statistics that look at causality, a 1.0 would equal perfect causality) for the financial services industry. This means that because of collaboration, the turnover would be about 25% less. In this study, \$36,514 in profit is attributed to each employee in this organization. A company voluntary turnover rate of 13.1% in an organization of 16,353 employees calculates to 2,142 employees turning over voluntarily each year. At a value of \$36,514 per employee, the company is losing \$78,212,988 per year of profit on turnover, not even counting expenses for those employees. If collaboration can cut that by 23.3%, the loss would be \$18,223,626 less, or \$59,989,362. The savings of \$18,223,626 from decreased turnover can be weighed against an estimated cost of \$5,000,000 for development and deployment of the collaborative system, giving a 3.6X ROI.

Assume that for every 100 people in an organization, each point on the TCEP scale is worth \$10,000. Let's look at the same financial services company of 16,353 people, which has a very average "before" TCEP score of 50; the company decides to do a collaborative pilot project with a group of 100 people (Group A). We measure the "before TCEP score" for Group A and find it is 65, significantly higher than the average for the company. After we complete the collaborative pilot project, we measure Group A's "after" TCEP and find the score has risen to 75. Since there are 100 people in this group that are directly benefiting from collaboration, we could say the value or direct benefit is \$100,000 (10 points x \$10,000/point) per person in Group A, or an ROI of \$10,000,000 (100 people x 10 points/person x \$10,000/point) for Group A.

A final way to measure value is through time savings, which can be particularly relevant to those using the WorkSite suite since we have established that the iManage WorkSite™ suite is likely to save workers time. Let us assume that XYZ Corporation is a well-known multi-national *Fortune 1000* company with 10,000 employees. Let us further assume that that XYZ's operating expenses for Q1 2002 will be \$600,000,000 (a reasonable estimate for this size company), and that operating expenses and labor costs per employee will remain constant. As XYZ Corporation implements the iManage's WorkSite solution, the first year it yields a modest 2% reduction in enterprise-wide labor costs. Based on these conservative assumptions, the following holds true:

XYZ's Per-Employee Time Savings Using iManage:

- Each XYZ employee will save 9.6 minutes per day based on an eight-hour workday.
- Based on XYZ's work force of 10,000 employees, the company will save 1,600 employee-hours per day on an enterprise-wide basis.
- XYZ will save 96,000 employee-hours per quarter on an enterprise-wide basis (20 working days per month).
- XYZ will save 384,000 employee-hours per year an enterprise-wide basis.

XYZ's Operating Expenses and Labor Costs:

- XYZ's operating expenses for Q1 2002 are \$600,000,000.
- XYZ's labor costs for Q1 2002 are \$420,000,000 (many analysts agree that labor costs account for roughly 70% of total operating expenses).
- XYZ's labor costs per hour for Q1 2002 are \$875,000.
- XYZ's labor costs per hour per employee for Q1 2002 are \$87.50.

XYZ's Enterprise-Wide Savings Using iManage (ROI):

- Using this formula, one may estimate that XYZ will save \$8,400,000 in labor costs during Q1 2002 by using iManage as its enterprise-wide collaborative business solution.
- At that quarterly rate, XYZ will save \$33,600,000 in labor costs during the 2002 fiscal year.
- Based on a basic purchase, implementation price of \$5 million and annual maintenance fees of 18%, XYZ will realize a ROI of 291% during fiscal year 2002 using iManage as its enterprise-wide collaborative business solution. (Greg: the above was partially based on an older ROI model you sent us. Maybe you can put in here what the cost would be for a 10,000-person deployment with the suite and applicable volume discounts, etc. Then we can recalculate the ROI % for 2002...)

Process-Based ROI

Another way to look at ROI is as it applies to a specific project or process. For example, a large Midwestern high-tech manufacturing company has a close relationship with another company to which they outsource the manufacturing of some of their products. Currently, the process of transferring the information over from the development team to the outsourced manufacturing team is done by e-mail. In more than one case, documents sent as attachments to e-mail were lost, either delaying the process or leaving out crucial QA steps. This ended up costing both companies millions of dollars and lost time in getting the manufactured product to market.

To calculate ROI, we can assume that every time there is a problem in the product transfer process it will cost \$100,000. If three products are being transferred each month to the outsourced manufacturer, and there are problems with half of the product transfers than we can calculate that the ROI just in these product transfer process is \$18,000,000/year. If the iManage software for this process costs about \$100,000, then the payback (or break even) would occur in the first month of usage.

Conclusions

Relationships may be the only sustainable competitive advantage in the Information Age. In order to forge and sustain these relationships, companies are turning to the Web, and leveraging the Internet to get work done in a way never before possible. In this white paper, we have outlined the history and evolution of electronic communication and collaboration. We have also illustrated why a failure to effectively communicate and collaborate often has great pain associated with it. Today's business managers spend an inordinate amount of time:

1. Tracking down content
2. Chasing people for critical information
3. Coordinating efforts
4. Ensuring that projects are being completed properly

We have correctly identified these as *collaborative problems*, and established that these challenges can be met through attention to *content*, *context*, and *process*. Once this holistic model is established within an organization, collaboration efforts can be extended to partners and customers.

After looking at collaborative tools and infrastructures from a high-level perspective, we turned our attention to the area where WorkSites offer the most value. The iManage WorkSite™ suite in particular is well suited to facilitate communication and collaboration within a company and among its value network. We explored why iManage WorkSite™ is different and better than similar portal, document management, and virtual team tools.

Lastly, we touched on the thorny issue of ROI for collaboration. Through several models and approaches we have tried to give you the tools to determine if implementing a system such as iManage WorkSite™ is likely to have a significant ROI at your organization.

About iManage, Inc.

Needs to be revised

Headquartered in San Mateo, Calif., iManage, Inc. is a leading provider of e-business software platforms and applications for enterprises engaged in information commerce as part of their e-business strategy. The company's products provide a centralized Web-based unified content platform for information and collaboration management, both for internal use and for use across the extended enterprise. For more information, please contact info@imanager.com or visit our Web site at <http://www.imanager.com>

Over 900 customers (almost 1000)

350,000 users

leading companies including _____, _____ etc.

Call **877-4iManage** or visit our website at www.imanager.com to find out if WorkSite is right for you.

About Collaborative Strategies LLC

Collaborative Strategies LLC is a San Francisco-based IT analyst firm focused on technologies for electronic collaboration and knowledge management (KM). Founded in 1989, Collaborative Strategies believes *people* are critical in knitting together technology and culture to form vibrant organizations. Collaborative Strategies provides objective, timely research and publications as well as expert advice to vendors and users of interpersonal and interactive technologies for electronic collaboration and KM. Our ability to meet and exceed client expectations is based on a commitment to the use of collaborative behaviors, methodologies, and technologies. Our clients have more

time to focus on their core competencies because we devote our time to their specific information requirements. Collaborative Strategies can be found on the Internet at www.collaborate.com or contacted by calling 877 209 2455 (US) or 415 282 9197.

Footnotes

1. This data came from a 1998 study by Dr. Nick Bontis of the Institute for Intellectual Capital Research (ICR). The study was funded by Arthur Andersen and was done in conjunction with the Saratoga Institute. More information on IICR and this study can be found at www.bontis.com and www.saratoga-institute.com.