

Expert Collaboration: Dynamic Access to Distributed Expertise Will Shape Successful Enterprises

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Executive Summary

In today's global economy, enterprises struggle to effectively use talent distributed around the world. The ability to engage the knowledge and expertise of dispersed employees and business partners can be a competitive differentiator. Although such issues are often relegated to the human resources (HR) group, they must be on the CEO's agenda because addressing this challenge requires the attention, resources, and sponsorship of the entire senior management team.

Several interrelated trends impact this situation, including declining levels of employee engagement, the growing importance of knowledge work, increased workforce participation in social networking, innovations in communications and collaboration tools, and the availability of sophisticated business intelligence and analytics software. These trends enable companies to develop new management models and practices, including **expert collaboration**—an organization's ability to harness, apply, and improve the collective experiential knowledge of its business ecosystem in real time.

Virtual teams have emerged as a way to enable expert collaboration. Virtual teams can provide the basis for a new management model in which employees—especially knowledge workers—have flexibility in choosing their work and how they want to participate based on their personal preferences and work styles. Implementing expert collaboration requires a technology platform to enable collaboration practices, enterprise social networking, and information visibility and availability. These technologies support virtual communities and teams, as well as productive collaboration among virtual team members. They provide access to accurate information and remote experts on both a “pull” (search) and “push” (recommendation) basis. Communication and collaboration technologies, business analytics, and business intelligence are the foundations of expert collaboration.

Expert collaboration cannot be effectively implemented without the support, energy, engagement, and example of management leaders. Leaders must encourage and empower employees to tap the collective knowledge of the organization and its ecosystem. CxOs should target core business areas where expert collaboration will provide a sustainable competitive advantage. Improvements should be prioritized based on their potential to drive both innovation and operational excellence. Selected business areas will vary by company and industry, and may include sales, product development, customer relationship management (CRM), or supply chain management.

This paper provides real-world examples of expert collaboration at work; a case study that examines how a high-tech manufacturing company began implementing expert collaboration; and specific recommendations for the roles played by top management in implementing expert collaboration in the global enterprise.

Challenges Facing Global Enterprises

Many global enterprises struggle with the challenge of effectively using distributed talent. Globalization, market expansion strategies, and competitive pressures are compelling managers to improve and scale utilization of experiential knowledge across the enterprise for profitable growth and competitive advantage. This paper continues a discussion on “The Expert Organization,”¹ and provides an example of how expert collaboration can help achieve financial objectives.

A McKinsey & Company analysis with Dealogic and Thomson Reuters Datastream² showed that in 61 percent of mergers and acquisitions announced in 2008 and 2009, acquiring companies overpaid, placing additional pressures on their balance sheets and increasing their risk profiles. Other globalization strategies that require borrowing or liquidity investments also increase risk as supply and value chains are extended into unfamiliar countries and cultures. In addition, employee engagement is at an all-time low, resulting in a significant “cognitive surplus”³ (untapped human capability). The costs of cognitive surplus are huge, and will likely have a lingering impact on growth, profitability, and shareholder value for many years.

Something new is required to take full advantage of the knowledge and experience embodied in the global organization’s ecosystem of employees, business partners, and customers. Expert collaboration has the potential to meet this challenge.

Knowledge workers account for a significant and growing portion of the workforce,⁴ and knowledge work, performed collaboratively, is essential to innovation and profitable growth.⁵ Expert collaboration enables an organization to dynamically and efficiently bring together experiential knowledge from different domains to innovate, solve business problems, or address customer issues.

Enterprises today enjoy access to new information and communications technologies (ICT) that are enabling practical implementation of expert collaboration. Enterprises have largely overlooked governance, culture, and process change, however. Executive leadership plays a pivotal role in cultivating talent, improving employee participation, and harnessing dispersed experiential knowledge. This requires encouraging experimentation and employee participation to harness dispersed experiential knowledge. Benefits from expert collaboration can be measured in areas such as improved revenue growth, profits, market capitalization, customer loyalty, employee satisfaction, and employee engagement.

Confluence of Different Trends

In explaining the need for—and development of—expert collaboration as a means of addressing business objectives, it is worthwhile to review several seemingly disparate, yet interrelated business trends that have gathered momentum:

1. Declining levels of employee engagement
2. Growing importance of knowledge work
3. Adoption of enterprise social networking
4. Emergence of new management models enabled by communications and collaboration

5. Use of business intelligence and analytics software to cope with information overload

1. Declining Levels of Employee Engagement

"The CEO failed to realize that improving the financial condition for the shareholders has its importance but that the mental attitude of the employee sets how the company is publicly perceived over time."⁶ This quote from *The Wall Street Journal* succinctly captures today's organizational reality. Company surveys and other research show that employers are not fully engaging knowledge workers to achieve high performance.

A recent study by Towers Watson⁷ concluded that only 60 percent of the workforce is engaged to any degree. This implies that enterprises are underutilizing the knowledge and expertise of 40 percent of the workforce, resulting in cognitive surplus. A company with 50,000 employees is, in essence, failing to apply the capabilities of 20,000 workers. This is a huge waste and costly to the company and to society as a whole. Companies, on average, use only 30 percent to 40 percent of the intelligence and creativity of the people in their organizations.⁸ Talent and knowledge management remain a challenge as well as an opportunity for most corporations worldwide.⁹ The challenge is that improvement of employee engagement is typically viewed as an "HR initiative," and often does not make it to the CEO's list of strategic priorities.

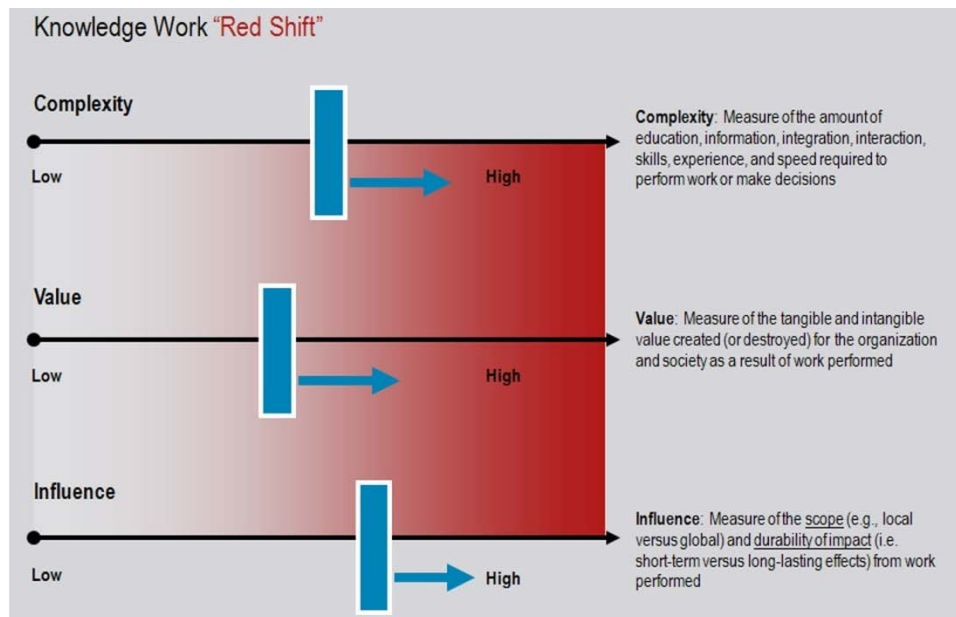
Improving employee engagement is the responsibility of both the employee and the manager. Employees need to participate proactively in knowledge creation, dissemination, and improvement. Active participation and collaboration have emerged as important leadership attributes at many corporations. Managers must provide the right conditions and encouragement for employees to decide when to engage, participate, and collaborate in their work.

2. Growing Importance of Knowledge Work

Knowledge work contributed more than 70 percent of all U.S. market value over the last 30 years, and accounted for 85 percent of all new jobs created in the last decade.¹⁰ Knowledge work is critical to innovation, productivity, and GDP growth. McKinsey & Company predicts companies that maximize use of knowledge capital will realize productivity gains three times greater than those of companies that do not.

The importance of knowledge work continues to skyrocket because an ever-evolving business environment requires high-quality managerial decisions based on understanding and analyzing **increasingly** complex information with **increasing** speed, with **increasing** value at stake, and often with an **increasing** scope of impact (see Figure 1).

Figure 1. The Knowledge-Work Bar Is Continually Raised



Source: Cisco IBSG, 2011

In this environment, it is imperative that companies implement a management model that allows them to identify the right expertise for a specific situation; determine where to source the expertise; and then combine these resources with the appropriate leaders to collaboratively make business decisions. This management model, paired with advanced collaboration technologies, reduces the cost of communication, coordination, and resource allocation, thereby enabling more effective management of the complexity, value, and scope of impact delivered from knowledge work. This capability must be scaled efficiently and should include systematic capture of learning from various experiences. The benefit can be measured in productivity improvement using metrics such as "profit per employee."

3. Adoption of Enterprise Social Networking

Social networking applications have achieved mass adoption in many enterprises. Social networks form organically and are highly decentralized, with little hierarchy in place. According to a new study by Gartner,¹¹ consumers increasingly rely on online social networks for expert advice on purchase decisions. Within social networks, some assume different roles—"salesperson," "connector," "maven," "seeker," and so forth—depending on the situation.¹² Salespeople try to influence others to take action. Connectors introduce people to one another. Seekers search for advice, and mavens provide expert insights on a particular topic. Companies are experimenting with social networking to access and scale distributed knowledge in the workplace. Benefits include improved quality, innovation, customer satisfaction, employee engagement, profits, and growth.

Many challenges—information security, data integration, user privacy, and ease of use, to name a few—remain as companies integrate social computing with business processes and associated information systems. The adoption rate of enterprise social networking, and the ability to capture benefits, will depend upon successfully overcoming these challenges.¹³

4. Emergence of New Management Models Enabled by Communications and Collaboration

Management innovation is increasingly in vogue.¹⁴ Companies are beginning to question whether existing management practices will enable competitive differentiation and business success in the future.

Advances in ICT have led to a decline in the costs of communication and collaboration over long distances,¹⁵ allowing enterprises to invest in new unified communications¹⁶ (UC) and collaboration technologies. The global market for UC services alone is estimated at US\$8 billion, growing at 21 percent annually for the next few years.¹⁷ UC technology has made possible new, networked, decentralized ways of organizing people in the workplace. Self-organizing, self-managing frontline virtual teams¹⁸ with decision-making authority can now function effectively in large, global corporations, resulting in:

- **Economies of scale:** sharing back-office functions, IT infrastructure, and other resources
- **Economies of scope:** expanding the responsibility of virtual teams
- **Agility:** quickly channeling the organization's dispersed resources to business opportunities anywhere in the world

Many challenges remain unresolved. New governance structures and policies must be developed—especially around dynamic resource allocation and access to integrated data—to enable effective virtual teams. Information access guidelines and corporate budgeting processes must evolve to adjust to the needs of cross-functional, cross-geography virtual teams. New incentive structures are required to measure and reward participation in virtual teams, and business process architectures must enable modularity and flexibility in the way work is performed.

Corporate hierarchies will not entirely disappear overnight; both decentralized and centralized management models will need to coexist in the organization.

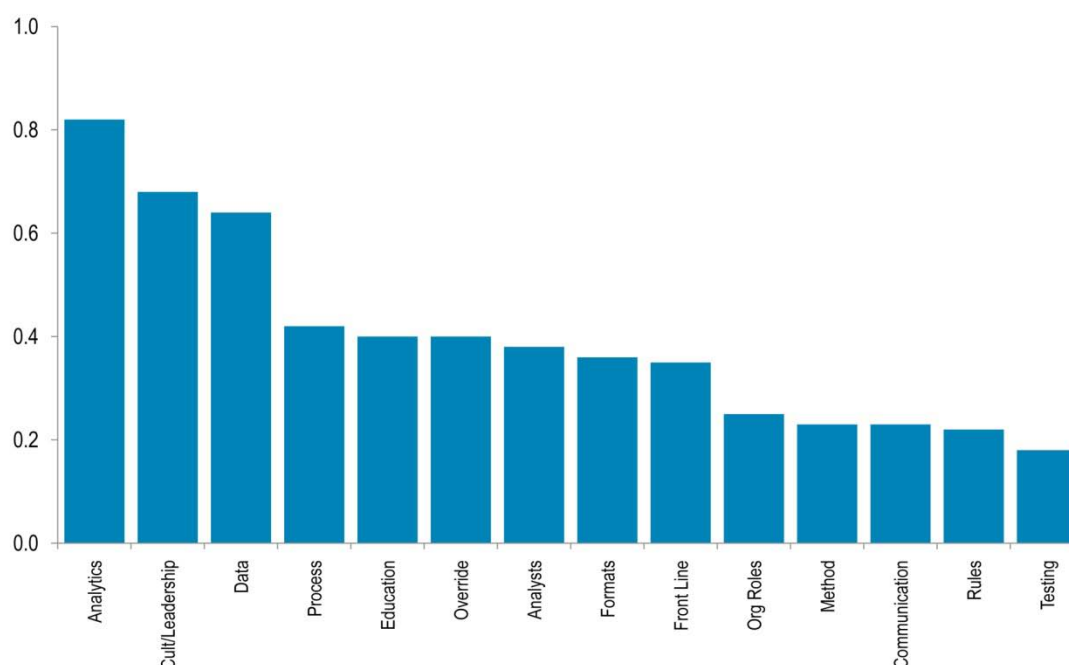
5. Use of Business Intelligence and Analytics Software To Cope with Information Overload

Companies are flooded with vast amounts of data and information every day. For example, Walmart captures data on more than 1 million customer interactions every hour, feeding databases whose size is estimated at greater than 2.5 petabytes—about 167 times the information contained in all the books in the U.S. Library of Congress.¹⁹ Digital information increases by about 10 times every five years.²⁰ Many articles have been written about why this abundance of information is both a blessing and a curse. As Nicholas Carr notes in his new book, **The Shallows: What the Internet Is Doing to Our Brains**, an overabundance of information can be a distraction and lead to superficial learning and incomplete knowledge.²¹

However, management decision quality can be improved by basing decisions on accurate information, data analytics, and timely insight—all provided by advanced business intelligence software. In fact, the business intelligence software industry is now worth more than \$100 billion and growing by 10 percent every year,¹⁵ driven by the need to improve the quality of managerial decisions.

Companies continue to invest in a variety of techniques to improve business decision making (see Figure 2), including the use of business analytics software, efforts to integrate and improve the integrity of underlying data, and business process changes. As the volume of data increases, challenges such as maintaining information security, protecting privacy, federating data from multiple internal and external sources, and providing decision makers with a “single source of truth” continue to become more difficult.

Figure 2. Frequency of Decision Interventions



Source: “How Organizations Make Better Decisions,” Thomas H. Davenport, International Institute for Analytics, January 2010.

Expert Collaboration and Virtual Teams

The business trends described in the previous section are the catalysts for companies to change resource management and allocation practices, especially in the area of knowledge work. Expert collaboration is a new management model that allows companies to bring the right expertise, experience, and informational insights to bear on a problem.

Expert collaboration is based on the principles of disciplined collaboration²²—knowing when to collaborate, and when not to. Advanced ICT, including business intelligence and analytics software, is the foundation for enabling expert collaboration. Expert collaboration requires a company to change its approach to managing resources, business processes, and information.

Virtual teams enable expert collaboration. They are autonomous, self-organizing, self-managing units with appropriate decision-making authority, consisting of a “core team” and an “extended team.” Core team members provide continuity and are responsible for the business results expected of the team. Extended team members provide subject-matter expertise on an as-needed basis. Virtual teams may have variable life spans. Some teams assemble to address a unique problem or event (such as a product recall), or work on a

special project and disband when the project is completed. Other teams may have longer life spans (for instance, customer account teams in sales). Extended team members join the virtual team and choose the level of their participation.

Virtual teams strengthen the work community. They provide an environment in which employees—especially knowledge workers—have flexibility in choosing the work they do, based on their personal preferences, work style, areas of expertise, and interests. Advanced collaboration and ICT enable virtual teams to include geographically dispersed members. Contributions by various team members can be evaluated at a peer level, using many of the capabilities provided by social networking and collaboration technologies. Virtual teams may not apply to all areas of a company's activities; executives must identify business areas where expert collaboration and virtual teams can deliver a competitive advantage.

Companies will need to change their talent sourcing, recruitment, and people-development strategies based on the knowledge-work “red shift” (see Figure 1). The right metrics must be developed for incentivizing and evaluating knowledge workers' performance, and for encouraging their participation in virtual teams. Management must be able to measure employees' participation, collaboration, and contributions to growing the company's knowledge base.

Enterprise social networking technologies must become more user-friendly and integrated with employees' work styles, processes, and preferences. Organizations may need to accelerate data management and business intelligence processes in order to provide virtual teams with access to the right information and insights to support good decision making. Data-sharing policies and other business processes must adjust to the needs of virtual teams and the expert collaboration process.

As with any major business transformation, an organization's transition to expert collaboration requires dedication, perseverance, and senior executive support. A company should begin with an assessment of its organizational culture, business processes, and enabling technologies, with particular emphasis on understanding “pain points” that may be barriers to implementing expert collaboration capabilities.

A business area such as sales or supply chain management should be selected for a pilot program to design and fine-tune concepts. Business process capabilities and enabling technologies should be developed and implemented in phases. Small changes, such as enabling a core team to reach out and tap broader distributed expertise using “communities of practice,” can have great impact and are priorities for early implementation. The high-tech case study covered below provides additional insights for implementing expert collaboration.

Expert Collaboration in Action

Several smaller organizations have already made virtual teams and the virtual workplace the core of their business model:

- **Crayon** (www.crayonville.com) is a virtual marketing company described by its website as a “consortium of new marketing futurists, social media insiders, and conversational marketing thought leaders”—essentially a group of freelance industry veterans and marketing experts who come together on demand to address the needs of specific client work. The company does not maintain a physical office and has few permanent

employees. Team members communicate and collaborate using advanced ICT and social media platforms such as Second Life. The company has low fixed-salary and overhead costs, and competes on the expertise of its freelance network.

- **E lance** (www.elance.com) is an Internet-based marketplace of talent, matching the needs of companies to the skills of a talent pool of more than 100,000 freelance professionals. Companies may hire specific individuals or dynamically assemble a virtual team of experts, based on their specific needs. The track record, rating, skill set, and portfolio of each professional are available to hiring managers to help in the selection process. Companies do not need to take on permanent employees, and professionals have more flexibility in choosing their assignments. Elance also provides an online collaborative workspace for companies and professionals.
- **Cisco's Customer Value Chain Management (CVC M)** organization is responsible for the company's global supply chain operations and for managing relationships with customers, contract manufacturers, and thousands of partners and suppliers. CVC M has created customer value teams (CVTs) to manage relationships with top customers.²³ The CVTs' charter is to establish Cisco as a trusted and valued supplier, and to deliver on customer loyalty objectives by taking a holistic view of customers' needs.

CVTs are based on the expert collaboration concept. Essentially virtual teams, each CVT consists of core and extended teams. Core team members are supply-chain and customer service professionals with responsibility for meeting specific customer relationship objectives. Extended team members are drawn in as needed from other functions to help address specific customer needs and issues. CVTs are self-managing, self-organizing, and possess appropriate decision-making authority. They operate under a well-defined charter that follows a "vision-strategy-execution" approach. The CVT Steering Committee (senior executives from the Cisco sales, services, and CVC M operations groups) and a CVT Operations Committee (including directors representing different functions) provide additional governance. CVT members gradually build ratings and reputations over time through peer assessment based on their participation and contributions. (Members of the extended ecosystem, such as channel partners and logistics providers, are not currently included as CVT team members, but they will be in the future.) CVTs emphasize applying dispersed knowledge within Cisco to create and capture new insights and information. Measurable benefits from CVTs include improved forecast accuracy, supply-chain delivery performance, reduced order fulfillment lead times, and greater customer satisfaction.

Implementing Expert Collaboration: A High-Tech Company Case Study

This global Fortune 100 IT company's senior management team designated the sales function—specifically, sales teams supporting large, strategically important customers in Japan—as a target for implementing expert collaboration.

The global IT industry faces a challenging environment fueled by unrelenting pricing pressures, demanding customers, disruptive technology innovations, and an increasingly competitive landscape. IT companies seek to differentiate themselves in target markets by

architecting complete solutions based on integrating various products and technologies, and on providing lifecycle services.

Sales teams must operate differently in this environment than they may have in the past. One of the fundamental changes taking place is shifting the sales organization's mindset from selling point products to providing complete solutions and architectures. This can be done only when the sales team has a deep understanding of industry and customer issues, and about how the proposed solutions will help customers address business challenges. This new approach requires a different skill set; account executives now are required to orchestrate large, complex deals by working with distributed experts (internal and external) across the sales cycle, from initial ideation through opportunity identification, proposal, deal closure, and post-sales customer support.

The company began by assembling a cross-functional virtual team to lead the design, pilot, and scaled implementation of expert collaboration in the sales function. The team first developed specific objectives by analyzing a series of fundamental questions (see Figure 3).

Figure 3. Sales Transformation Based on Expert Collaboration

How Should Sales Improve Performance by Using Distributed Expertise and Knowledge?	
<ul style="list-style-type: none"> What is the business imperative for improving sales performance? Why now? 	<ul style="list-style-type: none"> What is the governance mechanism for prioritizing the application of scarce expertise?
<ul style="list-style-type: none"> What are the challenges today (for example, capability shortfalls, issues, and "pain points")? 	<ul style="list-style-type: none"> What is the impact on organizational roles and responsibilities?
<ul style="list-style-type: none"> How do expertise and knowledge address today's challenges and drive improved sales performance? 	<ul style="list-style-type: none"> What are the benefits for sales employees? Why should they embrace change?
<ul style="list-style-type: none"> Which specific domains of expertise and knowledge are required? 	<ul style="list-style-type: none"> What is working well today? Which "best practices" should be continued?
<ul style="list-style-type: none"> Where are the leverage points for expertise and knowledge ("insertion points" in sales process and sales models)? 	<ul style="list-style-type: none"> How should the company empower front-line sales employees to make decisions?
<ul style="list-style-type: none"> What does the "future state" of the sales organization look like? What are the company's aspirations for sales? 	<ul style="list-style-type: none"> What is the role of technology? How should the company measure and track the impact of changes (process, organization, technology)?

Source: Cisco IBSG, July 2010

The team developed a vision of the targeted future state of the sales organization, a strategy for reaching it, and a set of initiatives to support the strategy. These were used to socialize the objectives of the effort with stakeholders and establish a common vocabulary for the initiative. A set of business value hypotheses also was developed to support the effort (see Figure 4).

Figure 4. Value Proposition of Expert Collaboration in Sales



Source: Cisco IBSG, 2010

Next, the team focused on identifying challenges and pain points faced by sales teams in the current environment. This was done using a series of focus group sessions and interviews with selected sales teams. Figure 5 provides a list of questions used to develop a baseline understanding. The sales organization had just completed an internal study on what it takes to be a high-performing sales team, and findings from this effort also were considered.

Figure 5. Value Proposition of Expert Collaboration in Sales

Question	Key Factors
<ul style="list-style-type: none"> What drives sales success for your accounts? 	<ul style="list-style-type: none"> Sales success factors Categorize success factors by “behaviors,” “tools,” “process efficiency,” and “access to information”
<ul style="list-style-type: none"> How does the sales process align with your customers’ buying process? Do you understand your customers’ buying process? 	<ul style="list-style-type: none"> Sales process linkage with customers’ buying processes
<ul style="list-style-type: none"> Do you have the right resources (information, knowledge, access to experts, availability of additional resources, etc.) to be successful? 	<ul style="list-style-type: none"> Is the availability of information, knowledge, and resources a “pain point” and barrier to sales success?
<ul style="list-style-type: none"> Which expertise and knowledge are required for sales success? Do you have timely access to the right expertise and knowledge? Where do you find the expertise and knowledge? Do you rely on external partners? 	<ul style="list-style-type: none"> Expertise and knowledge domains Sources of expertise and knowledge Unavailability of expertise and knowledge as potential pain points
<ul style="list-style-type: none"> Which initiatives will help improve sales processes? 	<ul style="list-style-type: none"> General awareness of proposed improvements / changes
<ul style="list-style-type: none"> Which tools and technologies do you use in the sales process? Please rank these according to “ease of use” and “frequency of use” 	<ul style="list-style-type: none"> Tools actually used by salesforce
<ul style="list-style-type: none"> What percentage of time do you spend on back-office (administrative) tasks? Is this useful time or not? Which changes would you propose? 	<ul style="list-style-type: none"> Administrative burden on sales “Lost productivity” Work that can potentially be offloaded to a shared services group

Source: Cisco IBSG, 2010

The pain points and challenges were grouped under three main categories: “organization,” “process,” and “technology.” Organization-related pain points included culture, language, and other barriers that prevented sales teams from reaching out to subject-area experts on a global basis. There were limited incentives for sales teams to look beyond their local office social networks for assistance on sales opportunities. Three factors—difficulty in identifying subject-area experts, access to people in different time zones, and trust—were cited as barriers to broader collaboration. Limited emphasis was placed on reuse of existing knowledge objects or creating new knowledge that could be disseminated and shared globally with other teams.

Focus group sessions also revealed that few teams followed the standard sales process framework. Most teams considered the sales process to be too cumbersome and rigid to meet their needs. The process also was overly transaction-oriented (focused on submitting a proposal, or closing a sale by getting a purchase order for a specific product), and did not accommodate all the collaborative interactions that characterize the selling of complex solutions and architectures. For example, the sales process did not allow the collaborative

development of business ideas into tangible opportunities. Roles and responsibilities in the sales cycle also were unclear. Sales teams had to use many different systems and tools to do their work. Most of these systems had complicated forms, with many data-entry fields that were not typically used by other sales teams.

Figure 6. Functional Decomposition in Sales and Customer Care Domain

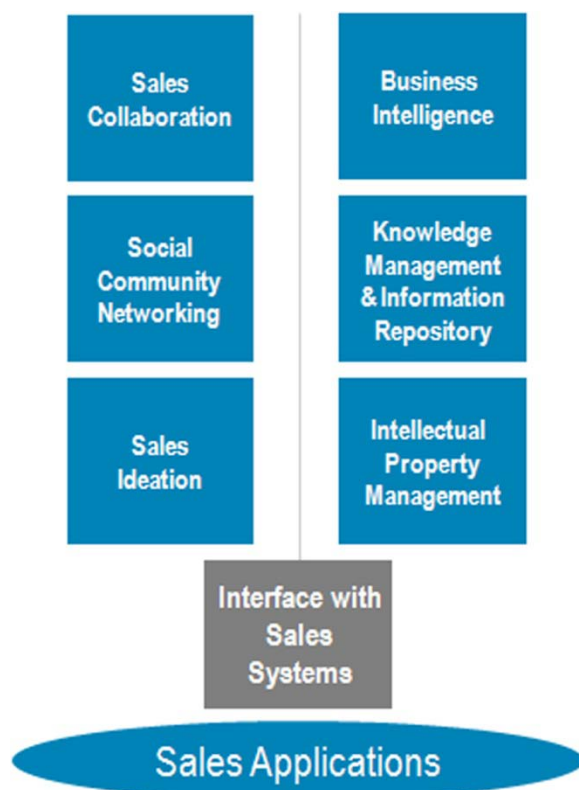
Domain: Sales and Customer Care	
Function	Basic Service Functions
Customer Business Relationship Management	<ul style="list-style-type: none"> • Customer information management • Customer agreement management • Allocation planning and order promising • Customer relationship management
Salesforce Planning and Management	<ul style="list-style-type: none"> • Salesforce planning • Sales quota assignment and tracking • Sales forecasting • Sales compensation management
Customer Acquisition	<ul style="list-style-type: none"> • Sales generation • Customer requirements development • Customer solution development • Customer solution pricing • Customer sales query handling
Customer and Partner Order Fulfillment Management	<ul style="list-style-type: none"> • Order processing and management • Billing and invoicing • Customer financing • Collections
Customer Service Delivery	<ul style="list-style-type: none"> • Service planning and management • User access entitlement management • Content distribution management • License distribution management • Service personnel assignment & tracking • Installation & systems integration • Technical support • Customer training & certification coordination • Maintenance, repair & restoration • Service parts supply management • Software release distribution management • Consulting service delivery

Source: Proact Business Transformation, Inc., 2010

The team used an enterprise architecture methodology to develop detailed business capabilities for the sales function, employing the following steps:

1. Identified all functions and services performed by a sales and customer-care organization in a high-tech company using a reference framework provided by Proact Business Transformation, Inc.²⁴ The Proact framework enables a “functional decomposition” analysis that, beginning at the domain level, identifies all functions within that domain and all basic services within each function. (An example of functional decomposition is shown in Figure 6.)
2. Determined relevant functions and services performed by related domains such as finance, human resources, engineering, and marketing.
3. Identified new capabilities for expert collaboration at this basic service/function level. When identifying additional capabilities, the team focused on how and when expertise and knowledge should be inserted into the sales process.
4. Defined roles and responsibilities, as well as information flows among the various functions.
5. Worked with the HR organization and senior sales management to create appropriate incentives and performance measures to support external collaboration, engagement, and participation from dispersed expert resources.
6. Grouped expert collaboration capabilities across all functions, and devised a set of enabling system and technology requirements for a technology platform to support expert collaboration (see Figure 7).

Figure 7. Expert Collaboration-Enabling Technology Platform for Sales

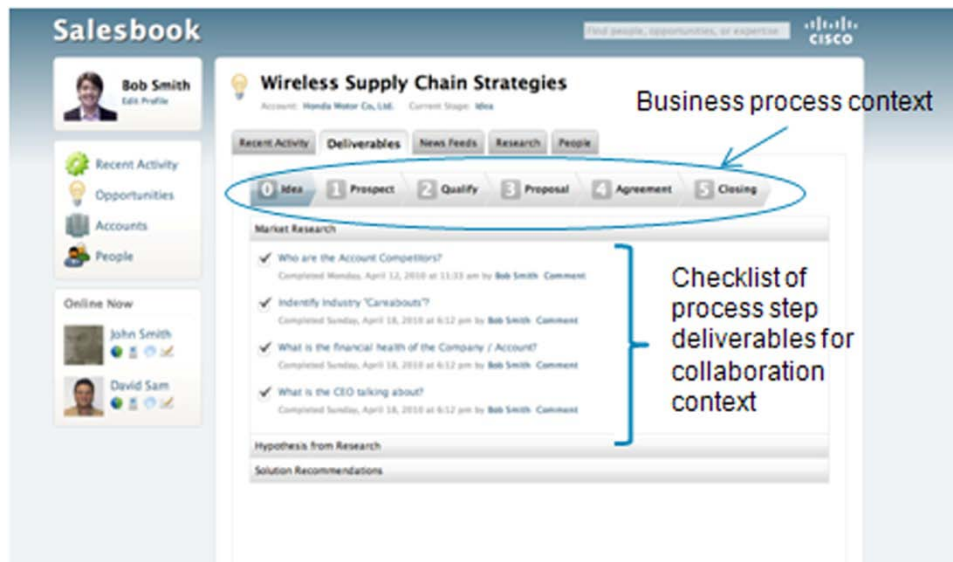


Source: Cisco IBSG, 2010

Enabling a Technology Platform for Expert Collaboration

An enterprise social networking platform such as Cisco Quad is essential to enabling expert collaboration. Enterprise social networking platforms enable the systemic implementation of an organization's social graph.²⁵ These platforms provide a sense of community, enable interaction and collaboration among virtual team members, and provide access to information and experts both on a “pull” (search) and “push” (recommendation) basis. Enterprise social networking platforms also provide new ways for individual contributions to gain visibility and recognition by peers, and increase productivity— especially when the business process is integrated with the collaboration platform (see Figure 8). Enterprise social networking platforms enable the capture, improvement, and dissemination of experiential knowledge, primarily through discussion forums, blogs, video blogs, communities, and “folksonomy”-based content tagging.

Figure 8. Example of Business Process Integration with Enterprise Social Networking



Source: Cisco IBSG, 2010

Recommendations

Enterprises that embark on the journey of implementing expert collaboration will require support, energy, and engagement from management leaders:

- **CEOs** need to encourage employees to expand their reach to others inside and outside the enterprise, and to improve their internal communication strategy. CEOs also must establish initial target areas of improvement. These should focus on important mainstream processes that require both innovation and operational excellence, such as sales, product development, or supply chain management. CEOs also need to encourage adoption of proven collaboration technologies such as video and unified communications to help bridge time zones and cultural boundaries.
- **CIOs** need to be innovators. The new trend of using business intelligence requires more than moving and analyzing data. Expert collaboration dynamically incorporates the knowledge worker into every process at the right time. Because expert collaboration understands the implications and challenges in business processes as

well as the supporting technologies, it anticipates knowledge bottlenecks in the enterprise and avoids them—in some cases by bringing a knowledge worker with specific expertise into the process before a problem can arise.

CIOs increasingly need to drive adoption of video in the enterprise. Video has emerged as a powerful enabling technology for richer communications and collaboration. Corporations today can choose from a variety of video solutions—from high-end telepresence studios and custom video-based collaboration environments, to desktop and tablet PC-based video solutions. Implementing video requires integration of technology with work processes and new operating models such as cloud services to manage time-to-market risk and cost of investment in capital or operating expenses.

- **COOs** need to be change agents, sponsoring new measurements of success across the organization. This requires building new business sensors into the marketplace (ecosystem partners, technologists, economists, and customers) to understand which capabilities work and which need to be improved. The COO will also be the chief connector on market-driven innovation and internal change resisters, and will focus on key processes needed to harness people to organizational intent (shared goals).
- **Chief human capital officers (CHCOs)** need to be advocates. The CHCO may begin by completing an inventory of all job descriptions and job titles in the company. Next, an analysis of the relevance of current job descriptions to the knowledge (“red shift”) world needs to be completed. Do they represent the capabilities that the company needs in five years? A balance must be struck between respect for local cultures and motivation of global inclusion and participation in expert collaboration. This may be done through effective communication of successes in global expert collaboration results.
- **CFOs** will be the sponsors, developing new data governance policies to determine how data access enables expert collaboration while protecting the company. CFOs must champion CIOs’ efforts to sponsor data and information exchange in addition to information governance.

Conclusion

The time for expert collaboration is now. Experiential knowledge and deep domain expertise have emerged as competitive differentiators in a world where the Internet has already leveled the playing field by making information and explicit knowledge universally available. Companies across all industries need to master the ability to dynamically harness distributed expertise and apply it for competitive advantage. This will require courage and deep commitment from management leaders. An open mindset to experimentation must be implemented with virtual teams that include internal and external experts and display collaborative behaviors. New ways of allocating resources, sharing information, improving employee engagement, and measuring success must be implemented. Leaders who successfully pursue the path to expert collaboration will take their organizations to new heights. The benefits of expert collaboration will accrue not just to individual companies, but also to ecosystem partners and society as a whole.

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Endnotes

1. "The Expert Organization: Harnessing Collective Experiential Knowledge for Sustainable Competitive Advantage," Arun Saksena, Cisco Internet Business Solutions Group, June 2008.
2. "A Strong Foundation for M&A in 2010," Werner Rehm and Carsten Buch Sivertsen, **McKinsey Quarterly**, Winter 2010.
3. Definition adapted from **Cognitive Surplus**, Clay Shirky, The Penguin Press, 2010.
4. "Using Technology To Improve Workforce Collaboration," James Manyika, Kara Sprague, and Lareina Yee, **McKinsey Quarterly**, October 2009.
5. "Innovation and Growth: Rationale for an Innovation Strategy," Organisation for Economic Co-Operation and Development, 2007.
6. Reader comment on "Common Sense: Hewlett-Packard Still Can't Handle the Truth," James Stewart, **The Wall Street Journal**, August 11, 2010.
7. "Global Workforce Study," Towers Watson, 2007.
8. **The Future of Work**, Thomas W. Malone, Harvard Business School Press, May 2004.
9. "Megatrends: How Our World Is Changing," European Market and Business Intelligence, Cisco Systems, January 2010.
10. "The Productivity Imperative," Peter Bisson, Elizabeth Stephenson, and S. Patrick Viguerie, **McKinsey Quarterly**, June 2010.
11. "User Survey Analysis: Consumer Marketing Using Social Network Analysis, Worldwide, 2010," Gartner Group, June 2010.
12. **The Tipping Point: How Little Things Can Make a Big Difference**, Malcolm Gladwell, Little Brown and Company, 2000.
13. "Bridging the Gap: Achieving the Promise of Enterprise Social Computing," Saugatuck Technology, March 2009; "The End of Management," Alan Murray, **The Wall Street Journal**, August 21, 2010.
14. "The End of Management," Alan Murray, **The Wall Street Journal**, August 21, 2010.
15. **The Future of Work**, Thomas W. Malone, Harvard Business School Press, May 2004.
16. Unified communications includes technologies such as voice-over-Internet Protocol (VoIP), web conferencing, video, messaging, "presence," mobility, and others that improve the way geographically dispersed people communicate, interact, and collaborate with each other.

17. "Worldwide Unified Communications Services Forecast," Wainhouse Research, December 2009.
18. Wikipedia defines a virtual team—also known as a geographically dispersed team (GDT)—as "a group of individuals who work across time, space, and organizational boundaries with links strengthened by webs of communication technology."
19. "Data, Data Everywhere: A Special Report on Managing Information," **The Economist**, February 25, 2010.
20. "Data, Data Everywhere," **The Economist**, Special Report on Managing Information, February 25, 2010, <http://www.economist.com/node/15557443>
21. "Is Technology Good or Bad? Yes." L. Gordon Crovitz, **The Wall Street Journal**, August 23, 2010. Also see, "Is Google Making Us Stupid?" by Nicholas Carr, **The Atlantic**, July/August 2008.
22. **Collaboration: How Leaders Avoid the Traps, Create Unity, and Reap Big Results**, Morten T. Hansen, Harvard Business Press, 2009.
23. "Shifting to a Customer-Centric Value Chain," John Yuva, **Inside Supply Chain Management**, Vol. 21, No. 9, September 2010.
24. <http://www.proact-ea.com/>
25. The social graph is a term coined by Mark Zuckerberg of Facebook, who originally referred to the social network of relationships among users of the social networking service provided by Facebook. It has been described as "the global mapping of everybody and how they're related" in a company. Source: Wikipedia, 2010.

More Information

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