Spotlight

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Building a Collaborative Enterprise

Four keys to creating a culture of trust and teamwork *by Paul Adler, Charles Heckscher, and Laurence Prusak*

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A SOFTWARE ENGINEER we'll call James vividly remembers his first day at Computer Sciences Corporation (CSC). The very first message he received: "Here are your Instructions" (yes, with a capital I).

"I thought I was bringing the know-how I'd need to do my job," James recalls. "But sure enough, you open up the Instructions, and it tells you how to do your job: how to lay the code out, where on the form to write a change-request number, and so on. I was shocked."

In this division at CSC, code is no longer developed by individual, freewheeling programmers. They now follow the Capability Maturity Model (CMM), a highly organized process that James ini-

tially felt was too bureaucratic: "As a developer, I was pretty allergic to all this paperwork. It's so time-consuming."

Not anymore. "I can see the need for it now," James says. "Now I'm just one of 30 or 40 people who may have to work on this code, so we need a change-request number that everyone can use to identify it. I can see that it makes things much easier."

What James was joining at CSC was neither a code-writing assembly line nor a bunch of autonomous hackers but a new type of organization that excels at combining the knowledge of diverse specialists. We call this kind of enterprise a *collaborative community.*

A shared purpose is not the verbiage on a poster or in a document, and it doesn't come via charismatic leaders' pronouncements.

Collaborative communities encourage people to continually apply their unique talents to group projects—and to become motivated by a collective mission, not just personal gain or the intrinsic pleasures of autonomous creativity. By marrying a sense of common purpose to a supportive structure, these organizations are mobilizing knowledge workers' talents and expertise in flexible, highly manageable group-work efforts. The approach fosters not only innovation and agility but also efficiency and scalability.

A growing number of organizations—including IBM, Citibank, NASA, and Kaiser Permanente—are reaping the rewards of collaborative communities in the form of higher margins on knowledge-intensive work. (The CSC divisions that applied the CMM most rigorously reduced error rates by 75% over six years and achieved a 10% annual increase in productivity, while making products more innovative and technologically sophisticated.) We have found that such clear success requires four new organizational efforts:

- defining and building a shared purpose
- cultivating an ethic of contribution
- developing processes that enable people to work together in flexible but disciplined projects
- creating an infrastructure in which collaboration is valued and rewarded.

Our findings are based on many years of studying institutions that have sustained records of both efficiency and innovation. The writings of great thinkers in sociology—Karl Marx, Max Weber, Émile Durkheim, and Talcott Parsons—also inform our work. These classic figures were trying to make sense of broad economic and social changes during times when capitalism was mutating from small-scale manufacturing to large-scale industry. Our era represents just as momentous a shift, as we make the transition to an economy based on knowledge work and workers.

A Shared Purpose

Sociologist Max Weber famously outlined four bases for social relations, which can be roughly summarized as *tradition, self-interest, affection,* and *shared purpose.* Self-interest underlies what all businesses do, of course. The great industrial corporations of the 20th century also invoked tradition to motivate people. And many of the most innovative companies of the past 30 years—Hewlett-Packard, Microsoft, Apple, Google, and Facebook—have derived strength from strong, broadly felt affection for a charismatic leader.

In focusing on the fourth alternative—a shared purpose—collaborative communities seek a basis for trust and organizational cohesion that is more robust than self-interest, more flexible than tradition, and less ephemeral than the emotional, charismatic appeal of a Steve Jobs, a Larry Page, or a Mark Zuckerberg.

Like a good strategy or vision statement, an effective shared purpose articulates how a group will position itself in relation to competitors and partners—and what key contributions to customers and society will define its success. Kaiser Permanente's Value Compass, for example, succinctly defines the organization's shared purpose this way: "Best

Idea in Brief

At many leading-edge enterprises, a new form of organization is emerging—one that is simultaneously innovative and efficient, agile and scalable. It is a way of working that focuses on knowledge production.

By marrying a sense of purpose to a robust operating structure, these collaborative communities are harnessing knowledge workers' creativity in a flexible—but also highly manageable—fashion.

To build such communities, companies must master a new set of skills:

- define and build a shared purpose
- cultivate an ethic of contribution
- develop scalable processes for coordinating people's efforts
- create an infrastructure in which collaboration is valued and rewarded.

quality, best service, most affordable, best place to work."

This shared purpose is not an expression of a company's enduring essence—it's a description of what everyone in the organization is trying to do. It guides efforts at all levels of Kaiser: from top management's business strategy, to joint planning by the company's unique labor-management partnership, right down to unit-based teams' work on process improvement. In that regard, Value Compass is less a vision than a recognition of the challenges that every member of the group has the responsibility to meet every day. (See the sidebar "A Collaborative Dance at Kaiser Permanente.")

Leaders often have trouble articulating such a purpose, falling back on either lofty truisms ("We will delight our customers") or simple financial targets ("We will grow revenues by 20% a year"). Indeed, the development of a common purpose can be a long, complex process.

For instance, IBM, which needed to reorient its employees from a focus on selling "big iron" in the 1990s, spent a decade building a shared understanding of integrated solutions and on-demand customer focus that went beyond simplistic rhetoric. For many years middle managers and technical employees had found it difficult to frame these concepts in practical terms. They didn't understand at an operational level what it meant for the company to offer not just its own products but those of other vendors—and to sell customers not simply what IBM offered but exactly what they needed when they needed it. Today these common purposes have become part of the language shared daily by people from different functions and at various levels of IBM as they face challenges together.

Properly understood, a shared purpose is a powerful organizing principle. Take, for example, e-Solutions, a unit of about 150 people formed in April 2000 within the cash-management division of Citibank to address a competitive threat from AOL, whose customers were already banking, trading stocks, and buying mutual funds online. To meet this challenge, Citibank sought to boost the growth rate of its core cash-management and trade business from 4% to roughly 20%.

But that was just the business goal. The common purpose behind that number was the aspiration to be a leader in creating new and complex online banking products that could be tailored rapidly to customers' needs. To fully grasp this purpose required widespread discussion and a shared understanding of the company's competitive position within the industry, the evolution of customer needs, and the distinctive capabilities of the organization.

A shared purpose is not the verbiage on a poster or in a document, and it doesn't come via charismatic leaders' pronouncements. It is multidimensional, practical, and constantly enriched in debates about concrete problems. Therefore, when we asked managers at e-Solutions why they worked on a given project, they did not answer "Because that's my job" or "That's where the money is." They talked instead about how the project would advance the shared purpose.

An Ethic of Contribution

Collaborative communities share a distinctive set of values, which we call an *ethic of contribution*. It accords the highest value to people who look beyond their specific roles and advance the common purpose.

The collaborative view rejects the notion of merely "doing a good job," unless that actually makes a contribution. We have learned from practically a century of experience with the traditional model that it is quite possible for everyone to work hard as an individual without producing a good

collective result. An ethic of contribution means going beyond one's formal responsibilities to solve broader problems, not just applying greater effort. It also rejects the strong individualism of the market model and instead emphasizes working within the group (rather than trying to gain individual control or responsibility) and eliciting the best contributions from each member for the common good.

Consider the way the software engineers at CSC view the aptly named Capability Maturity Model. "A more mature process means you go from freedom to do things your own way to being critiqued," one engineer acknowledges. "It means going from chaos to structure." That structure makes these knowledge workers more conscious of their interdependence, which has in turn encouraged the shift from an ethic of individual creativity to an ethic of contribution. Another engineer uses this analogy:

"It's a bit like street ball versus NBA basketball. Street ball is roughhousing, showing off. You play for yourself rather than the team, and you do it for the love of the game. In professional basketball, you're part of a team, and you practice a lot together, doing drills and playing practice games. You aren't doing it just for yourself or even just for your team: Other people are involved—managers, lawyers, agents, advertisers. It's a business, not just a game."

The type of trust engendered by an ethic of contribution is less of a given than the trust at traditional organizations, which is firmly rooted in a shared set of rules expressed through tokens of the shared culture. (For many years at IBM, for example, all "good" employees wore the same kind of hat.) But it is also less mercurial than trust built upon faith in a charismatic leader and dazzling displays of individual brilliance. Trust in collaborative communities arises from the degree to which each member believes the other members of the group are able and willing to further the shared purpose. (See the sidebar "Three Models of Corporate Community.")

Given this difference in values, people working on collaborative efforts within larger organizations can find themselves at odds with both the loyalists and the free agents in their midst. For instance, contributors at e-Solutions, working within the generally traditional Citibank organization, were suspicious of the tendency to discuss "who you know" rather than focusing on the task at hand.

"Everyone has their own signals that they look for," said one contributor. "If someone comes into the first meeting and starts throwing around names, my hackles go up because that means, rather than focusing on capabilities and market proposition, they're trying to establish credibility in terms of

A Collaborative Dance at Kaiser Permanente

A unit of Kaiser Permanente in California developed a new protocol—dubbed the Total Joint Dance—that illustrates how collaborative communities mobilize the knowledge of many diverse contributors to yield scalable business results.

In 2008 Irvine Medical Center wanted to streamline its costliest, most time-intensive surgeries: total-hip and knee-joint replacements. The task was daunting, because the solution required collaboration among specialists who normally fight for resources.

The feat could not have been accomplished by either a traditional or a free-agent type of organization. As Dr. Tadashi Funahashi, the chief of orthopedics, explained, "You have multiple surgeons from multiple different practices, each wanting to do it their own way." What's more, most of Kaiser's employees and insurance customers are unionized. Union cooperation was critical, so neither a top-down administrative mandate nor a surgeon-driven approach was feasible. Kaiser's collaborative community was formalized in the Labor Management Partnership, a joint governance structure involving management and most of Kaiser's employee unions.

In May 2008 a team of OR nurses, surgeons, technicians, and others was assembled. Together this group of union staff, management, and physicians examined every point in the process.

"Usually when we're in the room, we wish it would be done differently," said an OR nurse who was part of the efficiency team. "But this time we actually got a voice in how it's done differently."

Efficiencies were gained by making three types of changes. The first identified parts of the sequential process that could be done simultaneously. Housekeeping staff, for instance, might start the clean-up process when a surgeon begins securing sutures instead of waiting until the

who they know and who they've talked to....That, at the end of the day, doesn't move you an inch down the line."

Instituting Interdependent Processes

Of course, a shared purpose is meaningless if people with different skills and responsibilities can't contribute to it and to one another. Although traditional bureaucracies excel at vertical coordination, they are not good at encouraging horizontal relations. Free-agent communities excel at ad hoc collaboration but are less successful at large-scale interdependent efforts.

The key coordinating mechanism of a collaborative community, which is often made up of overlapping teams, is a process for aligning the shared purpose within and across the projects. We call that type of coordination *interdependent process management,* a family of techniques including *kaizen,* process mapping, and formal protocols for brainstorming, participatory meeting management, and decision making with multiple stakeholders. CMM, with its well-developed methods, for instance, enables CSC's software engineers to quickly tailor proven project-management procedures to the needs of the project at hand.

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Interdependent process management is explicit, flexible, and interactive. Processes are carefully worked out and generally written into protocols, but they are revised continually as the demands of the work and of clients change. They are shaped more by people involved in the task than by those at the top. As one CSC project manager put it, "People support what they help create....As a project manager, you're too far away from the technical work to define the [processes] yourself....It's only by involving your key people that you can be confident you have good [procedures] that have credibility in the eyes of their peers."

At e-Solutions, interdependence took shape in the "e-business road map," which was made available online to everyone in the organization, served

patient is out of the operating room.

The second type of change was triggers: cues to a staff member about when to begin a specific task, such as alerting the post-op and transporting departments that a surgery is ending and the patient will be ready for transport in 15 minutes. This matter might sound trivial, but it requires people to think beyond their own jobs to how their roles fit with others'.

The third change was investing in a "floater" nurse who could move between ORs to provide extra help or relieve staff on breaks. That added capacity is costly but pays off in cycle-time reductions—a trade-off that managers miss if they're focused purely on dollars.

The effect of combining better coordination with increased resources was "like night and day," as Dr. Funahashi describes it. "It's the difference between a well-organized, choreographed team and things happening in a default chaotic state."

With these three changes in place, the number of total-hip and knee-joint replacement surgeries increased from one or two up to four a day, and the average turnaround time between procedures dropped from 45 to 20 minutes. Better coordination freed up 188 hours of OR time a year, at an average annual saving of $132,000 per OR.

Patients and employees are also happier with the outcomes. Surveys of OR staff at one Kaiser facility showed an 85% increase in job satisfaction after the new protocol was adopted.

Perhaps most significant from an organizational perspective is that the gains were scalable. For example, the practices have been adopted by general surgery, along with head and neck, urology, vascular, and other surgery specialties at Irvine. And this approach has spread to other Kaiser hospitals.

Three Models of Corporate Community

Traditional enterprises inspire institutional loyalty; free-agent communities foster individualism. Neither type of organization creates the conditions for collaborative trust that business today requires.

TRADITIONAL INDUSTRIAL MODEL
These densely interconnected communities are bound by strongly shared values and traditions: clear roles, consistent opportunity for advancement, job security, and benefits. The combination of loyalty and bureaucratic structure allows such organizations to reach unprecedented scale but makes them inflexible and slow to innovate.

FREE-AGENT MODEL
These organizations are innovative and flexible. They forgo rules, procedures, and deferential relations in favor of individual effort and reward. Loyalties are based on affection for charismatic leaders. This model is effective for modular projects, but weak organizational ties make it difficult to build the extensive team structure that is needed for knowledge-based work.

COLLABORATIVE COMMUNITY MODEL
These communities are organized around a sense of shared purpose and coordinated through collaboratively developed, carefully documented procedures. They believe that diversity of capability stimulates innovation. Such organizations excel at interdependent knowledge-based work.

as a template for emerging projects, and was continually updated and refined. Emerging teams developed their own maps to feed into it as they defined their roles and responsibilities.

In a collaborative community, anyone can initiate changes if his or her work demands it, but considerable discussion is required to figure out the consequences for other participants and to make sure that everyone understands them. A Citibank e-Solutions manager described it this way:

"Who owns the process map? We all do. All of us have different perspectives, either on particular partners or on the products or on the overall relationship. When we make a change, it gets communicated to everybody. We've had team meetings to discuss it; everyone understands his role. Originally it was just me and a couple of other people; when we split responsibilities from delivery and execution, we had to redo the exercise."

This kind of process management is tough to maintain. It requires people who are accustomed to more-traditional systems to develop radically new habits. In either bureaucratic or market-oriented organizations, people are given objectives and procedures but are generally left alone to operate within those boundaries. Collaborative process management intrudes on that autonomy—it requires people to continually adapt to others' needs. Accepting the value of this interdependence is often difficult, and the habits of documentation and discussion may require considerable time to take root. A manager at Johnson & Johnson described his group's struggles:

"The team acknowledged problems of poor alignment. As a result, we sat down as a team and put things on a piece of paper. The idea was that I could just go back and refer to something we had decided and say, 'On May 15th we decided x, y, and z.' Within a day, that plan was obsolete. We were making agreements, changing dates, reprioritizing, and not updating the document. The main problem is the informal side conversations between two people. They make a decision without informing the rest of the team. The key is to review this periodically as things change. We need to update and maintain the document as we have conversations."

Creating a Collaborative Infrastructure

If work is organized in teams and workers increasingly serve on more than one team, the need for a new type of authority structure arises—one that involves overlapping spheres of influence. We call it *participative centralization*. It's participative because the collaborative enterprise seeks to mobilize everyone's knowledge; it's centralized because that knowledge must be coordinated so that it can be applied at scale. An e-Solutions contributor described a typical example:

"There are really three heads of the unit. One of them is responsible for my salary, but from a professional perspective they're equally important. One of them tells me more what to do on a tactical level, another more on general direction and vision. The advantage is that there are multiple people who can play multiple roles, so we can get at resources from multiple perspectives. In the e-space it's very use-

> Matrix structures offer a huge competitive advantage precisely because they are so hard to sustain.

ful to be nimble in that way. At the end of the day it is clear who gets to make the decision, but it rarely comes to that. I wouldn't say that decisions are never bumped up; I would say that these flat structures invite more questioning and more discussion, which I think is a good thing because when you have a stricter organizational hierarchy, people are more reluctant to bring things to their superiors."

If what this contributor describes appears to be a matrix, it is. The matrix structure has been tried by many firms during recent decades, and its failure rate is high, so people often assume it's a poor model. But matrix structures actually offer a huge competitive advantage precisely because they are so hard to sustain. They both support and are supported by the other features of the collaborative model: shared purpose, an ethic of collaboration, and interdependent process management. Without those buttresses, the matrix model collapses under the weight of political bickering.

Pay systems are not primary drivers of motivation in collaborative organizations. People will become dissatisfied over time if they feel their pay does not reflect their contributions, but their daily decision making is not guided by the goal of maximizing their compensation. Rather, the operative motivation is what Tracy Kidder, in *The Soul of a New Machine,* memorably labeled the "pinball" theory of management: If you win, you get to play again—to take on a new challenge, to move to a new level. More broadly, people talk about one another's contributions a lot, so collaborative communities foster a relatively accurate reputational system, which becomes the basis for selecting people to participate in new and interesting projects.

That said, pay systems need to be equitable. Given that formal supervisors can't monitor everything that subordinates in different departments are doing on various projects, collaborative organizations rely heavily on some form of multisource, 360-degree feedback.

The Collaborative Revolution

We do not wish to downplay the undeniable challenges of building collaborative communities. Setting and aligning processes that interconnect people on many teams requires constant attention. Not every star player you may wish to attract will want to relinquish autonomy to reap the rewards of a team's effort. Allocating pay fairly according to contribution is tricky.

Indeed, we have found that the patience and skill required to create and maintain a sense of common purpose are rare in corporate hierarchies, particularly given that it is not a set-it-and-forget-it process. The purpose must be continually redefined as markets and clients evolve, and members of the community need to be constantly engaged in shaping and understanding complex collective missions. That kind of participation is costly and time-consuming. And charismatic leaders who believe that they should simply go with their gut often don't relish this way of doing business.

What's more, developing a collaborative community, as IBM's experience attests, is a long-term investment, in tension with many short-term competitive and financial pressures that companies must navigate. So we do not envision a day anytime soon when all companies will be organized entirely into collaborative communities.

Still, few would argue that today's market imperative—to innovate fast enough to keep up with the competition and with customer needs while simultaneously improving cost and efficiency—can be met without the active engagement of employees in different functions and at multiple levels of responsibility. To undertake that endeavor, businesses need a lot more than minimal cooperation and mere compliance. They need everyone's ideas on how to do things better and more cheaply. They need true collaboration.

A century ago a few companies struggled to build organizations reliable enough to take advantage of the emerging mass consumer economy. Those that succeeded became household names: General Motors, DuPont, Standard Oil. Today reliability is no longer a key competitive advantage, and we are at a new turning point. The organizations that will become the household names of this century will be renowned for sustained, large-scale, efficient innovation. The key to that capability is neither company loyalty nor free-agent autonomy but, rather, a strong collaborative community.

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