Contents

Introduction

Charles Heckscher and Paul S. Adler

A central tension has run through social analysis for well over a century: community and trust seem increasingly necessary in a complex interdependent world, but they are also less available. At the same time that markets and polities have drawn people into tighter webs of relations, traditional communities have been greatly weakened, and the unifying institutions of previous eras—dominant religions, labor unions, major political parties—have lost much of their credibility. The resulting sense of fragmentation and anomie has led some to despair and others to call for the revival of community, including conservative appeals to traditional values and liberal explorations of dialogue and participation.

What is less known is that the corporate sphere has faced the same essential problem and has engaged in considerable practical innovation in dealing with it. Complex knowledge-based production requires high levels of diffuse cooperation resting on a strong foundation of trust. Contrary to the claims of neoliberal approaches, neither markets nor hierarchies are sufficient for coordination in such conditions: bonds of trust are essential. Yet the old corporate communities based on a culture of loyalty, which have been the basis for commitment for a century now, have been taken apart by three decades of economic turbulence, downsizing and restructuring. These developments raise the fear that the foundations of organizational trust are eroding when they are most needed.

Some look back with nostalgia, and argue that we should respond by reconstructing a culture of loyalty. Yet that culture had its own problems: it proved unable to encompass the increasing scope, diversity, and flexibility of interactions in business and other arenas. The traditional form of community was often narrow in its parochialism and deadly in its conformism—the antithesis of what is needed in our increasingly knowledge-intensive economy.

A growing group of theorists has been exploring the possibility of a new form of trust that would enable interdependent activity in the more fluid, open contexts characteristic of knowledge production, reconciling choice with community. The past few years have seen a proliferation of work on non-traditional forms of trust: 'studied,' 'deliberate,' 'swift,' and 'reflective.' And an emerging body of research focuses on new forms of organization among professionals and in 'post-bureaucratic' firms and markets.

The contributors to this volume have come together around a shared sense that a distinctively new form of community is being developed in the womb of the most advanced business organizations today. The claim at the core of the current study is that leading-edge organizational innovations, driven by pragmatic business considerations, offer a glimpse of this community, one that is collaborative and open rather than traditionalistic and closed. When firms and the business networks within which they operate become more knowledge intensive and more solutions oriented, they find it increasingly necessary for people to 'work things out' flexibly through discussion rather than relying either on arm's-length market exchange or bureaucratic authority. Thus while many companies have dismantled traditional relations of loyalty, many of the most successful of them have *not* simply retreated to some combination of self-interest and hierarchical command; rather they have gone at least some distance towards putting into practice a form of trust that overcomes the rigidities of traditional communities.

Studying these companies we can learn a great deal about why trust is needed, why traditional forms have broken down, and how new forms have begun to fill the gap. This emergent collaborative community rests on three major institutional pillars:

1. A shared ethic of interdependent contribution, fundamentally different both from traditional ethics of honor and loyalty, and from the modern individualist ('Protestant') ethic;
2. A formalized set of norms of interdependent process management, supplementing and often replacing the informal relations of traditional communities. These process approaches include iterative co-design, metaphoric search, and systematic mutual understanding; and
3. An interactive social character, formed by changes in family, childhood, and workplace patterns, that grounds an interdependent social

identity. This motivational pattern enables people to manage multiple group affiliations and peer relationships; they are less tied to motivations of autonomy or paternalistic dependence.

This volume is itself a result of an extensive collaboration among diverse specialists. The contributors fall into two main groups: those who are based in academia, and those who make their living primarily as consultants to large companies. The 'academics' bring to the table a theoretical perspective grounded not primarily in the business world, but in other social institutions; the 'business' writers bring a rich knowledge of what is going on in companies right now, and a 'feel' for what makes sense. Of course, the collaboration would be impossible if the line were as clear as that: the dialogue has depended on the fact that everyone has spent considerable time in both camps.

The group met three times over the course of a year and a half under the auspices of the Center for Workplace Transformation at Rutgers University. In the first session participants presented their initial understandings of how trust and community work in the best firms and interfirm networks. The second meeting focused especially on drafts of the main theoretical concepts. The third was organized around close discussion and collective critiques of chapter drafts. We also greatly benefited throughout from an 'independent auditor': Paul DiMaggio made very valuable and generous contributions through detailed critiques in all the sessions.

The flow of the volume is as follows:

- The opening section is primarily theoretical, sketching the main concepts of collaborative community.
  - Paul Adler and Charles Heckscher provide an overview, including the historical evolution and future prospects of this way of relating. They sketch the basic elements of the emerging form of community—values, organization, and identity. They also review the counter-forces that work against community and trust, but conclude that the evolution of production towards complex interdependent knowledge-based services and products will continue to foster collaboration in spite of these obstacles.
  - Charles Sabel focuses on the level of organization, on the workings of 'interdependent process management.' In particular he shows how the mechanisms of iterative co-design and disentrenching search, when put into motion, can generate trust through a

dynamic process of learning. Finally, he extends this organizational argument from the level of the workplace to the level of governance, showing that even highly complex systems (including governments) can build trust through properly designed incentives and forums that create cumulative understanding.

- Michael Maccoby focuses on character and identity, arguing that collaborative interactions are based on a transformation of social character that has been under way for several decades. He traces the roots of this change in the evolution of family systems as well as transformations at work. He analyzes ways in which the interactive character develops through the life cycle—including both the positive potential for intimacy and leadership based on mutual development, and the negative potential for superficiality and loss of integrity.

- The next set of chapters develop these concepts through studies of the internal structure of firms:
  - Jay Galbraith examines the organization of firms, arguing that they are becoming complex combinations of multiple types of networks: in addition to the traditional dichotomy of informal relations and formal organization, there is increasing dependence on e-coordination, formal teams, integrators, and matrices. This creates new challenges for leadership, which must foster and manage differentiated systems of relationships through network design.
  - Adler takes up the software design industry. In the past software developers were united by a 'guild' form of professional community—a form that united them in a common identity as independent 'hackers.' The recent drive to process management has destroyed that pattern: it has meant greater specialization, formalization, and control. This control initially took a coercive form, but more recently it has taken a more participative and enabling form. Professional community has also taken a more interdependent, collaborative form. The result is a highly efficient and innovative combination of bureaucracy and community with new internal contradictions.
  - Maccoby considers the health care industry, which is under enormous pressure from the rapid development of medical knowledge and technology, but which has not moved nearly as far as the software industry. The craftlike tradition of independent practice is more deeply embedded and has created walls between special-

ties and levels that are hard to overcome. The more recent bureaucratic control systems have brought some cost efficiencies but at the cost of patient focus. The Mayo Clinic provides some indication of how collaboration might work to combine knowledge in the service of patient outcomes; but it has not yet proved its ability to work on large scales.

- Annabel Quan-Haase and Barry Wellman analyze the use of computer-mediated communication in a small software company. They conclude that the company is in effect a hybrid: both hierarchy and collaboration (networking) are extremely important features of daily operations, and they form complex combinations. Computer-mediated communication adds a capability for wider ranges of problem solving across departments with differing cultures; but it also helps strengthen more localized and personal relations.
- Saul Rubinstein takes up the issue of employee voice in collaborative companies by examining a set of attempts at labor–management cooperation in team-based work organizations. He finds that in some instances unions can add value to companies by increasing the degree of collaboration—in effect creating an environment where management lets go enough to get the full advantages of interactivity. However, these cases also require deep changes in the internal functioning of unions, which pose significant challenges. In the end most companies have been content with part-way solutions rather than full institutional collaboration.

- A pair of chapters looks at systems that cross firm and industry boundaries.
  - Lynda Applegate compares three sets of trans-firm relations: in the financial services, health care, and automotive industries. This level presents particular problems of governance: the more successful cases have evolved innovative inter-firm organizational solutions and ownership structures that reinforce a sense of common membership rather than locking in status hierarchies. The cases show not only the benefits, but also the difficulties and vulnerabilities of such inter-firm arrangements as they struggle to extend the limits of traditional systems.
  - John Paul MacDuffie and Sue Helper show that auto supplier relations are being driven inexorably towards greater collaboration, but finds that this move is being shaped into two patterns based

on prior history: 'collaboration without trust' with the USA's 'Big Three' auto companies, and 'collaboration with trust' with Japanese manufacturers. Close examination of case material suggests the first of these may not be sustainable, and that trust adds clear value to the partners and to production outcomes.

- The final section focuses on the issues involved in the deliberate creation of collaborative relationships.
  - Maccoby and Heckscher note the challenges posed for leadership by this shift—especially the move from appealing to motives from father transference, which is the archetypal relationship embodied in paternalist bureaucracies, to drawing on horizontal sibling transferences.
  - Heckscher and Nathaniel Foote take up a set of interventions that aim to create within-firm dialogues around shared purpose, strategy, and the barriers to execution. These often reveal the power of the iterative learning model sketched by Sabel, but they also frequently run into obstacles from leaders and hierarchical mechanisms that are not easily overcome. One key to success is the development of a team of mid-level managers representing the core value of contribution rather than deference, and committed to reporting the unvarnished truth.
  - Mark Bonchek and Robert Howard discuss initiatives to bring together stakeholders of firms in leader-to-leader networks. The development of forums between companies and customers must overcome tensions between 'learning' and 'selling,' between 'intimacy' and 'reach,' and between hierarchy and collaboration; but it is capable of modifying market-based choices in a way that increases value for all parties.

Though the contributors came to considerable agreement, there remain differences in emphasis and areas of uncertainty which might be worth outlining at the outset. First, and probably most intensively discussed, is the independent importance of values as distinct from the structures of process management. Some argued that a well-designed process eventually creates higher levels of trust and community through the repeated experience of good results; others insisted on the independent importance of new values—the ethic of contribution—and the need to deliberately foster them. As we worked through individual cases there was no irrefutable resolution. There was, however, general agreement that change efforts need to start with a process focus, if only because this brings people together around a common, external task, and that shared values change significantly in the move to collaboration. The remaining question is how much *independent* attention should be paid to values.

A similar debate arose around the role of identity and character. There was general agreement that there was a significant shift away from the 'bureaucratic personality' outlined by Merton in the 1940s; but there was a range of views about how much this shift was grounded in childhood experiences and how much it could be brought about through adult resocialization via the experience of collaborative work organization. Working through the various case studies, it appeared that individuals differed on this dimension: while many individuals seem capable of shifting from one mode to the other, there are always some who seem characterologically incapable of functioning in a collaborative system.

A third dimension of debate had to do with the continuing role of bureaucracy within collaborative organizations. Once again, the debate shaped up as a matter of nuance rather than of fundamental disagreement. Some argued that collaborative community is emerging in the corporate world in a form that is intertwined with core features of bureaucracy such as formalization, standardization, specialization, and hierarchy. Others argued that while these structural features are indeed essential to the effective functioning of collaborative community, they assume such a radically different meaning in the new context that it would be misleading to call them bureaucratic.

Finally, there was also a degree of difference in the overall assessment of the prospects for collaboration. Certainly strong forces are arrayed against it: the neoliberal swing towards unfettered markets, the widespread fundamentalist retreats towards traditional values, the increased exercise of naked power by corporations in their relations to employees and suppliers. It was clear that the movement we analyze towards collaboration is a contested one, and that many companies have gone down the 'low road' of tighter control. Nevertheless, all the group members agreed that the long-term competitive and human advantages afforded by collaborative community ensured that it would continue to attract proponents.

It should also be added that the publication of this volume does not, in our eyes, mean the end of our work. Many ideas were proposed for further chapters, many concepts have yet to be properly nailed down, and many issues need to be further explored. For example, we touched on the problem of collaborative *accountability* frequently, but did not go further. We have not paid sufficient attention to possible distortions and inequities *within* the collaborative model, such as the tendency of reputations to become highly centralized and exclusive. We surfaced, in the last meeting, a sense that the formalized process management which is crucial to our analysis must still be grounded, even in the most advanced cases, in a network of personal trust and friendship; but we have not worked through the connections between personal networks and more formal process relations. We began to sketch a typology of different versions of collaborative forms—but that will have to wait for future work.

Our thinking developed considerably through these discussions and debates. We hope this publication is a way of launching the continuing discussion in a wider field.

Part I

Framing Concepts

1

Towards Collaborative Community

Paul S. Adler and Charles Heckscher

Introduction

In the last thirty years the celebration of the unfettered market has gained considerable momentum. There has been a sustained attack on collective institutions—on government, large bureaucracies of all kinds, worker associations, and communal norms of equity and solidarity—and a growing chorus celebrating competition and its association with individual freedom and choice. This chapter, and indeed the whole volume that it introduces, voices a counterpoint to that chorus.

From a long-term perspective, the recent ascendance of the market is but the latest phase in a long-running tug-of-war of competing ideologies. At least since Adam Smith praise for the dynamism of markets has oscillated with anxiety about the decline of community. And indeed, the communal side continues to be heard today: the appeal of communitarianism and the power of fundamentalist and values-based movements are testimony to the continuing widespread concern that alienation has been the dark corollary of market individualism.

This debate has focused not only on society as a whole, but also on the corporate arena, which is the center of our analysis here. Recent years have witnessed a clear challenge to corporate community and its commitments to lifetime employment. Widespread attempts to shake up bureaucratic hierarchies have been buttressed by the ideology of individualistic 'free agency.' Concurrently, on the other side of the debate, we have also heard much about the need for more collaboration and teamwork, and about the dangers of losing employees' loyalty and commitment.

A basic tension marks these developments: on the one hand, a desire for progress, choice, and dynamic change; on the other, a desire for community and stability of values. We argue that it is the inability to conceptualize 'post-modern' types of community that has led many observers into a nostalgia—sometimes enthusiastic, sometimes uncomfortable—for vanishing forms of social relationships.

The academic literature has struggled to deal effectively with these tensions. Analyses based on economics have been hamstrung by an a priori commitment to self-interest as the only salient motive of human action and exchange as the only bond. Some economists have sought to incorporate power and authority, yielding a literature on markets versus hierarchies; but efforts to conceptualize trust and solidarity bonds have been rare and clumsy. Sociologists, meanwhile, have paid far more attention to the strains on community—indeed, this trope might be considered constitutive of sociology as a field—but without achieving anything close to consensus.

Broadly speaking, sociological views have been divided into three camps. A first camp develops a pessimistic critique of capitalist growth and of modernization more generally as leading to the progressive erosion of community—a 'tragic' vision we can trace back to Weber and Tönnies, and extending forward to Putnam, Sennet, and others. A second camp, drawing from conservative theorists like Tocqueville, seeks hope in a revival of pre-modern community through support for the remnants that have survived the onslaught of the market—traditional forms such as family, friendship networks, church groups. Both these camps encounter sharp criticism and diffuse discomfort, in particular because they assume—to mourn or to promote—a form of community that stifles individual autonomy and development.[1]

A third camp, however, has explored the possibility that a new and possibly higher form of community might emerge, offering a framework for trust in dynamic and diverse relationships, and reconciling greater degrees of both solidarity and autonomy. These ideas have for the most part remained philosophical and abstract.[2] A few have attempted to find empirical grounding for the new form of community in relatively peripheral social forms such as science and (to a lesser extent) the professions.

The present essay lies within this third camp. We argue that capitalist development does indeed corrode traditional forms of community, but also that the demand for complex, knowledge-based and solutions-oriented production in the modern capitalist economy has stimulated significant progress towards a new form of community. Rather than focusing on institutions like science and the professions, we direct attention to the very center of capitalist society—the structure of large corporations and the nature of inter-firm relations. We argue that in the last few decades, a form of community—we call it *collaborative community*—has emerged that points the way beyond the classic antinomy of individual vs. collective, of tradition vs. freedom, of *Gemeinschaft* vs. *Gesellschaft*, and begins to embody the intuition behind Durkheim's notion of 'organic solidarity.'

Such a diagnosis may appear perverse, given the rise of market-oriented neoliberalism and the associated phenomena of outsourcing and employment insecurity. We do not deny the importance of these countertendencies; but we argue that capitalism and its concomitant pressures for competitive advantage and profit *simultaneously* stimulate progress toward collaborative community *and* retard and distort this progress. The result, we suggest, is a zigzag path, jerky and halting, but pointing nevertheless over the longer term towards the emergence of the new form of community as an increasingly central principle of social organization. This is not an ineluctable trend, however: it has resulted from myriad human choices and social struggles that have favored social advance over narrow interests of elite groups.

Community: beyond *Gemeinschaft* and *Gesellschaft*

The classical formulation and its limits

Community is essential to the human condition. Fundamentally, people need to be able to rely on others. *Trust* is a willingness to act on the basis of such reliance. *Community* is the set of institutions that give a basis for this confidence, by establishing and enforcing mutual expectations—so that when I do something I have some idea of how you are likely to react, and how it will all come out.

A 'thick' kind of trust, in which members have a high degree of confidence in their expectations of others' behaviors, is found in very structured and stable communities with powerful mechanisms of socialization. In the sociological tradition such community has been known since Tönnies's seminal writings as *Gemeinschaft*. 'Thin' trust relies on relatively few rules and only generic assumptions about others—mostly that others will act rationally in their own self-interest; this is the basis of trust in what Tönnies called *Gesellschaft*—often translated as business but also denoting association.

Sociologists have long postulated that *Gesellschaft* is too weak to sustain real human relations and moral order. Many writers have argued that capitalism has undermined the *Gemeinschaft* conditions for true community, provoking fear that such a shift will destroy the order that is the basis of cultural meaning, personal integrity, and social peace. In this view, the dominance of the market and the emergence of an order based entirely on rational self-interest produces anomie (Durkheim 1893/1984), alienation (Marx 1844/1975), lack of civic involvement (Putnam 2000), personal instability (Fromm 1973), corrosion of character (Sennett 1998), moral disorientation, and a host of other evils:

> Things fall apart, the center cannot hold
> Mere anarchy is loosed upon the world ...[3]

Marx was among the early writers to argue that capitalism systematically destroys the affective links of pre-capitalist communities, leaving only relations of naked self-interest. At the end of the nineteenth century Max Weber expressed the fear that the 'iron cage' of rationality would imprison mankind by its instrumental efficiency, driving out all communal forms of organization. Fifty years later David Riesman's *Lonely Crowd* touched a nerve among many feeling the anomie of our cities and enterprises. The economist Joseph Schumpeter formulated a similarly gloomy assessment: capitalism, he argued, both lives off and destroys the remnants of community derived from pre-capitalist societies, and therefore inevitably undermines the conditions for its own survival.[4]

The second, more traditionalist, camp in sociology has sought to moderate this critique by pointing to the survival of traditional *Gemeinschaft* ties at the interstices of modern *Gesellschaft*. Family, local community, voluntary associations, and churches still bring people together. However, the evidence is hard to ignore that over the past century—to borrow Habermas's formulation—such 'lifeworld' spaces have been progressively 'colonized' by the 'system world' of business and government.

More fundamentally, both the pessimistic and traditionalistic discourses suffer a fatal flaw: analysis of *real* communities of the kind to which they refer often reveals communities as restrictive, oppressive to minorities, hierarchical, and resistant to change. Such community is not only inimical to the freedoms we moderns take for granted, but would also be ineffective as a matrix for dynamic, flexible, economic development. The positive side of the rise of modern society and the market economy was the *liberation* of the individual from the dead weight of custom and narrow loyalties. Marx and Engels were eloquent in the Communist Manifesto:

> In place of the old local and national seclusion and self-sufficiency, we have intercourse in every direction, universal interdependence. . . . National one-sidedness and narrow-mindedness become more and more impossible . . . The bourgeoisie . . . has rescued a considerable part of the population from the idiocy of rural life.[5]

While the rise of capitalism lent enormous momentum to it, the impetus for escape from traditional communities began in many spheres even before the consolidation of the new mode of production, and before Hobbes and Smith provided a theoretical framework for it. In commerce, the escape from *Gemeinschaft* was manifest in the legitimization of usury and the growth of entrepreneurialism in Italy and the Low Countries; in art, in the development of ideas of individual genius superseding traditional themes and motifs; in religion, in the sudden eruption of Protestant challenges, based on individual faith, to the Catholic Church's control of dogma; in politics, in the development of national identities distinct from the prior religious and limited local communities. The exhilaration of breaking free is one of the central emotional tones of history since the Renaissance.[6]

Thus modern society is caught in a contradictory self-representation—an antinomy of individualism and community, with neither side sufficient to ground relations in an increasingly interdependent and dynamic society. The thick forms of *Gemeinschaft* trust are comforting but stifling; the thin forms of *Gesellschaft* trust are liberating but alienating; and their combination is unstable, with the latter progressively corroding the former.

History, however, does not pose problems it cannot solve.[7] We submit that the resolution of this conundrum is taking shape 'below the radar' of most social analysts, in the corporate sphere. We argue that within and between firms, community has been evolving towards a new form we call *collaborative*—one that can be interpreted as a dialectical synthesis of the traditional opposites *Gemeinschaft* and *Gesellschaft*.[8]

Three organizing principles and three forms of community

Abstractly speaking, we can identify three primary principles of social organization.[9] *Hierarchy* uses authority to create and coordinate a horizontal and vertical division of labor—a bureaucracy in Weber's ideal-type form. *Market* relies on the price mechanism to coordinate competing and anonymous suppliers and buyers. *Community* relies on shared values and norms.[10] Table 1.1 summarizes the key contrasts.

Real collectivities embody variable mixes of these principles. Moreover, real collectivities may best be mapped using the principles as three orthogonal dimensions rather than as three apexes of a two-dimensional triangle:

Table 1.1. Three Principles of Social Organization

	Hierarchy	Market	Community
Coordinating mechanism	Authority	Price	Trust
Primary benefits	Control	Flexibility	Generation and sharing of knowledge
Resources produced	Organizational capital	Economic capital	Social capital
Fits tasks that are	Dependent	Independent	Interdependent

the fact that one principle is a powerful factor shaping a particular collectivity does not preclude one or both of the other principles from also being powerful factors. However neither hierarchy nor market can actually function without at least some underpinning of community. Neither can function without a stable set of expectations shared by its members—that, for example, contracts will be honored and doing one's duties will be rewarded.

The form of community differs depending on its relation to the other two principles of social organization. When the dominant principle of social organization is hierarchy, community takes the form of *Gemeinschaft*. When the dominant principle shifts to market, community mutates from *Gemeinschaft* into *Gesellschaft*. We postulate that when community itself becomes the dominant organizing principle, it will take a form quite different from either *Gemeinschaft* or *Gesellschaft*.

Aspects of this new form of community can be discerned in the organization of science and the professions. Today, we argue, this new form is also emerging in the heart of the corporate realm. To summarize the argument below, we can contrast the new form of community with the two earlier ones on three fundamental dimensions:

1. *Values*: Community is first a set of value orientations shared (more or less) by all members of a group. Everyone can assume that the others will orient to those values and can therefore predict their actions and responses. This forms the basis for trust among individuals and order in social interaction. Collaborative community is distinctive in its reliance on value-rationality—participants coordinate their activity through their commitment to common, ultimate goals. Its highest value is *interdependent contribution*, as distinct from loyalty or individual integrity.
2. *Organization*: Community is also a social structure, specifying the boundaries of reference groups, the appropriate forms of authority, and the division of labor. Collaborative community is distinctive in

social structures that support *interdependent process management* through formal and informal social structures.

3. *Identity*: Community cannot be effective as an organizing principle if it is merely an external constraint on people or a socially sanctioned set of values: it must become internalized in personalities and motivational systems. Collaborative community is distinctive especially in its reliance on interactive social character and *interdependent self-construals*: rather than orienting to a single source of morality and authority, the personality must reconcile multiple conflicting identities and construct a sense of wholeness from competing attachments and interactions.[11]

Table 1.2 summarizes the argument that we lay out in the subsequent subsections.

Table 1.2. Three Forms of Community

	Gemeinschaft community in the shadow of hierarchy	*Gesellschaft* community in the shadow of market	*Collaborative* community as the dominant principle
Values	*Trust based on*:		
	• loyalty	• integrity	• contribution
	• honor	• competence	• concern
	• duty	• conscientiousness	• honesty,
	• status deference	• integrity	• collegiality
	Legitimate authority based on:		
	• tradition or charisma	• rational-legal justifications	• value-rationality
	Values:		
	• collectivism	• consistent rational individualism	• simultaneously high collectivism and individualism
	Orientation:		
	• particularism	• universalism	• simultaneously high particularism and universalism
Organization	• mechanical division of labor coordinated by common norms	• organic division of labor coordinated by price and/or authority	• organic division of labor coordinated by conscious collaboration
	• organization through vertical dependence	• organization through horizontal independence	• enabling (horizontal and vertical) interdependence
	• tie structure is local, closed	• global, open	• 'glocalization'
Identities	• status-dependent	• independent	• interdependent
			• self-construal, interactive
			• social character

Gemeinschaft: *traditional community*

In its traditional (*Gemeinschaft*) form, community itself had a sacred quality. As Tönnies (1887) argued, *Gemeinschaft* had a hierarchical structure, in which individuals and subunits are related in clear chains of subordination to the superordinate leader whose authority derives from tradition or charisma (per Weber).[12] The core values are therefore those of loyalty and deference.

In such a social structure, horizontal relations, such as the relations of husband and wife, of doctor and patient, even of merchant and client, are defined indirectly, in terms of status obligations and their 'fit' within the larger system rather than through direct interaction or negotiation. In effect, the proper relationship between two parties can be read directly from their respective social roles. Challenges to status or violations of obligations of deference are a deeply feared threat to order. Shakespeare expressed this world view with customary power, frequently linking disruptions of the status order—violations of 'degree'—not only to social but even to cosmic chaos:

> Take but degree away, untune that string,
> And, hark, what discord follows!
> What plagues and what portents! what mutiny!
> What raging of the sea! shaking of earth!
> Commotion in the winds! frights, changes, horrors ...[13]

The bedrock of trust in the traditional order is honor, or duty—the fulfillment of a status role defined by the social order. Those who are honorable, in other words, are trustworthy. A large system of sanctions, especially the force of reputation in the community, centers on the performance of these obligations.

This form of community is necessarily closed and particularistic, and this closure is reflected in the nature of social identities. Identities under *Gemeinschaft* typically trace a sharp differentiation between insiders and outsiders. They are conformist, because conformity defines insider status. They have hierarchy built in. Friendships and romantic relationships do exist in traditional societies, but if they cross the boundaries of the status system they are seen as grave threats to order.

Clearly such a form of community leaves little room for modern markets, let alone systematic innovation. Under *Gemeinschaft* conditions, these processes must be organized informally and in the interstices of the system.

Gesellschaft *and the limits of association*

The development of individualism was an upheaval that shook apart the traditional order. It 'took degree away,' freeing people from the strictures of status and therefore destroying the basis of trust in the status order. In its place it put as the basis of trust the *integrity* of the individual; trust became based on the consistency—the rational instrumental consistency—of action. It led to the necessity of forming an independently coherent sense of the self, distinct from social roles and institutions.

One core insight in both Weber and Durkheim is that the move to individualism did not mean the elimination of the shared moral beliefs, or even a relaxation of them. It involved rather the development of a new *content* to the moral order. Both associated this change with Protestantism, which created a moral imperative for individualism. Both stressed that individualism in this sense was not a matter of the expression of an essential 'human nature,' but quite the contrary, a socially determined obligation which created heavy burdens on personality: an *obligation* to be rational, self-interested, and consistent. It is in this sense that *Gesellschaft* is not the negation of community but a form of it. The individualism in Protestantism produced enormous pressures for the rationalization of motivation and the acceptance of individual responsibility, and (as Durkheim noted) the overload could easily lead to pathologies such as suicide.

On the one hand, this value system—of which Protestantism is only one manifestation—supported and framed a market economy by freeing action from the constraints of status and by requiring a consistent moral person who can be responsible for promises and contracts.[14] On the other hand, the second insight we take from Durkheim and Weber, as well as from Marx and other critics of modernity, is that this modern value is inherently incomplete and contradictory because it disconnects values from relationships. It breaks the communal ties of traditional society by separating people from each other. It does not provide a framework for lateral relationships of colleagueship and collaboration; indeed, it radically separates individuals from each other and connects them (in the Protestant version) directly to God or (in secular versions) to their own private grounding of values. Values aside from individualism itself thus become personal and private rather than ways of connecting to others.

Gesellschaft is thus inevitably associated with subjective alienation. The communal dimension cannot be removed from human relationships without a loss of sense of self and of meaning. It is not surprising, then, that traditional community has continued to flourish in the interstices of the larger, cooler set of *Gesellschaft* associations, nor surprising that the two remain in tension. National and local communities draw people together, but they also limit the scope of markets and are essentially contradictory to the ethic of individualism.

The main solution in modern times has been to wall off community, especially the family, in a 'private' sphere, where it can provide comfort and solidarity without threatening the larger system.[15] But this way of dealing with social interaction—through the separation of public from private and the reliance on informal links for community—is adequate only when the density of interaction is low enough that people can distinguish a large realm in which their actions do not affect others, and when there is no need for intensive collaboration. As these conditions change—as the intensity of interdependence and the needs for collaborative effort increase—the separation breaks down. Then there is a need for a socially ordered form of lateral, cooperative relationships. That change has been visible both at the societal level and within the economic sphere.

The emergence of collaborative community

Neither the traditional nor modern forms of community are adequate for groups that seek high levels of adaptiveness and complex interdependence. In such situations trust is particularly *important*, because people depend a great deal on others whose skills and expertise they cannot check; autonomy and 'rugged individualism' give way to an increasingly dense web of interdependence, and there is a growing need for stable cooperative relations among highly differentiated actors. But in such situations trust is also particularly *difficult* to achieve, because it can no longer be based on tradition or on personal acquaintance and experience.[16] We believe that close scrutiny of contemporary firms reveals the emergence of a new type of community that can square this circle.

Collaborative community forms when people work together to create shared value. This increasingly characterizes societies in which the generation of knowledge, often involving many specialists, has become central to economic production. In this it is fundamentally unlike the two forms we have described above: the traditional, where values are assumed to be eternally embodied in the existing community, without the need for shared 'work' to achieve them; and the modern, where values are removed from the public realm and left to individuals, with community being merely a place where individuals can pursue their own ends by participating in a shared game. In a collaborative community, values are not individual beliefs, but the object of shared activity; they have to be discussed and understood in similar ways by everyone. The basis of trust is the degree to which members of the community believe that others have contributions to make towards this shared creation.[17] Adler's chapter invokes this idea under the label 'object': a collaborative community emerges when a collectivity engages cooperative, interdependent activity towards a common object.

The institutions of collaborative community are centered on defining the core purposes and regulating interactions so that the right people can contribute at the right time to advance the process of value-creation. In a dynamic environment purpose must be distinguished from eternal 'values,' which are timeless statements of what the group *is*. Purpose is a relatively pragmatic view of what the group is trying to achieve, given the environmental challenges, in the foreseeable future. Agreement on purpose or strategy is crucial: members of the community need to both understand it in depth and be committed to its achievement. This means that rather than being left to a small cadre of leaders, the purpose must become a matter for widespread discussion. One can see this result clearly in corporations: in the last few decades strategy has often moved from a confidential preserve of top management to a key desideratum for all employees.

When value and purpose are discussed, they may also be contested. This is possibly the most difficult aspect of the difficult move to collaboration: finding ways to debate core orientations while still working together. Whereas in the *Gesellschaft* community working together is a more or less accidental by-product of an interplay of individual interests—coordination achieved by an invisible hand of the market or by a nexus of employment contracts—in the collaborative community it involves a deliberate and deliberated commitment to shared ends. But deliberation at this level is hard to manage. Even in voluntary organizations, it can easily slide into polarization or factionalism which shuts off discussion.

Moreover, in the capitalist firm, there are deep structural challenges to collaborative community. First, the power asymmetry between managers and employees generates anxiety, deference, and resentment. Second, the external goals of the firm are deeply contradictory—to produce useful products and services ('use-value' in the parlance of classical political economy) and to create monetary profit ('exchange-value'). In capitalist firms, collective purpose is therefore contradictory in its very nature. Nevertheless, there has been a slow elaboration of mechanisms for deliberation—forums in which employees are invited to 'push back' against their superiors, and where the contradictory nature of the firms' goals is acknowledged and confronted.

Theoretical antecedents

Several writers have sought to define forms of community that somehow squared the circle of solidarity and flexibility, community and autonomy. In recent decades these themes have been central to the political debate in the United States and to academic debates among communitarians, Rawlsians, traditionalists, and other strands of social and ethical theory. Despite their differences, they have all been searching for a kind of community that would provide stability of expectations, security of relationships, safety against opportunism, without the conformism, insularity, status oppression, and other problematic characteristics of traditional communities—one that would reconcile freedom with constraint, individualism with collectivism.

The ones who have come closest to the cooperative form have been those who have focused on discourse and deliberation. The most articulate among them is probably Jürgen Habermas, who has attempted to characterize this form of legitimization in terms of the 'ideal speech situation.'[18] His argument is that it is possible, indeed necessary, to organize society as a genuine dialogue among differentiated groups.

These writers have had to fight strong pessimistic currents from both the left and the right. 'Realists' in both camps believe that ideals of participation and cooperation ignore the reality of power and conflict. Max Weber, the great theorist of power, is best known for his pessimism about the 'iron cage' of bureaucratic domination, which, he said, 'is superior to every form of mass and even of "communal" action. And where the bureaucratization of administration has been completely carried through, a form of power relation is established that is practically unshatterable.'[19] And for most of the nineteenth and twentieth centuries Weber seemed to be right: large formal organizations expanded at the expense of small organizations and informal associations.

Yet even in that period some effective institutions were based on different principles. In particular, scientific and professional communities have long been characterized by a normative commitment to values (e.g. health, scientific progress) and these commitments have enabled these relatively large collectivities to govern themselves. Their norms have been radically different from the rational individualism of modern society as a whole. They have emphasized obligations of sharing, of mutual help, of focus on collective goals and purposes. They have developed elaborate mechanisms regulating horizontal relations, including peer review and accountability, that have been based on distinctive occupational identities.

Weber noted the distinctiveness of science and the professions and suggested that they were governed by 'value rationality' (*Wertrationalität*), that is, by a shared belief in the values and purposes of a group. Value-rationality is expressed in collegial forms of decision making: it accords no legitimacy to commands as such, since each member is assumed to be equal in their exclusive orientation to the 'absolute value' to which they are all devoted.[20]

But Weber remained skeptical that value-rationality could support a robust form of organization.[21] Like many other commentators, he believed that a reliable administration requires a more solid foundation—that subordinates accept the legitimacy of orders from authorized superiors. Collegiality, he argued, is viable only within small or loosely structured groups: it is difficult to see how it can serve as a principle of organization in large and disciplined bodies.

At about the same time, Emile Durkheim was also exploring the possibility of collegial relations with his concept of 'organic solidarity.' Durkheim argued that the hugely complex division of labor wrought by capitalist development implied an 'organic' form of solidarity based on the interdependence of specialized roles. The web of interdependence in organic solidarity enabled people to build trust and to bank on the future notwithstanding the absence of the traditional values and ordered statuses of pre-capitalist societies. But Durkheim struggled to understand how such a community could keep from flying apart into the fragmented state of 'anomie.' His best answer, like Weber's, focused on occupational groupings or professions,[22] but it remained sketchily developed and problematic.[23]

Our thesis is that Weber and Durkheim were ahead of their time in these explorations—that the forms of collaboration that they turned to for models were as yet underdeveloped for the task of resolving the major problem of modern community. It is only in recent decades that community based on organic solidarity and value-rationality has become a practical economic imperative. Today, as corporations struggle to adapt to an increasingly knowledge-intensive world, they have begun to develop forms of organization that reflect these principles. Corporations have a growing practical need for a new kind of community and trust that breaks the *Gemeinschaft/Gesellschaft* antinomy, and they have made significant—though still far from complete—progress in achieving it. By observing this progress we can flesh out the abstractions that Weber and Durkheim sketched, and begin to build a more complete sense of how such an order might develop the strength and solidity to overcome the iron cage of bureaucracy.

Thus we revive the Weberian and Durkheimian analysis to help us understand how people can organize themselves and build needed levels of trust in a society that is increasingly interdependent and knowledge intensive. Value-rationality is the core value base, and organic solidarity the core organizing principle, of the emerging collaborative community.[24]

Community and the firm

Community in the shadow of hierarchy

The pre-industrial era—that is, prior to the growth of large corporations in the late nineteenth century—was marked by the rapid growth of market relationships and individual entrepreneurship. It was nevertheless already clear that to the extent that economic activity involved working together within or across firms, some form of relational connection other than markets was needed. In this period, relations within firms were often coordinated by the traditional mechanisms of craft guilds, with their long-standing systems of deference and status. Inside contracting often leveraged similarly traditional family ties. Where workers lacked craft traditions and family ties, where work was more 'proletarianized,' managers often instituted some form of paternalistic 'welfare' provisions. These modeled the firm on the pattern of the family. Between firms, relational community was typically strong because business ties were deeply embedded within traditional, spatially bound, communities.

Such forms of community, however, depended essentially on face-to-face relationships and provided little support for cooperation on a large scale. As the economy developed to a point where production and distribution could be sustained on a mass basis, these clusters of small firms were progressively supplanted by large corporations built on principles of rational bureaucracy, modern individualism, and *Gesellschaft* association. Rational bureaucracy too, however, proved insufficient. Purely bureaucratic structures, even when buttressed by a strong ethos of professionalism in workplace relations, often led to rigidity, unresponsiveness, and conflict.[25] Corporate managers thus recognized fairly early that they needed some form of trust and active, intentional collaboration—that is, some form of community.

Confronted with the inadequacy of the purely formal rationality of *Gesellschaft*, corporate managers continued to reach backward for remedies, and tried to recreate elements of *Gemeinschaft* in the form of a loyalty-based ethos. Whereas the earlier generation of 'welfare' provisions typically focused on the non-work lives of workers—sickness and death provisions, social activities, libraries, etc.—a new generation of 'human relations' proponents attempted to restore community to the workplace relations between workers and managers. Chester Barnard, whose experience as president of New Jersey Bell gave him unusually practical insight, emphasized the responsibility of the executive in creating loyalty through communication and leadership: 'The most important single contribution required of the executive, certainly the most universal qualification, is loyalty, domination by the organization personality.'[26] The Human Relations stream of research and practice pursued the deliberate development of loyalty-based corporate community.[27]

By the 1940s, leading corporations—partly under the pressure of sustained conflict and resistance to the new forms of management from workers and unions, partly under the influence of personnel management ideas inherited from both scientific management and human relations schools of thought—had developed an elaborate form of community that enabled them to avoid some of the worst excesses of purely rational bureaucracy. This mix of hierarchy and community was often embodied in the institution of the 'internal labor market.'[28] As a structural dimension of community, internal labor markets represented a commitment to filling higher-level positions by promotion from within. They thus increased the employee's economic dependence on the firm. The value counterpart to this structure was loyalty: employees owed a duty to do their best for their corporations and to obey orders, and the corporations had a reciprocal duty to offer care and lifetime security to those who did their best to fulfill these obligations. These values were preached by leaders, embodied in daily expectations, and supported by mechanisms of self-interest such as company-dependent pension plans and a strong link between pay and seniority. Many successful large companies in the decades from 1940 to 1980—whether in America, Europe, or Japan; whether in the auto industry, steel, or telecommunications—embraced the community of loyalty, creating a hybrid structure that could be described as a 'paternalist bureaucracy.'[29]

This loyalty-based community was powerful because it allowed managers to elicit commitments beyond individual interests and beyond the boundaries of rational authority. However it was not modern, and certainly not rational, but rather *traditional* in its nature, structured around similarities and vertical relations of deference.

The content of the traditional ethic of large bureaucratic firms can be summarized under a set of interrelated obligations: respecting the structure, conscientiousness in performance, and loyalty:

- Respecting the structure means observing hierarchical distinctions: don't skip levels, don't take responsibility beyond your mandate. It also has a correlative set of duties to respect others' turf, the logic being that everyone is supposed to be responsible for his or her own domain. Thus the norms include not challenging others on their own turf; always trying to figure out whose responsibility a problem is and everyone else getting out of the way; and in general an avoidance of conflict. Any type of conflict involves some breakdown in the structure and should simply be referred to the appropriate higher level for resolution.
- Conscientiousness in performance means (as Merton 1940 put it) 'devotion to one's duties, a keen sense of the limitations of one's authority and competence, and methodical performance of routine activities'—a secularized version of the Protestant notion of calling. Some typical correlatives include avoidance of risk (anything outside the routine should be referred to higher levels) and a focus on following the rules and procedures rather than concern about the results—the latter being the responsibility of the higher-ups who make the rules.
- Loyalty, as discussed above, centers on deference to authority and status order. A major correlative is conformity (fitting within the dominant value pattern). Rosabeth Kanter's classic study of IBM in its heyday used the striking phrase 'homosocial reproduction' to explain the basis of trust: that is, within this order it was important to be seen as similar to others in order to be trusted. This is precisely the basis of traditional loyalty, as discussed earlier. The Human Relations writers, such as Mayo, used the medieval community as their reference point, and observers of corporate cultures have frequently used the term 'feudal' in their descriptions,[30] primarily because of this element of deference, dependence, and loyalty.

These norms are interrelated because they all support a structure of nested hierarchy with closely defined job responsibilities, which is the core of bureaucracy. Such an organization is strong in its vertical coordination, but weak in lateral, horizontal coordination. This latter was assured mainly by the fabric of the 'informal' organization.[31] The stability of the large, bureaucratic corporation certainly allowed for the formation of these informal relations, but since these relations were private and invisible to the formal control structures, they only sometimes supported these latter structures, and could equally work at cross-purposes to them.

The bureaucratic character type, as elaborated by Merton and others, has a strongly individualist side—one that takes great pride in doing a defined job well, that seeks a sphere of autonomy and a clear objective, and wants to be held accountable as an individual for meeting that objective. Success from this viewpoint is marked by the solidification of organizational position, because that means that people leave you alone and do not challenge your competence in your sphere. This kind of character expresses respect for peers by leaving them their own sphere of autonomy, by not criticizing or 'second-guessing' them. But in practice corporate employees cannot operate as individualistic monads. They are part of a collective effort and a hierarchical social order, which means that the craftlike motivation to do a job is not sufficient. Thus alongside the strongly individualistic and craftsmanlike self there is a simultaneous sense of self as subsumed under the corporate community. It is this side that is stressed by writers like Mills, Kanter, and Jackall: all these authors have found that members of *Gemeinschaft*-inflected bureaucratic hierarchies in fact behave in an extremely conformist way, 'looking up and looking around' (in Jackall's phrase) for signals about what is acceptable, avoiding conflict and risk, accepting with few questions the moral authority of their superiors.[32]

This systematic conflict between individualist self-images and subordinated identities is very apparent in water-cooler conversations. Among their peers people will often claim to act with total integrity and fearlessness towards their bosses—'I'm the kind of person who isn't afraid to tell the truth'; but when given the opportunity to actually voice criticisms through open doors or feedback forums or other mechanisms that trumpet 'empowerment,' very few will act out their individualist dreams.

The growing need for community in industry

Given the limitations of loyalty and conscientiousness as a basis for community, some suggest that the way forward for corporate organization is simply to cast aside all vestiges of community and allow the market to assert more thorough control, perhaps complemented by rational bureaucracy.

However, the requirements of knowledge production increase rather than reduce the need for community and trust; the pure market path is even less viable than a combination of market and hierarchy.

In the industrial era the dominant companies were those that could organize scale and scope, producing in high volume reliably and efficiently, distributing to large enough markets to reduce unit costs. The organization of production in this economy required that large numbers of people perform consistently on defined tasks. Though things never became completely routinized, there was relatively little need for innovation and adaptation. When market demands moved out of sync with organizational systems, companies reorganized, changing tasks and responsibilities within a continuing bureaucratic frame. Such reorganizations happened infrequently, with long stretches of stability in between.

Since the 1970s two fundamental and interconnected developments have made this way of organizing inadequate: the growth of knowledge and the increased sophistication of consumers.

KNOWLEDGE

In the most economically advanced countries, the 'mysteries' of effective commodity production have become common knowledge; they are now merely tickets for entry rather than keys to winning in competition. In place of strategies of scale and scope, companies are looking increasingly to draw value from knowledge, in the form of product and process innovation and customer responsiveness. They draw on the abilities of a more-educated and more-skilled workforce,[33] and they cater to the needs of a sophisticated consumer base that already owns most basic commodities and increasingly seeks novelty and customization. Knowledge has moved to the center as margins have fallen in commodity production, as the educational levels of the workforce have risen, and as scientific and technical knowledge has accelerated.[34]

The large corporation combining rational bureaucracy and loyalty-based community meets its limits in organizing the production of knowledge. Bureaucracy, as has been frequently documented, is very effective at organizing routinized production, but it does very poorly at these complex interactive tasks involving responsiveness and innovation.[35] Under bureaucracy, knowledge is treated as a scarce resource and is therefore concentrated, along with the corresponding decision rights, in specialized functional units and at higher levels of the organization. However, in organizations that are competing primarily on their ability to respond and innovate, knowledge from all parts of the organization is crucial to success, and often subordinates know more than their superiors. Innovation and responsiveness cannot be rigorously preprogrammed, and the creative collaboration they require cannot be simply commanded. The vertical differentiation of bureaucracy is effective for routine tasks, facilitating downward communication of explicit knowledge and commands, but less effective when tasks are non-routine, since lower levels lack both the knowledge needed to create new knowledge and the incentives to transmit new ideas upward.

Many economists argue that, given these difficulties, bureaucracies should be replaced by markets. But this argument encounters a fundamental difficulty: a substantial body of modern economic theory has shown that the market mechanism fails to optimize the production and distribution of knowledge.[36] Knowledge is a 'public good'; that is, like radio transmission, its availability to one consumer is not diminished by its use by another. With knowledge, as with other public goods, reliance on the market/price mechanism forces a trade-off between production and distribution. On the one hand, production of new knowledge would be optimized by establishing strong intellectual property rights that create incentives to generate knowledge. On the other hand, not only are such rights difficult to enforce, but, more fundamentally, they block socially optimal distribution. Distribution of knowledge would be optimized by allowing free access because the marginal cost of supplying another consumer with the same knowledge is close to zero. Economists have established that neither markets nor hierarchies (in the form of central planning) nor any intermediate forms (such as regulated markets and market socialism) can simultaneously optimize incentives to produce knowledge and to disseminate it.[37] The same dilemma characterizes options for knowledge management within firms: neither market-based transfer pricing nor bureaucratic fiat nor any combination of the two suffices in the face of current technological and competitive challenges.

In response to the difficulty posed by the public goods characteristics of knowledge, much recent economics scholarship has argued for the acceptance of a second-best solution. In the absence of other alternatives, pure or mixed markets and hierarchies are seen as the best feasible way of organizing production.[38] This resignation is, however, not warranted. Hierarchy and market are not the only possible organizational forms, and for this purpose they are not the best ones. Community is an alternative form of coordination—one that is essential to knowledge creation.

Compared to hierarchy and market, community makes possible an enlarged scope of simultaneous knowledge generation and sharing.

Community can dramatically reduce both transaction costs—replacing contracts with handshakes—and agency risks—replacing the fear of shirking and misrepresentation with mutual confidence. Community can thus greatly mitigate the coordination difficulties created by knowledge's public good character. And insofar as knowledge takes a tacit form, community is an essential precondition for effective knowledge transfer.[39]

The key requirement for effectiveness in complex knowledge work is the combining of different kinds of expertise and information in both the generation and dissemination processes. This may involve, for instance, the knowledge of the marketer and that of the product designer, or that of the salesperson and the strategic planner, or that of the assembly-line worker and the mechanical engineer. In each of these cases and a growing number of others, the parties have understandings that could help each other in improving production, but they speak different languages and have different interests. The problem is to bring them together to find the interactions that will benefit each other and the whole.

For this markets and bureaucracies are not the answer. Markets involve an exchange of the products of knowledge: individuals get the output of specific expertise but not the ability to interact with it and improve it. Bureaucracies, similarly, structure interactions so that each person performs in a box and 'throws' the output 'over the wall' to the next; the only combination occurs by moving up the hierarchy, where the superiors are supposed to know everything their subordinates know. This system crumbles when superiors no longer can grasp the full scope of the problems on which their subordinates are working.

Knowledge work thus requires that each party offer something with no guarantee that they will get anything specific in return. They must *trust* that the other has useful competence and knowledge that will help in their joint effort; that the other can understand her own ideas well enough to engage them productively; and that the other is motivated to help her and contribute to the joint effort.

The critical role of trust in knowledge production has long been emphasized in the sociology of science. The advance of the capacity for discovery has gone hand in hand with the advance of mechanisms for the generation of trusting social relations. Here trust is grounded not in informal ties but in formalized systems of assessment and exchange: from making experiments and notes public, in the eighteenth and nineteenth centuries; to systems of peer review; to the regularization of independent replication as a key test of validity; to the use of cross-disciplinary teams; and finally to the recent growth of large-group scientific projects with at times hundreds of authors, in which no single authority can judge and manage the breadth of knowledge involved.[40]

Similarly, corporations are finding that to produce the complex forms of knowledge increasingly needed for economic growth—bringing together the expertise of multiple specialists—they need to move beyond the informal links of the paternalist community. Indeed, they have begun to reinvent many of the same mechanisms discovered by the scientific community over the past two centuries: posting the outcomes of experiments and projects in public form on intranets; developing a form of peer review through multisource feedback mechanisms; organizing in increasingly large and diverse project teams.

'Knowledge' does not refer in this context only to technical or abstract information gained in higher education. Management theorists have often argued that where cost rather than quality or innovation is the dominant concern—that is, in more routine, repetitive operations—front-line employees' knowledge and innovative capacity can safely be sacrificed. Recent research, however, has shown that this was a comforting and comfortable illusion, plausible only when competitive rivalry was muted by monopoly conditions. When more aggressive competitors appear, even routine operations must learn the discipline of continuous improvement—thus learn to mobilize all the organization's available intelligence, not only that of staff experts. Blue- and pink-collar workers also have knowledge that is critical to firm performance. The automobile production process functions better if the knowledge of the line workers is combined with that of the design engineers and quality inspectors: this is the lesson of (among others) NUMMI, which introduced Japanese methods of collaborative quality analysis and learning to General Motors through an alliance with Toyota.[41] The arena of low-end services—McDonald's and Wal-Mart—has often focused on cost control, but there is also evidence here that drawing the front-line workers into participative relations with their bosses and coworkers helps to improve service and create competitive advantage.[42] The challenge at all levels is to combine different forms of knowledge: the relatively concrete, practical experience of those in contact with customers with the technical expertise of engineers and the abstract conceptualizations of strategists and marketers.

CUSTOMER FOCUS AND SOLUTIONS STRATEGIES

A second key factor undermining traditional community, and at the same time raising the stakes for a new level and form of community, is the growing sophistication and complexity of industrial and consumer markets. This is apparent on at least two levels: users in advanced economies have moved beyond the stage of 'black box' consumption and are increasingly looking for customized products that distinguish them from the mass; and business-to-business markets have greatly expanded, and in these markets, the customer is in many cases far more demanding and powerful than an individual consumer.

As a result, many large companies have been pressed to turn outward. In the older mass-production market companies were distinguished primarily by internal capabilities—cost control and efficiency—and much less by their customer or supplier relations. On the customer side, they could generally 'push' products out the door and expect the market to absorb them. As consumers become more demanding, however, the push is less likely to work: it becomes imperative to develop ongoing and deep *understanding* of customers and to gear production around it. On the supplier side, firms are increasingly dependent on a broadening range of specialized suppliers of equipment, materials, subassemblies, and services: firms therefore need to develop a more nuanced understanding of suppliers' capabilities. Thus 'customer focus,' 'outsourcing,' and 'supply chain management' have become widespread mantras for cultural change in large companies—and the magnitude of the challenge is indicated by the difficulty of implementing this way of operating.[43]

Under the pressure of these forces, businesses in an increasing range of industries are seeking to make an even more profound change: moving away from commodity production focused on scale and scope and embarking on strategies which provide customized solutions—tailored mixes of services and products that respond to the changing needs of the customer.[44] IBM is one marquee company that has reorganized itself on this basis, shifting from a focus on selling its products to a focus on providing answers to customer problems—which may mean combining its products with those of other companies, or bringing together resources from different parts of the firm.

This move towards outsourcing and solutions requires the organizational capability to combine resources flexibly both inside and outside the company walls. Hierarchy and market mechanisms do not suffice: market mechanisms do not suffice because the holders of resources tend to compete with each other and to hoard their capabilities rather than sharing them; bureaucratic mechanisms do not suffice because coordination requires moving resource decisions up and down long ladders of authority that end distant from the actual problem. *Gemeinschaft* forms of community are increasingly inadequate too, because they make it very hard to develop trust with an ever-changing array of people outside the enterprise.

Collaborative community, as we have defined it, is powerfully stimulated by the shift to knowledge and solutions strategies.[45] One very clear manifestation is the growth of alliances, which fall in the space between markets and hierarchies: the Citibank Esolutions case which we will describe shortly created an alliance unit specifically to draw in capabilities from outside the bank that could not be found internally.[46]

The inadequacy of the community of loyalty

Although trust and community are, as we have argued, vital to the organization of knowledge work, the form they have traditionally taken in corporations of the industrial era is inadequate to the task. The first and most obvious problem is that the foundation of this kind of collaboration is the expectation of long-term employment. This expectation creates both emotional and self-interested bases for trust: the emotional base is a widely shared sense of loyalty; the self-interested base is that one's dealings with fellow employees are likely to be repeated, so good and bad acts will not be forgotten. But leading companies in the last thirty years have been unable to sustain employment security, even in cases like IBM or Delta Airlines where they tried explicitly to do so, and even in countries like Japan with a very strong tradition of and commitment to employment stability. The dynamism of the economic change has broken through attempts to hold this dike. As the expectation of long-term employment in large companies declines, people's identity and self-interest both have tended to become disconnected from their companies, undermining the traditional foundation of collaboration.

Second, collaborative relations in the loyalty-based system tend to be personal and linked to the hierarchy, rather than cutting across it. This is particularly evident in the management ranks: subordinates develop a loyalty to bosses, who bring their employees with them as they are promoted. Employees feel a solidarity with others in their functional group, tied to disdain for and rivalry with other groups. This structure of the informal organization reinforces the near-universal phenomenon of 'empire building,' and it strengthens rather than weakens the barriers between functions and divisions. Collaborative relationships across boundaries, where they emerge, are largely serendipitous rather than based on organizational needs. That is, someone in production may have a friend in marketing, which might lead to some useful exchanges of information;

but this relationship is not generated by the organization itself. It is likely to result from their having attended a training program together, or having children at the same school, or being members of the same club. The probability that the *right* connections (from the organizational perspective) will be made is low.[47]

Third, while the paternalist community distributes resources in a slightly more fluid way than that prescribed by pure rational bureaucracy, it is not yet fluid enough. The trust based on the community of loyalty allows middle managers and line workers often to barter exchanges without reference to collective goals, as a way of avoiding cumbersome bureaucratic procedures: these take the form 'I'll do this for you now (for instance, I'll lend you one of my people for a few weeks) in the expectation that you'll do something for me later.' Such bilateral trust can sometimes help organizations deal with crises and small fluctuations of demand, but it is inadequate to the task of organizing new resources reliably and rapidly around complex problems: that would require a more generalized reciprocity.

Finally, the paternalist community reinforces bureaucratic divisions in another important way: it is based heavily on the norm that each person is expert in her own domain, and no one should challenge anyone else's knowledge territory. Thus instead of promoting engaged discourse and working through disagreements, this version of community suppresses conflict and encourages 'getting along'—a conclusion also common to the various observational studies of traditional corporations cited above. In this culture 'teamwork' means not pushing others but rather avoiding fights.

The community of loyalty is particularistic. A knowledge-intensive economy needs a more universalistic orientation. It needs teamwork based on commitment to the principles of teamwork—not based on loyalty to particular others in the team. It needs 'swift trust'[48]—not blind trust based on long-standing familiarity.

THE LIMITS OF LOYALTY: AN ILLUSTRATION

Task forces are a common organizational form of knowledge work, grouping people from across functions, areas, levels, and sometimes companies, focused around solving a problem. In a nutshell, the problem of community in the current business world is this: task forces have become increasingly necessary for competitive success in an increasingly knowledge-intensive economy; but the ties of paternalist community interfere with their functioning rather than facilitating them. Members are more concerned with protecting their own 'turf' than with achieving common objectives. They are both unable and unwilling to enter into real dialogue with other parts of the organization, since a crucial norm within bureaucracies is that each part should 'respect' the expertise of others in their own areas.

Task forces have proliferated enormously in the last few decades. In automobile production, the sequential design process characteristic of bureaucracies has been shown to be vastly inferior in time and quality to 'simultaneous engineering,' in which engineers and production people form task forces. The Total Quality movement consists essentially of forming task forces crossing traditional lines to analyze processes throughout organizations. Almost every one of the movements that has swept through management in recent years, from Re-engineering to Alliance Management, has had task forces at the core, bringing together people with varied experiences and knowledge for direct dialogue outside the normal hierarchy.[49]

At the same time, it has become clear that task forces face enormous resistance from the existing organization because they challenge the basis of loyalty and community in traditional corporations: the supervisor–subordinate unit. In the paternalist structure, as sketched above, this unit formed a tight, mutually protective and interdependent, family-like bond of solidarity (though, like any family, there could often be internal battles and dysfunctions). Employees depended entirely on their supervisor for rewards and advancement as well as for the quality of their daily work life; the supervisor's prestige depended almost entirely on the performance of the subordinates. When someone goes off to work on a task force, the superior loses control, and the task force member is left in limbo in terms of future sponsorship and influence. The only way of sustaining the relationships in which so much has been invested is for the employees to view their task force service in terms of protecting the interests of their 'home' units, and to show their boss that they have protected them; but this, of course, undermines the effectiveness of the task force.

These ways in which knowledge-intensive production puts strain on the structure of paternalist bureaucracy can be seen clearly in a publicly available case, 'Mod IV,' which is typical of many other situations we have observed.[50] The case involves a product development team at Honeywell trying to make a transition from the traditional sequential development to simultaneous cross-functional decision making. The core problems involve a tug-of-war among three perspectives: marketing, which focuses on customers' buying preferences; engineering, which is concerned primarily with quality and functionality of the product; and corporate leadership, focused on improving financial performance in order to fend off the threat of takeovers. Traditionally these differences in perspective and priority had been resolved, as in most bureaucracies, through methods that involved relatively little interaction: the case uses the widely known phrase 'throwing things over the wall.' At Honeywell, marketing was king: it generally started the product development process and laid out specifications from the customer perspective; engineering then tried to design to those and in turn tossed designs to manufacturing; and higher leadership would intervene sporadically using their authority to enforce particular priorities. When on occasion engineering felt that marketing's demands were infeasible, higher authority was again called in to make a binding decision.

But this traditional process was clearly too slow and unresponsive to meet the company's competitive demands. Product development was therefore restructured as a collaborative task force that would bring different viewpoints together simultaneously. The new process fundamentally changed the familiar dynamics. As the participants put it: 'The team system does not allow people to single-mindedly defend the position of their functional area, of what's easiest, or best, or cheapest for their own functional area. It forces people to look at a bigger picture' (Margolis and Donnellon 1990: 4). This shift, however, involved a large number of difficult transformations in attitudes and relations that greatly hampered the process:

- The different groups lacked 'credibility' with each other: engineering was seen by marketing as cavalier about deadlines; marketing was seen by engineering as careless about quality; higher management feared that no one on the team understood the real importance of the project to the business.
- There was a tug-of-war around respect. Marketing's self-image was as the driver and leader of company success. This project, however, had been initiated by engineers, and marketing was being asked to play an equal role in a peer process. They naturally resisted this demotion. Meanwhile, engineering was resentful of their past subordination and convinced that marketing did not take them seriously enough.
- There were no consensual grounds for prioritization. Each player felt its own priorities—quality, customer satisfaction, etc.—were key. Traditionally marketing's priorities were always put first; but when the parties had to work them out in dialogue there was no basis for decision. As a result, as one person put it, '*All* work is high priority.' This created intolerable stress in the system.

- In general, there were no legitimate decision rules. The champion of the project was concerned that if he played his usual role of bureaucratic direction he would stifle initiative, so he tried to be hands-off and leave people a great deal of autonomy. At the same time he fretted that his concerns were not being given sufficient weight. The team members, meanwhile, seemed to be trying to read the tea leaves in interpreting slight signals from their leader, since this would give them at least something solid to hang onto; when they could not, they were unable to work out a way to actually reach decisions in the face of conflicting views about the solution.

These are, in our terms, indicators of the breakdown of the paternalist bureaucracy. Modir's problems are typical, not unusual. Despite the flowering of books trumpeting task forces as the key to success, such teams continue to face many resistances and difficulties in most companies.[51] Our interviews in a wide range of companies have shown that most employees—to this day—resist joining task forces and believe that they are ineffective; and too often even task forces that succeed we disbanded prematurely. Even the most successful cases rarely achieve what the buzzword promises, 'simultaneous' planning; the auto industry's successes have moved only partially away from the linear model, achieving overlapping problem solving but not true concurrent discussion among units.[52] It is these problems that constitute the data for our claim that without a rebuilding of communal institutions, the potential of a knowledge economy cannot be realized.

Yet we must also recognize that the glass is half full: there has been a tremendous amount of social invention facilitating the operation of task forces, from the techniques of brainstorming to the elaborate 'technology' of process management, with 'process champions' and 'process leaders' helping shepherd these new units outside the usual bureaucratic roles. While we cannot confidently cite a single lasting instance of an organization that can reliably produce effective task forces, we do see many partial or temporary or recent examples; the following section discusses one such organization, in order to characterize more specifically the form of community that could support the new knowledge economy.

The emergence of a collaborative corporate community

Our central thesis is that an increasingly knowledge-intensive, solutions-oriented economy requires collaborative community. We are not, however, Pollyannas: while the capitalist nature of our economy greatly stimulates this trend, it is also evident that market forces have had a destructive effect on many communities in the last twenty years, and that few companies have achieved anything like the sense of coordinated contribution that we describe. Firms are caught between conflicting imperatives: they must both draw people into a common, collaborative endeavor, and simultaneously deal with the fact that this endeavor risks being undermined at any time by the market imperative of profitability or by managerial autocracy. Thus while we begin with a focus on positive developments, we will return to the negative ones below.

The past three decades have witnessed an extraordinary burst of innovation in corporations centered around the notion of teamwork. The word itself has evolved in meaning with these developments of practice. Within the bureaucratic culture, as mentioned earlier, 'teamwork' largely referred to a sociable and informal willingness to help out and a general disposition to avoid conflict. In the 1970s it became focused on small, face-to-face teams working collaboratively rather than merely implementing orders from a boss. In the last decade it has further evolved, to cover complex processes spanning multiple levels, parts of the organization, and indeed firms—centered in middle management, though sometimes involving front-line workers. Such elaborated collaborative processes involve far more than market exchange, but also far more than paternalist deference, and therefore far more than the historically familiar form of community.

It is our contention that these, more advanced forms of corporate organization are tending towards a novel, collaborative form of community more suited to higher levels of interdependence, as distinct from *Gemeinschaft*-like dependence and *Gesellschaft*-like independence. We can characterize the new form under three headings: values, structure, and identity.

These three dimensions are discussed throughout the essays in this volume. Here we will draw our evidence primarily from the Esolutions group in Citibank, which was studied by Charles Heckscher in 2000–2. While we focus on this case to build at least one rich picture, other cases referred to in other chapters are consistent with these points: GHX (Chapter 9), IBM (Chapter 4), Cisco (Chapter 2), Delphi (Chapter 10), the Mayo Clinic (Chapter 6), Veridian (Chapter 12), Nestlé (Chapter 4), various software services companies (Chapter 5), and others.

The Esolutions case was one of a long series of efforts by Citibank over twenty-five years to break the old 'fiefdoms' (as they were referred to internally) of the geographic divisions and create capabilities for cross-unit coordination of experts that would bring the global strengths of the bank to bear on customer solutions. Esolutions, a unit of about 150 people within the cash management division, was established to integrate the bank's customer management and global products on the internet. The unit emerged from a unit with a different name which had been marginal and isolated; it gradually built its connections to the cash management structure; and after three years it was folded more tightly into the larger division while still retaining many of its innovative ways of operating.

The work was organized in a very fast-moving and free-wheeling way. The basic orientation was to listen to customer needs and to try to create technological platforms for meeting them as rapidly and flexibly as possible. Initiatives were not only new forms of information flow to customers; Esolutions also introduced many new products—electronic bill presentment, credit instruments, investment infrastructure—that could be facilitated through an integrated digital interface.

Many of these initiatives were generated by middle managers who pushed them as far as they could, negotiating for resources with their peers and superiors. They therefore frequently needed to create task forces on the fly, bringing in not only other members of their own unit but people from the more established product and marketing divisions. They also needed to create alliances with companies that had capabilities not available within Citibank at all. For example, it would have taken years for the company's in-house computer staff to develop software platforms for the customer interface; but a whole network of small dot-coms had already built major parts of it. Thus representatives of these outside companies had also to be drawn into relationships, and sometimes into ongoing task forces, with people from various parts of Citibank.

THE ETHIC OF INTERDEPENDENT CONTRIBUTION

In collaborative firms or parts of firms an ethic is emerging that contrasts sharply with the loyalty ethic described above. It can be summarized around two elements: contribution to the collective purpose, and contribution to the success of others. We can see it in Esolutions.

- Contribution to the group's purpose contrasts with focus on one's own job responsibilities; it particularly legitimizes going 'above and beyond' the duties of the job—not in terms of effort but in terms of trying to solve a problem regardless of the formal responsibilities involved. But it also implies working with others as part of a group effort, rather than trying to gain total control or responsibility as would be the expectation in a bureaucratic framework. An important corollary is that this value legitimizes the taking of risks, in the sense of assuming responsibilities beyond one's mandate—though not to the exclusion of the need to build teamwork and agreement. Another is it does not require or legitimize deference to higher-status positions, but to the contrary requires the surfacing of conflict and engagement of differences:

> [How do you decide whom to trust?] 'I look for someone who would be open to criticism or suggestions as opposed to someone who would get defensive, be scared by people meddling around. Some people are just content with just managing their piece of turf and don't want anyone mucking around in it. In this business a lot of the role is to find out how pieces of the business are run if you don't already know. So it's important that the people you're talking to are open, and you not be overbearing and say 'Here's how you have to do things.'

- Contribution to the success of others, an equally important part of this ethic, implies the need to understand the concrete interests and identities of others in a collaborative relationship, and to help them achieve their own goals as well as those of the group:

> Focusing on the alignment and focusing on values—I mean value-generation, not values—is the way you get trust.

  It legitimizes attention to factors other than the immediate goal or task; in general, it is more accepting than the loyalty ethic of the validity of competing claims such as family and career.

  In other words, the responsibility of the individual extends to helping maintain the strength of the set of collaborative relationships in which he functions, rather than just to fulfilling the obligations of the job. Both of these dimensions imply an obligation to openness and sharing of information, which is treated in the traditional bureaucratic ethic as a preserve of job holders.

The ethic of contribution does not entail long-term loyalty; employees of Esolutions had no expectation of lifetime employment. The focus is on existing projects and relationships, with an assumption that these will evolve and change. It is not founded on the essentially traditional notion that people can be trusted to the extent that they are locked in to the same order; it is founded instead on an assessment of personality attributes, in a modern sense, independent of any particular social order—attributes that include the ability and motivation to help group efforts.[53]

The radical nature of the concept of contribution can be seen in the problems it poses for accountability. Traditional bureaucratic accountability assumes that people are rewarded for performances for which they are clearly responsible, and for which they control the resources. When those conditions are absent, the system of material rewards is thrown into disarray. As a result, in Citi Esolutions and other units moving towards collaboration, people are often driven by the value of contribution even when the reward system does not line up with it:

Q: Does [the head of this task force] have any input into your evaluation?
A: As far as I know probably not.
Q; So why do you spend time on it?
A: Because I think it is an important function that we must fulfill in order to achieve our goal of being leading e-business provider in the world.[54]

The contrasts between this ethic of contribution, or collaborative ethic, and the traditional ethic of loyalty produce mutual scorn and tension. Loyalists see the collaborative ethic, paradoxically enough, as just a version of naked individualism, because it rejects lifelong commitment. They know that the kind of deal that is common within the loyalist community—long-term log-rolling, with a favor now repaid with favors next year—has no value for the ethic of contribution, which values only a mutual helping-out on the current shared purpose. Those who have internalized the collaborative norms, on the other hand, are equally scornful of the loyalists for avoiding risks and conflict, submitting to demands for conformity instead of pushing their distinctive competencies as part of the larger effort, seeking to build their personal empires, and generally failing to take responsibility for outcomes beyond their immediate job responsibilities:

In an alliance, when we talk about sharing value, there's no culture problem. But if you talk about [traditional companies] having an alliance you will have some culture issues: people want to do it internally, people want to build empires and get bigger responsibilities.

Thus the two types look for different signals to see whether others are trustworthy. In traditional bureaucratic organizations people look for cues that someone is a part of the particular shared culture: at IBM for many years it involved the kind of hat you wore, at UPS where you drank your coffee, and so on; clothes and manners are generally highly important indicators of who can be trusted. In those contexts people also shy away immediately from those who come across as 'abrasive' or 'impatient.' Contributors, by contrast, reject this kind of symbolism as completely irrelevant; rather, they see the tendency to be sociable, to talk about relationships rather than the task, as a sign of *un*trustworthiness, because it means that the other will probably fail to take the risks and make the commitments needed for success:

Everyone has their own signals that they look for. 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 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. People who hedge—who don't share information, who say 'I can't tell you this, or I've got to go talk to somebody'; or sometimes even more damning is when you ask for a piece of information that they should look for every day as part of their performance indicators and they've never looked at it. People who exaggerate—people who have had an elevator discussion with someone and say we're deep in negotiations with him—that kind of exaggeration is pretty easy to spot. It all comes down to what you can contribute, what is your business proposition.

I don't buy into the cultural thing—the hard part is finding the people who do what you need done. At the end of the day it's a matter of what you contribute to them, articulate what the proposition is and what you need from them, and form a one-to-one relationship around the proposition rather than any culture hocus-pocus stuff.

Thus contributors are far more open than loyalists to diversity on gender, race, and other outward presentational signs, because trust in their view of the world does not depend on 'fitting in' or being similar to others; on the contrary, difference is valuable to contribution to the group effort. People look for *distinctive* competencies, and very often look for 'new ways of thinking' to enhance the range of organization capability. Where the traditional organization culture emphasized conformity to values, the collaborative ethic emphasizes 'value-generation, not values.'

At the same time, contributors also reject with equal moral sharpness the free-agent definition of responsibility, which is essentially *Gesellschaft* individualism without a group component. The free-agent ethic values breaking out of the constraints of both community and bureaucracy, sees it as the moral responsibility and right of individuals to push as far as they can and to maximize their individual potential. What is lacking is a concomitant obligation to the success of the group or the shared task.[55]

The ethic of interdependent contribution as a set of values fits well with the demands of tasks that call for different types of knowledge and competency to be brought to bear in a fluid way. It also adds complexity to moral choices because it involves two dimensions of responsibility—'vertically' to the collectivity and 'horizontally' to the success of peers—and because these responsibilities are not nested in a simple hierarchy, but can conflict with each other. There is not one boss to please, but an entire network of collaborating partners. Thus there are very subtle elements of judgement that cannot be resolved by a rule of thumb as simple as deference to the boss: how far to take responsibility beyond one's formal scope when a customer or crisis demands it; how far to push one's particular knowledge competence when others fail to recognize it; and so on.

'Contribution,' of course, requires something to contribute *to*: that is, people must understand the value that they are creating in the same way and they have to be committed to achieving it. On both scores, collaborative community in the corporate world encounters fundamental limits: capitalist purpose is, as we indicated above, always dual, and the commitment of employees to it must by nature be ambivalent as well. Nevertheless, we observe firms creating novel mechanisms to connect people far beyond the top management circle to strategic purpose (for an example, see Chapter 12) and we observe firms defining their goals in novel ways. In most corporate settings the focus of strategy is the success of the firm defined by market performance. In collaborative settings this is not enough: some therefore use the 'balanced scorecard' to identify not only financial goals but also customer satisfaction, internal process, and employee development goals; others rely on 'values-based leadership.' In these various forms, collaborative-community-oriented corporations are seeking ways to articulate goals that bring to the fore the use-value aspects and in doing so, they often make visible the tensions between the use-value and exchange-value aspects. IBM has recently made explicit its conception that a 'great company' must motivate its employees to pursue more than market success, to make a positive contribution to social values; and it has conducted a major values initiative to draw out the social goals that employees at all levels want to contribute to. This raises a question of what happens when the market values and other social purposes conflict—a question to which we will return in the last section.

INTERDEPENDENT PROCESS MANAGEMENT

In addition to this new value orientation, the collaborative community requires a new way of organizing—ways of structuring how people relate to each other and how sanctions are applied when they deviate.[56]

Collaborative community in modern industry needs to coordinate interactions that span a wide range of competencies and knowledge bases, and that shift constantly to accommodate the evolving nature of knowledge projects. The challenges it faces cannot be met through 'teamwork' in the usual sense of small, homogeneous, and informal groups. Process management coordinates large, diverse communities and high levels of complexity. It must solve several difficult problems of organization:

1. The boundaries of solidary groups must be far less fixed than in traditional communities, far more capable of being bridged and merged.
2. It must accommodate a very high level of technical division of labor and diversity of knowledge and skills.[57]
3. It must allow for authority based not on status but on knowledge and expertise—that is, 'value-rationality'—which means that people must in many cases be accountable to peers or to those below them in the hierarchy, rather than to their formal superiors.
4. It must bring values into the realm of public discussion, so that they can become common orienting and motivating elements for all the members of the community. Thus it must find a way past the modern assumption that values are personal and private, and find ways to build shared commitment and understanding around them.

These problems require the deliberate and formal organizing of cooperation; while informal relations cannot be replaced or repressed, they are (as discussed earlier) far from sufficient in scope and flexibility. Organized informality is sufficient to coordinate relations in traditional bureaucratic environments; but it breaks down when confronted with the challenges of knowledge production and solutions orientation.

'Process management' in corporations has therefore become an increasingly elaborated and technical matter, with strong accountability and where accountability is not only hierarchical. Rather than emerging spontaneously from personal ties, relationships and trust are often built deliberately through organized discussions and explorations of motivations. These new formalisms are sometimes experienced as oppressive, and indeed the language of process management can become a cover for coercive bureaucratic control; but when it is successful, people experience the rules of process management as enabling rather than constraining, as helping to structure new relations rather than limiting them (see Chapter 5).

Interdependent process management has two aspects: processes for building a shared sense of purpose, and processes for coordinating work relations among people who are pursuing this purpose from different bases of knowledge and skill. In the corporate context, building shared purpose means actively encouraging system-wide understanding and discussion of strategy; and coordination means building systems to structure discussion along 'value chains.' On both dimensions collaborative community 'controls' hierarchy, though it does not displace it.[58]

Processes for developing shared purpose

In traditional bureaucracies, strategy was the preserve of the top team; 'operational' layers were focused on day-to-day matters and explicitly removed from the strategy-making process. At times, particularly in firms that required more frequent strategy adaptations, top levels sought the informal involvement of lower, operational levels; but their involvement was conceived as a supplement to the top-down strategy process.[59] Even twenty years ago it was rare for companies to share with their employees strategic information or goals beyond the vaguest generalities. In the past couple of decades, this has radically changed: a growing number of firms are involving lower layers in a more 'dialogic' and collaborative strategy formulation process, and by now most large companies make determined efforts to make sure employees at all levels understand the competition, customer needs, and strategic challenges.[60]

The pragmatic reason for the shift is that so many companies have been forced to make major modifications in strategy and identity, and they are not able to wait until everyone has settled into new roles before moving ahead. In traditional corporations the 'mission' was eternal and defining; in collaborative ones the generation of shared purpose becomes, as it were, an ongoing task rather than a fixed origin. It is evolving and fluid, and organized systems are needed to renew shared understanding and commitment. This has been a major force behind the development of collaborative mechanisms.

In the Citibank case this focus on strategy was continuous and widespread. There was a slogan ('Connect, transform, extend'), but far more than that: 'Our internet strategy is well documented and communicated throughout the company. Twenty years ago a strategy document would have been in only certain hands within the company and kept very close. Now it's everywhere, on all the intranets.'

A detailed 'e-business road map' was available to everyone in the organization. It was organized around the three basic strategies, continuously updated and refined. Incoming managers were regularly briefed in groups by the division head, and other senior managers met regularly with various subunits to reinforce the same messages and to hear what issues were arising in implementation. New project teams usually spent two to three days at offsite meetings talking through their relation to the business strategy, with industry leaders and key partners inside and outside the business. The road map became a kind of 'lingua franca' through which different parts of the organization could communicate: presentations at all levels and in multiple combinations were organized around these categories, and intranet documents from all the subunits used the same organization. Because of this common core, any person could go to the intranet site of another group, understand it, and navigate through it.

The generation of strategic purpose, in other words, was a highly practical and interactive matter—not chiselled in stone and handed down from on high, but a topic of continuous argumentation and application. The top team had a central role in defining the strategy, but this role involved listening and synthesizing and encouraging debate. Such an approach was essential to transforming strategy into a living purpose that linked people in daily work.

With all of this it is not surprising that everyone we interviewed could talk about strategic issues with detail, passion, and clarity—not using rote words, but making creative connections to daily problems and issues. They were also quite capable of disagreeing with aspects of the strategy: several spoke of intense arguments they had had in one or another forum with top management around the nature of the business. Finally, they were capable of adjusting quickly with the market: 'We move fast when we need to. ... We opened the new year with a new strategy, and now it's on everyone's mind and in everyone's mind; everyone's talking about "solutions" and not talking about "internet" so much.'

Esolutions is an unusually advanced example of collaborative community, but far from isolated. In this book, the discussion of the Strategic Fitness Process in Chapter 12 revolves around the initiation of intensive conversations about strategic direction in companies like Hewlett-Packard and Merck; this becomes the trigger for fundamental transformation in relations and values. Other widely publicized instances include Ford under Nasser, GE under Welch, and IBM under Gerstner and Palmisano.[61]

At the same time we should not overstate the case: though this type of process for building agreement around a unifying purpose has moved a long way in the last few decades, it has not often—even in Esolutions reached the ideal-type model of a collaborative community. With rare exceptions, it remains limited in scope.

We can distinguish two basic types of process around purpose. The first, which has been quite widely developed in many large corporations, is the development of widespread understanding of the strategy, with discussion aimed mainly at clarifying and building commitment to it. This involves elaborated processes of communication, training, leadership reinforcement, and integration with appraisals and other organizational systems. The Citibank case exemplifies this level.

The second involves closing the loop: inviting diverse people throughout the organization to reflect on the strategic direction and, by highlighting issues from their perspective, to contribute to its reformulation. Here the record is much more limited. At Citibank Esolutions, for instance, interviewees sometimes had well-thought-out concerns about the strategy—as one would expect in an environment where there was so much discussion of it. One view was that the e-business model required a crucial shift from the traditional focus on large customers:

> [We] are playing in a new environment: you have to very rapidly respond, handle transitions, and deal with small customers. ... Without solving this fundamental problem there'll be no e-business. It's a very deep problem—it is fundamentally important to the identity of the bank.

This kind of objection was voiced with a sense of frustration. If it were an operational problem, people would know the process for raising it, having it analyzed, and making improvements; but for a fundamental matter of strategic orientation the process was not well developed, and there was a sense of mystery about how it would be resolved.

This is a rather widespread experience: very few top management teams have been willing to loosen their authority over strategic direction so far as to suggest it might really be changed by discussion. Some have tried to organize forums in which members of the organization can genuinely 'push back,' but these rarely go beyond the level of sporadic and unsystematic conversations.

There are a few partial exceptions. One is detailed later in this volume: the 'Strategic Fitness Process' described in Chapter 12 can lead to organized debate on core strategic issues, and sometimes even pushes top management in directions they did not expect. At Veridian, for example, the mid-level team challenged management to move to a consistent 'high-end' strategy rather than playing it safe by continuing to develop small projects that could be done within existing subunits. Another instance which should be mentioned is a recent effort by IBM in redefining its core values: CEO Sam Palmisano broke with the previous practice of sending down values from top management; he staged a 'values jam' in which all employees were invited to debate, with a systematic synthesis of the discussions as a major input to the final product.

Charles Sabel, later in this volume (Chapter 2), also points to prototypes of a process of 'disentrenching search' that go to the next step: not only providing an opening for real debate, but systematically encouraging the continual questioning of strategic goals—'applying the core principle of iterated co-design to the choice of strategy or goals itself.' Companies such as Cisco and Illinois Tool Works, and (remarkably) certain regulatory agencies such as the US Securities and Exchange Commission, have developed processes which force members regularly to justify their strategic choices against possible alternatives.

Such efforts have begun to develop a set of technologies and techniques—how to organize discussion, how to handle major disagreements, how to synthesize a large number of inputs—that at least point the way towards a reliable process of value debate. How far they can go against the common resistance of leaders is an unresolved question. On the one hand these processes seem to result in a combination of flexibility and robustness that is hard to beat over time in the marketplace. On the other, the process of participative value discussion may push the limits of what is feasible within the constraints of a capitalist economy. We will return to these longer-term issues in the final section.

Processes for coordinating work (*value chains*)

The shared purpose is meaningless without organized ways for people with different skills and competencies to contribute to it and to interact with each other. Traditional bureaucracies coordinated sequences of actions through pre-established standards and plans; formally, each part focused on its job and 'threw it over the wall' to the next. Inevitable problems were smoothed to a greater or lesser degree 'on the fly' through informal mechanisms of mutual adjustment.[62] These informal systems, however, are limited, functioning reliably only on a local scale. With growing knowledge intensity and solutions orientation, with the escalating intensity and scale of interdependence, companies have therefore sought to organize these lateral connections through formal analysis and coordination of the steps in the movement from raw material to final output—what has come to be called the 'value chain.'

This coordination has been based on a rapidly evolving set of systems and techniques for organizing collaborative discussions—that is to say, making it possible for people to exchange views and knowledge and to reach agreements on action without relying on a hierarchical superior. At the first level, such techniques of process management organize the functioning within small groups. Innovations have included techniques for consensual prioritization of goals and purposes of the group; procedures to encourage listening and understanding the diversity of views and knowledge (brainstorming being one key technique for this purpose), including criteria for bringing in new players as the core issues develop; methods of interactive research to build shared understanding of the emerging options; and decision rules for building agreement on courses of action.

The next level, which has evolved more recently, involves structuring interdependencies beyond the team, with other parts of the organization and environment—typically using the metaphor of a 'chain' of value moving towards the ultimate purpose or output of the organization. In the case of the Citibank Alliance group the value chain was sketched in the way shown in Fig. 1.1.

The next step is to elaborate the value chain in terms of the interdependencies to all the parts of the organization. The Citibank alliance group had a checklist of all the authorities and experts that are needed in shepherding the formation of a new relationship—lawyers, accountants, and so on. This was then 'mapped' into a sequence of connections and links needed to move the process forward (see Fig. 1.2).

To 'move fast' enough, key processes are continuously redefined and actively managed. Various teams and individuals have developed elaborate process maps for their own work, often looking to others for help and advice on the key steps. The alliance group's influence, as its leader points out, is based in part on being 'smart about process' in its particular area; those we interviewed outside the group say they go to the alliance team to

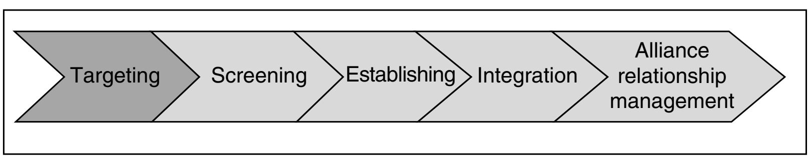

Fig. 1.1 Citibank Esolutions process map: key subprocesses

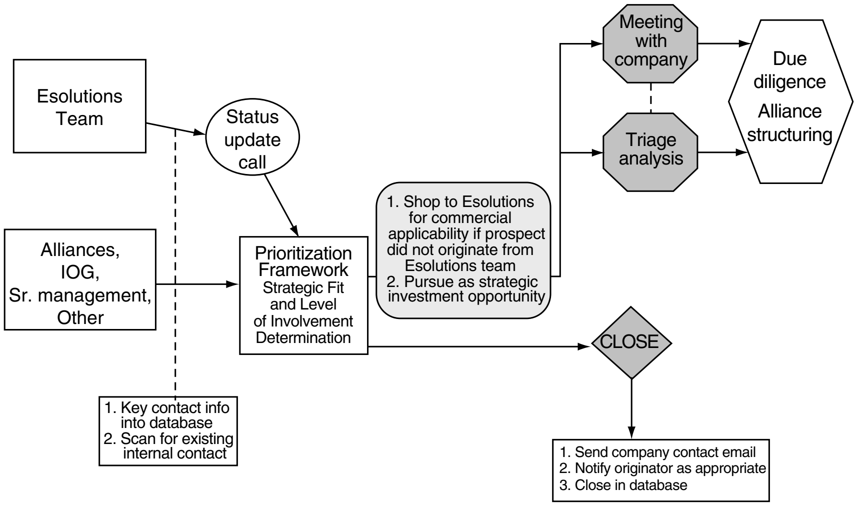

Fig. 1.2 Citibank Esolutions detailed process map for alliance screening

make sure they do not miss important steps in working out agreements with partners. In this approach process is a resource to be used, shared, and developed on an as-needed basis:

> We document it on paper; when we make a change on it it gets communicated to everybody; everybody knows about it, we've had team meetings to discuss it; everyone understands their role. We did that twice—originally it was just me and a couple of other people; then when we split responsibilities from delivery and execution we had to redo the exercise.

A key quality of an interdependent process map is its horizontality: that is, it cuts across the divisions of the formal organization. Whereas the principle of hierarchy as reflected in the traditional bureaucracy resolves unforeseen issues in interdepartmental coordination by referring them upwards for decision making by hierarchical superiors, interdependent process management defines ways in which the peers in their respective departments can collaborate directly to resolve these issues. An investment banker may deal with a marketer in this process without necessarily going through their common boss, which would be a violation of a central principle of bureaucracy. Indeed, because the standard of contribution applies to everyone, even relations that cross vertical levels in the hierarchy have a spirit of peer dialogue within these processes: everyone has the right to speak at whatever level they can contribute, regardless of formal position.

The hierarchy does not disappear, of course, remaining central particularly in the allocation of resources. In order to ensure that processes remain aligned with overall missions, organizations typically define a set of roles that link the process structure with the formal hierarchy: Table 1.3 is an excerpt from one used at AT&T.

The principles underlying these interdependent processes can be derived from their essential purpose: they aim to respond to outside demands or to develop innovative ideas by combining specialized knowledge into larger patterns. In the terms just sketched, they are norms that facilitate contribution—in other words, that help to ensure that all can contribute to their maximum capacity. These processes therefore cannot rely on authority, which does not often enough correspond with the value of knowledge or the capacity to contribute to solutions; they must free up people to speak openly and to contribute fully. Overlaying the structure of authority, they seek to create conditions for the effective functioning of influence, which is based on the capacity to contribute to the collective effort.[63]

The monitoring of performance cannot be done only through the hierarchical superior, as in traditional bureaucracies, because in collaborative orders the boss does not have close enough knowledge of how his subordinates are performing in teams and task forces of which he is not a part. Thus peer assessment becomes increasingly central—not just peers in the abstract, but those with whom the person has worked and who are in a

Table 1.3. Process-Centric Roles and Responsibilities

Process champion	Ensures process efforts are linked with overall business strategies and goals and advocates process breakthrough initiatives for one or more of the thirteen QMS (Quality Management System) processes
Process owner	Provides process vision, commits to customers' primary requirements, and is ultimately accountable for one or more of the QMS processes
Process leader	Charts PMT (process management team) activity, manages funding process, and interfaces with customers and suppliers
PMT leader	Leads effort to develop and implement initiatives to improve process capability and achieve process results
PMT member	Analyzes and recommends improvements to the process
Support manager	Manages the executing of current process and implements process improvements to achieve process results
Process associate	Executes current process and implements process improvements to achieve process results

Source: AT&T Total Quality Management materials, 1995.

direct position to judge how well he has contributed and managed commitments. 'Three hundred and sixty-degree' appraisal processes are therefore spreading rapidly. They encounter the usual obstacles: those with a bureaucratic ethic resist such spreading of information or distort it with subterranean politics. Nevertheless, there is growing evidence of its effectiveness in high-flexibility environments.[64]

A central issue is that performance goals are no longer neatly ordered through the hierarchical structure, but may often conflict. In a bureaucracy it is always clear, or should be, who is 'the boss' for any given situation; in a collaborative order people may be working on multiple tasks and initiatives with multiple accountabilities, and they frequently find themselves in situations where they are pulled in several directions at once. The ability to manage these tensions is one of the key capabilities required of individuals.

In recent years interactive process management has become an increasingly elaborated and technical matter (for further elaboration, see Chapters 2 and 5). This shift to flexible teamwork and collaboration does not mean the abandonment of bureaucratic hierarchy, but rather its combination with community:

> [Do people feel frustrated by the growth of controls?] There's no frustration—it makes sense, it's not bureaucratic and controlling, it's normal good business . . . It does not mean now that the people who do have a lot of good ideas get stepped on. The only people who are uncomfortable are those who don't understand the business well enough to spot new opportunities. (Citibank)

A final level in process management is the ability to gather experiences into systematic learning. There has been much recent writing on the concept of a 'learning organization,' and considerable elaboration of mechanisms of review. Adler's chapter describes formalized process development in software coding. Charles Sabel, later in this volume, cites examples such as NUMMI and Cisco, which establish clear benchmarks and regularly revisit the success of the strategy in relation to those benchmarks, bringing together the experience of all the relevant actors. In some settings, particularly manufacturing operations where production goals are clear, these techniques have been developed to a high level of detail and reliability.

There has been less practical progress in more complicated areas and higher-level processes, where goals are fluid and multidimensional. A number of companies, including GE, Coca-Cola, Cigna, Hewlett-Packard, Monsanto, and Young & Rubican, have established a new position of 'chief learning officer' who is supposed to coordinate the flow of knowledge so as to draw out the key learnings for the organization. Our anecdotal evidence suggests that this has so far rarely developed beyond the level of ad hoc interventions to the level of systematic and effective organizational reviews.

Linking purpose and process: understanding and commitment

In order for diverse parts of the knowledge-intensive, solutions-oriented organization to work together they must understand each other.[65] The Mod IV case above illustrates the lack of understanding between functions like marketing and engineering in traditional bureaucracies—and the resulting difficulty of collaboration. In order to work effectively together the two functions must each believe the other has a contribution to make to their shared project: an engineer must understand why a simple focus on quality may be limited and why marketers' analyses of customer segments may help in achieving their shared goals.

Traditional cultures, including the corporate culture of loyalty, block such understanding: they are marked by jokes and rituals that express each group's sense of itself and denigrate outsiders as crazy or weird or bad. Collaborative relations have to overcome such stereotypes. But there is always resistance to such understanding because within traditional communities understanding is the same as commitment: understanding others in effect means one has to agree with them and to become one with them. A key aspect of collaborative community is that one can understand without committing—that one can take the perspective of others and gain a sense of their motivation without bonding to them and 'joining' them in a moral unity.

Interdependent process management thus involves deliberate mechanisms of understanding, and, distinct from those, mechanisms of commitment. A first step in process-based trust is to help participants to grasp the logic and sympathize with the feelings of other actors by putting them 'in their shoes.' This may involve listening exercises, informal retreats, and shared educational experiences[66]—all techniques which have spread widely in the last few decades.

The problem of commitment has more recently moved to the foreground. In a collaborative community commitments and their enforcement are neither part of the informal culture nor automatically linked to the hierarchy: they must be deliberately agreed to. Thus an important element of process management is the articulation of what people have agreed to do, and the specification of ways to make sure they do it. At a larger scale companies are still wrestling with the commitment problem, as illustrated by Citibank's experience. They developed a complex computer-based system called COMPASS which was intended to allow people from different parts of the organization to come together around strategic priorities and to record commitments in such a way that they could be monitored. There is considerable resistance to engaging in these recorded agreements, however, much of which derives from lack of trust between divisions: people still anchored in the bureaucratic culture are resistant to putting so much information into the public domain accessible to people outside their local units. IBM's elaborate 'commitment management system' has faced similar resistance. In both instances, however, there is a general sense of the need for some such process tool to enable people to trust the work of others in cross-unit initiatives, and in both cases development is continuing.

SOCIAL CHARACTER: THE INTERDEPENDENT SOCIAL SELF

Community requires the internalization of motives in a stable self, because only if one can grasp others' motivational patterns can one have confidence in how they will act in the future. Thus character is always central in the generation of trust. Social character is the core aspects of character produced within social groups, through common socialization mechanisms, that enable people to count on the fact that others will react predictably.[67]

The shift to modernity created new requirements for personality: a high level of independence and personal consistency. Enormous social changes were needed to establish this kind of psychology as a dominant type. E. P. Thompson showed the work that had to be done in the eighteenth century to instill 'modern' orientations of punctuality and responsibility in recalcitrant peasants, without which the emerging factory regime could not have succeeded.[68] The current emergence of a new ethic is today creating new strains, because it demands the ability to interact in multiple communities and to adapt to competing demands of interdependence.

Social character involves two major aspects of personality. Durkheim and Freud, among others, focused on the superego—the internalization of social values in individual motivations, so that people want to realize social values and feel guilty if they don't. This anchoring of values in personal motivations is essential to the stability of social orders: we can trust others in large part because they have more than a calculating relation to shared values. The second aspect, which is the focus of ego-psychology, involves the ways in which social identities are integrated into a coherent sense of 'self.' Someone with a strong ego can maintain consistency and stability in multiple groups and can deal with the tension and uncertainty of competing demands. Failure to act appropriately in a group leads to emotions not of guilt but of loss of self-esteem and embarrassment.

In a traditional community, proper behavior is a direct function of status position. The effect of *Gesellschaft*-oriented modernity is to liberate the person from the social order: 'in the formal psychological sense of the term,' says Weber, 'it tried to make [man] into a personality.'[69] It did this in the first instance by insisting on a direct connection between the individual and God, so that right behavior was defined and motivated by the individual's relation to a personal deity. Eventually, as Weber showed, it evolved into an expectation of instrumentally rational discipline: people could differ in their wants but they could relate to each other based on this common expectation of instrumental rationality.

The collaborative community demands more: it demands not only that a person be an individual, but that she draw on that individuality to make distinct contributions in multiple social projects and settings. It is not enough to be unique; uniqueness has value only in terms of its relations. Thus it requires a personality that has internalized an ethic of contribution and that is able to relate that to multiple identities in various groups.

This is a difficult balancing act, as can be seen by the common laments in modern literature and social science about anomie, depression, and loss of self-respect. A classic failure of this kind of personality is a loss of internal coherence—the kind of glad-handing, sociable, but empty and amoral type popularized in *The Music Man* or *Death of a Salesman*. These types have neither a superego sense of what they think is valuable, nor a sense of integration among their social relations: they can take any identity and behave without guilt or embarrassment in any way that the immediate situation demands. The line is thin, as Arthur Miller illustrated, between such seemingly irrepressible sociability and the disintegration of the person—with suicide as the ultimate marker.[70]

Our understanding of these linkages between social structure and personality is informed by the pragmatists'—Mead, Dewey, Cooley, et al.—discussion of the 'social self.'[71] On the pragmatist view, the self is fundamentally—constitutively—social, shaped by the individual's set of social interactions, and the inner sense of self-identity is forged in this interaction. Mead defined three basic types of social self which correspond closely to the three types of community we have sketched. In traditional societies, the social self was generated by uniting a social group through hostility to some outside group, and by subsuming individuals under preordained social statuses. In modern society, the social self derives primarily from a competitive battle with people within the social group. And he suggested, as early as 1918, the need for a third type of social self in advanced societies, one in which the assertion of self is in effect bounded and turned from aggressiveness towards the kind of collaborative social construction of the kind we have discussed.

Mead did not name these types; we can label them in a manner consistent with the terminology we have been using: *dependent*, *independent*, and *interdependent* social selves. The first is defined by social status and driven primarily by a sense of honor and shame; the second asserts autonomy and uniqueness and is driven primarily by feelings of guilt.[72] As for the third—what kind of self is needed to function effectively in a collaborative social order? Mead sketched it abstractly:

> The test of success of this self lies in the change and construction of the social conditions which make the self possible, not in the conquest and elimination of other selves. His emotions are not those of mass consciousness dependent upon suppressed individualities, but arise out of the cumulative interest of varied undertakings converging upon a common problem of social reconstruction. (1918: 602)

To put it another way, this kind of self presents itself not in terms of its social status, nor as an independent and abstract 'individual'; people present themselves as interdependent with others, and are motivated to maintain and develop those relations.

What this means in a setting like the corporation is that people feel emotionally connected to the shared purpose; pride and self-valuation result from contributing to that purpose. This can be distinguished on one side from loyalists' attachment to the organization as such, and their pride in 'being part of' a powerful firm; and on the other from the individualist protestations of free agents who claim no emotional connection to the group and take pride only in their own accomplishments and rewards. In the case of Citibank Esolutions, which we use here as an (imperfect) example of collaborative community, we find people regularly saying things like: 'It's not about me succeeding or failing, it's about the multiple teams doing that' and 'In order to make the kind of thing we're working on happen, you can't do it by yourself; you have to work and play well with others or you won't get anything done.'

The interviewees in Citibank Esolutions frequently distinguished themselves sharply on several dimensions from what they called 'bureaucratic' types. One was in their willingness to engage in debate and to embrace disagreement and conflict:

> Some people are just content with just managing their piece of turf and don't want anyone mucking around in it. ... [You want] someone who would be open to criticism or suggestions as opposed to someone who would get defensive, be scared by people meddling around.

Another important and recurring theme was that they did not seek to establish and protect an organizational position. Their sense of what they were about had to do with whether they made something happen, not whether they established a position of power. They spoke with scorn of 'empire builders' and those who 'are just content with just managing their piece of turf and don't want anyone mucking around in it.' When they spoke of the leader of the alliance group, by contrast, several people elaborated on the theme: 'He's a big influence player—he doesn't want to build an empire, doesn't want a large team.' One of those working with him had no formal organizational ties of accountability, but pitched in for other reasons: '... as far as I understand [the alliance leader] doesn't input into my performance evaluation. I don't have input into his evaluation either. I put time into this because I believe it is important to fulfill our goal of becoming the global leader of e-solutions.' In this interview the passion and detailed ideas this person expressed about how to develop the e-solutions approach made clear why he spent energy on an area which did not build his own organizational power.

In order to operate effectively in such an environment, they stressed, it was essential to be far more open about information and competencies than is usual in bureaucratic environments, especially with peers. The primary reward they sought was not a consolidation of their position, but a recognition of their ability to contribute: 'My approach is to be transparent with the peers about the value you are bringing.... If you've generated enough value recognition will come, people understand where the value is being generated.'

This sense of worth from contribution as opposed to position is novel enough that it is often hard even for its proponents to express—as can be seen in the struggle of this person to define the basis for his approach:

> It's important that the people you're talking to are open, and you not be overbearing and say here's how you have to do things. It stems from security, being comfortable with your position—and I don't mean position from an organizational perspective, I mean it more that you don't feel that someone's going to come in

and ... [pause] I'm trying to make a distinction between hierarchy and feeling comfortable that you know what you're doing.

Competence in this framework is not a matter of doing well in a position; you 'know what you're doing' not in the sense of executing a defined expertise or doing a defined job, but in the sense of being able to make a difference on the collective task.

This sense of self centrally involves another theme stressed by Mead: the ability to role-take with a wide variety of others. The traditional bureaucratic character type manages to reduce interaction with, and the need for understanding of, those who are different by on the one hand emphasizing conformity, and on the other building walls around different positions. The collaborative sense of self, by contrast, requires constant interaction, taking responsibility for the collective outcome rather than just for doing a job, and it therefore requires the ability to grasp the distinctive contributions that different types can make to a shared project. Individuals need a capacity to 'see it from the other's point of view'—far more than in either traditional or modern forms of community. The language for this at Citibank is consistent: people talk about analyzing value for others in building collaborative efforts:

I quickly brought my team together and said, 'Here's our chance to make a difference in the institution.' One-on-one I figured out what was in it for each of them; and I did a grid for myself ... on where the conflicts were. So in every meeting I made sure there was something important for every person.

And another:

I sat down in office and made a war map on the wall about who I needed to get involved within Citibank. I outlined under each of them what the alliance would bring to them: to a senior guy it will bring market share or revenue; for lower levels it should bring learning opportunities that could be added to their resume; and so on.

Finally, as can be seen in some of these quotes, the interdependent, interactive sense of self is comfortable with a relatively unstructured process involving a great deal of negotiation; in contrast, the bureaucratic character tends to seek authoritative rules and procedures and to avoid such fluid situations where responsibility is blurred.

We are cognizant of an important debate concerning how deeply identity is grounded, and thus how easily it can be changed. One view is that it can change quickly with social expectations; another is that it is grounded in personality dynamics set in childhood. We have observed in our own research people who seem to 'get it' rather quickly on moving from a traditional to a collaborative environment; on the other hand, there are some who remain unable to adapt to the new culture even after considerable efforts. Adler's chapter describes some 'conversion' experiences among previously highly individualistic software developers, but that study also indicates that some developers cannot adapt to the more interdependent process.

Michael Maccoby's chapter makes an argument that the interactive sense of self is a matter of character, and that its spread in the last decades is connected to the transformation of early socialization, especially the decline in stable traditional families, which creates from a very early age increased capability to view events from multiple perspectives and to negotiate among them. This pattern is then developed through schooling and other socializing agents through a lifelong series of stages. If this is right, then the full development of the collaborative community will be a slow business. Certainly the progress made in almost a century since Mead's outline has been very incomplete, and the traditional bureaucratic patterns of self remain strong. The high level of tension and mutual mistrust between those who hold to traditional ethics and those who have internalized a collaborative ethic is evidence of the magnitude of the change, and also suggests that it may take generations for robust trusting community to be possible on the basis of contribution.

COLLABORATIVE COMMUNITIES, HIERARCHIES, AND MARKETS

Collaborative community often appears in the research and business literature in the guise of 'network relations' and is often treated as opposed to hierarchy and formal systems in general. Networks are frequently analyzed in terms of purely associational and voluntary relations, and collaboration is treated in terms of breaking free from the organizational hierarchy. This view appears in practice as well as in theory: many managers, like the division head in the Mod IV case described above, feel that if they want to foster collaboration they must abandon their tools of power and position, and they retreat into a passive position of 'letting people work it out.'

Yet this simple opposition is untenable in both theory and practice. Whenever a group is focused on shared instrumental activity (rather than mere coexistence or expressive activity), effective authority is essential to success—to define direction, to allocate resources, and to resolve disputes. Without it communal groups inevitably fall victim to faction—the splitting of groups that do not agree with each other or who want to maintain their autonomy—and to inefficiencies resulting from the inability to make decisions that involve conflict among members.[73]

In reality hierarchy and collaborative community are combined in a wide spectrum of patterns. The history of science provides the broadest range of examples. The scientific community is highly collaborative in the sense we have discussed: the primary value is contribution to the common enterprise; there is an increasingly elaborated web of process rules that assure the integrity of the method and effective interaction among related projects; and there are thorough socialization processes to ensure that these values and norms are internalized and understood by all members. For the most part science involves hierarchy only in the definition and certification of educational requirements, and the long socialization of postgraduate education is the main mechanism of control. But wherever science becomes focused on the pursuit of complex projects it adopts a more strongly hierarchical form—without necessarily undermining the essential communal mechanisms. Large-scale research is generally performed in laboratories with very strong leaders and status orders. This is also the result when social pressures develop for targeted scientific efforts—the atomic bomb being a prototypical case. In more recent times government funding agencies have become a mechanism of centralized control to steer scientific research in particular directions, funding large laboratories.

Another current and highly relevant illustration is the open-source software movement, which is often portrayed by its advocates as the communal opposite of the hierarchical Microsoft approach to coding. The actual experience of open source, however, is more complicated: the need for disciplined coordination in complex projects has led to the introduction of mechanisms of authority, sometimes masked. Its most visible successes—Linux and Apache—have been strongly coordinated by central mechanisms: Linus Torvalds as benevolent despot in the case of Linux, a formalized committee in the case of Apache.[74]

On the other hand, it is also evident that hierarchy can interfere with the development of collaborative community. The expectation of deference built into traditional bureaucratic organization is a continual obstacle to collaboration; thus any assertion of power by those higher in the organization is likely to trigger these deeply ingrained expectations. The widespread experience of those who have tried to sponsor participation in corporations is, contrary to the hopes of radical reformers, that lower levels tend to be very cautious about pushing the limits of their familiar patterns and of challenging their leaders, even when they are strongly encouraged to do so.[75]

In short, community and authority are not mutually exclusive; they can and do need to fit together. The form of authority is closely related to the values of the community in which it operates. It can sustain itself only when it fits within these communal definitions of legitimacy. In traditional systems authority is justified on the basis of eternal order—'the way things have always been done'. In bureaucratic systems, as Weber showed, it is justified on the basis of legal rationality—its instrumental effectiveness and sanction from above. In a collaborative system, authority is justified on the basis of the value of contribution. Authority is frequently essential to the attainment of shared purpose. As long as the members of the community believe that it is playing this essential role, authority is compatible with the collaborative community. Conflict develops when it is used in the pursuit of purposes *not* shared by the community, or in ways seen by many as harming that purpose.

In practice, this means that authority in a collaborative order has to involve more engagement and dialogue than in other orders: whereas a bureaucratic leader can refer to abstract principles of rationality and a traditional leader can refer to eternal laws, the collaborative leader has to justify decisions in terms of helping the concrete community to work effectively. The exercise of authority in collaborative corporations therefore looks different from that in traditional bureaucracies:

- *Allocating resources*. In organizations like Citibank Esolutions, individuals may create networks to pursue an opportunity and cobble together resources for a while from their own banks of time and money; at a certain point they need to get others with broader control over resources to agree that the course is worth pursuing. This is not just a single boss, as it typically is in a bureaucracy, but generally consists of some sort of 'review team' that involves multiple parts of the organization. In one documented case at IBM, the CEO indicated his general support for a team that had been developing internet opportunities on their own hook, but he did not simply 'grant' them a pot of resources to work with or set them up as a new division. Instead, his approval served more indirectly to help their negotiations with division and other leaders who held needed resources.[76]

- *Performance appraisals*. Reputational feedback from coworkers, as discussed above, is crucial to process-based trust; but in a firm this cannot work entirely by the 'pure' collaborative method of gradually isolating those who do not contribute, moving them towards the margins of the group. At some point efficiency demands that decisions be made about firing or reassigning those who do not perform; peer networks are notoriously bad at such decisions. The balance struck at Citi and other organizations we have studied takes this form: formal bosses no longer function as in the past as the main assigners and monitors of tasks to 'their' people, nor are they the primary appraisers. Instead, they are the coordinators of a multisource appraisal system, gathering the data from coworkers, partners, and customers; feeding it back in a structured way; and making decisions about what to do in cases of problems.
- *Conflict resolution*. Even with the best process skills and internal mediation, people may end up with different views of how to proceed on difficult problems; higher management plays a key role in defining what path best contributes to the general mission and mandate. Typically in collaborative units leaders will be less willing to leap in to break deadlocks than in pure bureaucracies and will more frequently use their persuasive powers—bringing to bear their knowledge of strategic issues, making sure that the parties don't avoid the issues, enforcing deadlines, but avoiding in almost all instances simply taking the decision out of the hands of the contending parties. Nevertheless, the fact that bosses remain in the background as potential interveners is very important for pushing peers to resolve problems on their own.

The relations between community and markets have also been transformed with the rise of collaborative orientations. The most visible sign is the rise of complex alliances and network relations that combine market and hierarchy mechanisms with high levels of trust. The Citibank alliance group was specifically charged with responsibility for establishing ongoing relations with companies outside Citibank who could bring needed resources and skills to the Esolutions effort; rather than acquiring these companies or merely purchasing their products, Citi sought to create ongoing mutually beneficial relations which would retain flexibility and benefit both parties. The realm of supplier relations, further explored in Chapter 10, has evolved in a similar way. Toyota, for example, always makes its suppliers aware of the ultimate power of the market test: it tries to maintain at least two sources for any non-commodity inputs.

However, the relationships between Toyota and these suppliers are hardly composed of anonymous, arm's-length, spot-market transactions. These contracts embody a comprehensive set of documents specifying in detail product requirements and management processes, and they are embedded within a long-term, high-trust, mutual-commitment relationship. Finally, there is an increase in the importance of industry-level coordination—not just in terms of legislative lobbying, but in terms of charting strategic directions and standards. Toyota brings its key suppliers together in a supplier association to share ideas and learn from each other in a forum in which competitive rivalry is moderated by collaborative community.[77] Other examples include Intel, which includes contribution to the development of the industry as a part of its performance appraisal for managers; and the Tapestry Networks forums described later in Chapter 13. Lynda Applegate explores this terrain in more detail in Chapter 9. The major point is that the values governing collaborative community also govern the legitimization of markets and hierarchies, and thus transform the interaction among these coordination mechanisms.

The balance of this volume explores aspects of the development of collaborative community—the ways in which it has succeeded in transforming the corporate realm, and also the obstacles it has encountered and the limitations of its current form. In the following section, we address the question of how far it can develop within the constraints of current economic and social institutions, and what transformations may be needed at this broader level. We will focus on the seeds of positive development, but it is worth reiterating that they have grown as far as they have despite many hostile aspects of the environment: continuing pressure for cost cutting that has often led to increased control, growing inequality, and a wide trend of market worship that denies the importance of community and trust.

The overall course of development: the zigzag path

In the previous sections, we have argued that powerful economic and social forces are pushing towards collaborative relations; but this is hardly evident if one simply looks around. The 'neoliberal' movement of the past thirty years, which has spread through much of the industrial world, runs largely in the opposite direction. Based on the premiss that the market can solve all ills, neoliberalism cheerfully encourages the dismantling of communal institutions and values such as employment security, loyalty, labor–management accords, and other long-term relationships. Meanwhile, performance incentives have increasingly been used (both within firms and in government policy) to favor those who break free of the communal norms and show their independence, and to reject those who can't measure up.[78] The neoliberal impulse has a more ambivalent relation to hierarchy. On the one hand, markets replace hierarchies as the preferred mechanism for coordinating large production units, and the services previously supplied by government are outsourced to private, market-oriented firms. On the other hand, even though such shifts are often portrayed as an advance in individualism and a way of freeing people from the constraints of the big bureaucracy, in practice, within these smaller units they typically involve a strengthening of hierarchical control at the expense of any acknowledgement of community. It has become routine for new leaders to impose their will by fiat, deliberately disregarding shared culture and 'the way things are done around here'; part of the routine, of course, has also been frequent mass layoffs which, at least in the white-collar realm, have been seen as an unprecedented attack on long-held expectations. Not surprisingly, there is considerable polling evidence that job satisfaction has declined and the level of fear in corporations has risen.[79]

In this section, we put in broader perspective the trends towards collaborative community that the previous section claimed to discern.

Tendencies and counter-tendencies

While we believe we can see the resurgence and reconstruction of community, we should also note powerful counter-tendencies, even among firms that are focused on the challenges posed by growing knowledge intensity and solutions orientation. These trends and counter-trends are observable on multiple levels: in employment relations, in interdivisional relations within firms, and in inter-firm relations:

1. *Employment relations*. In dealing with increased competitive pressures, many companies have relied heavily on hierarchical or market mechanisms to the detriment of community. On the hierarchy side, we see companies that have depended on brilliant strategic plans or determined cost-cutting initiatives driven from the top, with little involvement from employees.[80] The market side is most clearly represented by firms that have radically decentralized and opened their divisions to outside competition, reducing not only hierarchical rules but also bonds of

cooperation with other divisions. Both these approaches have been found wanting by at least some scholars. The 'top-down' approach has been shown, not too surprisingly, to yield little lasting change in attitudes and values; more surprisingly, it also seems to yield little lasting cost reduction or efficiency improvement.[81] Radical decentralization has led to such duplication of effort and strategic incoherence that in cases ranging from ABB to Kodak to Lucent it has been quickly reversed.

The market path has been particularly popular. Many companies have increased the use of individual incentives,[82] and the use of contingent workers. The implementation of incentive plans has often set people in competition with each other rather than encouraging shared contribution; in Citibank, as in other cases we have examined, those engaged in collaboration have found that the incentive system did more harm than good. And contingent workers, for legal and organizational reasons, are often sharply cut off from collaboration with permanent employees and separated from the main management systems of the firm.

Nevertheless, there are numerous corporations who are rowing against the current in their commitment to community as a way to augment their knowledge and solutions capabilities. For every Wal-Mart, there is a Costco.[83] The following chapters discuss some of these cases in more depth.

2. *Interdivisional relations*. Large multi-business corporations are under increasing pressure from financial markets to show real benefits for purported synergies. The first result of this pressure is, once again, often the reassertion of hierarchy and market rather than community. Hierarchical moves include the trend to divest unrelated businesses in the interest of 'focus,' and to jettison any 'social contract' hesitations they may have had to sell off less profitable lines of business. Market logic drives a trend to strengthening market-style incentives to division managers.

But the fact remains that in related-diversified firms, if divisions seek only to meet their own divisional objectives, they will behave in ways that are detrimental to the firm's global objectives. A third result of the performance pressure on large corporations is, therefore, a cluster of innovations that appear to be pushing beyond the limits of market and hierarchy towards community. Many multidivisional firms are actively experimenting with new ways to stimulate collaboration among profit centers. The notion of core competencies, as articulated by Prahalad and Hamel (1990), is premissed on the insight that corporate competitiveness depends on bodies of expertise that are typically distributed across divisions rather than contained within them, and collaboration across divisions, therefore, is a critical, not a secondary issue.[84]

A panoply of collaborative mechanisms founded on community and trust has emerged to coordinate across independent units. 'Customer relations managers' are one relatively simple approach—individuals with enough prestige across multiple units that they can persuade people that there is mutual benefit to working together. More broadly, many companies have adopted what Jay Galbraith (2000) calls a 'front–back' structure, where the customer interface pulls together resources from a product back-end; such structures require intensive use of consensual coordinating units to thrash out the allocation of resources. Similarly, titles such as chief technology officer and chief knowledge officer have proliferated; these positions have broad responsibility for building cross-division knowledge and sharing but typically lack formal authority—they rely on trust in their attempts to build more trust.[85]

3. *Inter-firm relations*. Collaborative community is hardly the dominant ethos in inter-firm relations. We see some firms, to the contrary, imposing ever sharper market discipline on their suppliers by aggressively demanding lower prices and moving rapidly to cut off suppliers who cannot deliver.[86] We also see firms trying to force improvements in their supplier base by introducing more unilateral 'hierarchical contracts' into their market relations.[87]

At the same time, however, a growing number of firms are building long-term, trust-based partnerships with their suppliers. Though the issue is still hotly debated, a burgeoning body of research suggests that trust plays a critical role in successful inter-firm relations.[88] This research shows that when firms need innovation and knowledge inputs from suppliers rather than just standardized commodities, no combination of strong hierarchical control and market discipline can assure as high a level of performance as trust-based community.[89]

A particularly interesting and well-documented illustration of the resulting moves towards community has been the gradual adoption by US auto manufacturers of a model of close relations with suppliers rather than arm's-length market contracts. The percentage of US auto parts producers who provide sensitive, detailed information about their production process to their customers grew from 38 per cent to 80 per cent during the 1980s.[90] Though this approach was initially inspired by Japanese *keiretsu*, it has taken a very different form in this country—one much less bound by traditional links, much more open to discussion and negotiation, and therefore closer to the collaborative form of trust. Chapter 10 discusses this trend and its limits in more detail.

Evidence for a trend to inter-firm community is even stronger in the proliferation of collaborative network forms of organization for the most knowledge-intensive tasks and industries.[91] Patent pooling and cooperative R&D consortia have multiplied in recent decades. Formal professional and technical societies and informal community ties among scientists constitute other, less direct forms of inter-firm networking whose importance appears to be growing.

The countervailing forces are strong. These high-trust network forms may be more productive, but since the market principle is also present, they suffer the risk of opportunistic defection. Self-interested behavior can sometimes encourage trustworthiness, particularly when the 'shadow of the future' is long. But self-interest does not reliably ensure the diffusion and persistence of trust-based networks, and whole regions can find themselves stuck at low-trust and poor-performing equilibria. However, when these regions are subject to competition from regions that have attained a higher-trust, higher-performing equilibrium, one sometimes observes serious, sustained, self-conscious efforts to create trust.[92] Some of these efforts succeed. One might hypothesize that if efforts to create trust as a response to competition do not succeed, economic activity will tend to shift to higher-trust regions. In either case, the trend towards community seems likely to emerge, if only at a more global level.

The contradictory forces shaping capitalist development

What are we to make of the persistence of these counter-tendencies that reinforce market and hierarchy and that undermine community? What underlying forces do they reflect? Why should a prognosis of emergent community be accorded any credibility? We believe a fruitful approach to the answer can be found in Marx's work, which analyzed the evolving tension in capitalist society between the *forces* of production—the cumulative growth of productive knowledge embodied in equipment, skills, and techniques—and the *relations* of production—the persistence of the basic matrix of capitalist property relations.

On the one hand, the capitalist system of property relations greatly stimulates the development of technology and human productive capabilities, leading to growing knowledge intensity and to increasing interdependence and interconnection of human activity. Capitalism creates an increasingly extensive division of labor across and within firms and regions, and an ever-denser web of interdependence in production and exchange—visible as globalization and the development of the world market. Marx called this tendency the ‘socialization’ of the forces of production—where socialization here means the development of the linkages that give individuals access to the wider capabilities of societies.

On the other hand, these same capitalist relations of production simultaneously divide people through exclusion and dependence—workers from employers, firms from competitors, countries from rivals—and impede the emergence of a collaborative management of this growing interdependence. Under capitalist relations, the increasingly interdependent economy is coordinated—in the first instance—not by a collaborative community, but by the coercive mechanisms of the market (coordinating across firms via the price mechanism) and of capitalist hierarchy (coordinating within firms via the employment relation).

As capitalism progresses, however, the pressure of competition forces firms to introduce more directly social, collaborative means of coordination and community. In their search for competitive advantage, firms learn to collaborate both with other firms and with their employees. The firm’s ability to create use-values—and thus to valorize the capital invested in them—depends on ever more effective collaboration within the ‘collective worker.’[93] The socialization of the forces of production thus also encompasses a tendency to greater conscious interdependence—and progressively prevails over the tendency of the relations of production to exacerbate divisions and domination. Capitalists, Marx and Engels write in the Communist Manifesto, are the ‘involuntary promoters’ of socialization.

The persistence of private ownership of means of production and the associated asymmetries of class power ensure that the movement towards socialization—towards greater conscious social connectedness and collaborative community—proceeds only in a halting, uncertain manner, prone to breakdowns. Moreover, alongside the ‘high road’ of collaborative community, the basic matrix of capitalist relations of production continually reproduces the ‘low road’ of super-exploitation and dispossession.[94]

A zigzag path

The net effect of the contradictory forces just described is to impart to the movement towards collaborative community a zigzag form. We can see this first, in the history of corporate management in the past century and a half.

Researchers who have studied the evolution of the popularity of various management techniques in management journals have consistently identified periods that alternate between a focus on employee commitment and a focus on managerial control:

1. Commitment, 1870s–1890s: welfare work.
2. Control, 1890s–1910s: scientific management.
3. Commitment, 1920–1940s: human relations.
4. Control, 1940s–1960s: systems rationalization.
5. Commitment, 1970–1990: employee involvement.
6. Control, 1990– : business process re-engineering and outsourcing.[95]

The surface pattern is one of alternation; but closer examination reveals an underlying progression. Starting from a situation of 'competitive capitalism' and 'simple control,'[96] the sequence of commitment approaches aims successively deeper; the sequence of control approaches aims successively broader; and the latter have become increasingly hospitable to the former.

First, relative to the commitment approaches, there is a clear shift from the earlier reliance on paternalism, to relatively impersonal, bureaucratic norms of procedural justice, to an emphasis on empowerment and mutual commitment, targeting progressively deeper forms of subjective involvement of the individual worker. And this sequence engaged progressively deeper layers of work organization: welfare work did not seek to modify the core of work organization; human relations addressed mainly supervision; employee involvement brought concern for commitment into the heart of work organization.

Second, the sequence of control innovations—from scientific management to systems rationalism to re-engineering—aims at successively broader spans of the value chain. Scientific management focuses on tasks and the flow of materials in the workshop. Systems rationalism aimed at a more comprehensive optimization of production and distribution activities. Re-engineering and outsourcing aimed at the rationalization of flows across as well as within firms.

Third, the relation between the commitment and control approaches seems to have changed: the control approaches seem to have become increasingly hospitable to commitment. Within two or three years of publishing a text popularizing a rather brutally coercive method of business process re-engineering, both James Champy and Michael Hammer published new volumes stressing the importance of the human factor and the need for job redesigns that afford employees greater autonomy.[97] The undeniably autocratic character of much early re-engineering rhetoric and its rapid 'softening' compares favorably with more unilateral and enduring forms of domination expressed in post-war systems rationalism. It compares even more favorably with the even more unilateral and rigid rhetoric in turn-of-the-century scientific management: scientific management only softened its relations with organized labor after nearly two decades of confrontation.[98]

The zigzag path of development in management technique appears to trace a vector that corresponds well to Marx's notion of 'socialization': conscious control, and in particular in the form of collaborative community, characterizes progressively broader spans of activity. Fig. 1.3 attempts to diagram this argument.

Beyond the economic sphere: a related zigzag

So far our discussion has focused on the economic sphere; but it should be obvious that progress towards collaborative community in that sphere depends to a considerable extent on buttressing from a 'superstructure' of political and societal institutions. In the USA, we have seen an oscillation from a *laissez-faire* period in the late nineteenth century, to the Progressive era in which societal regulation grew in strength; then another

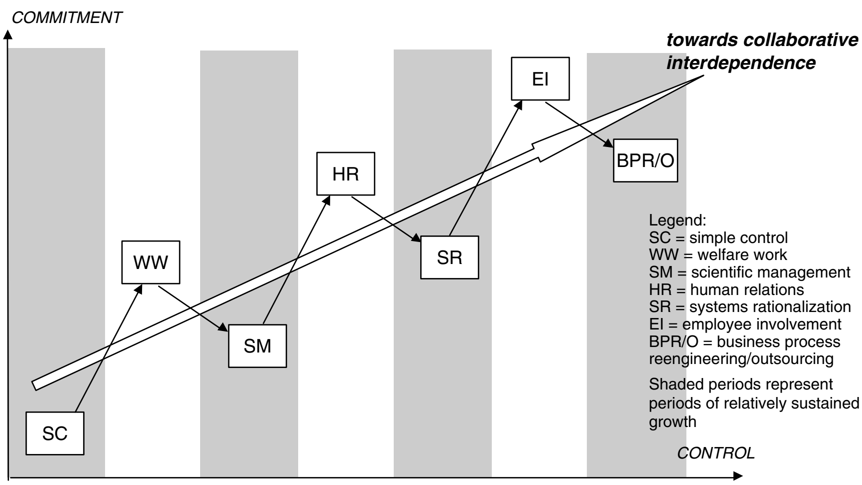

Fig. 1.3 The zigzag path of management technique

laissez-faire wave in the post-First World War period, giving way to a long period of growth of relatively strong unions and regulatory systems from the 1930s to the 1970s. The last three decades have been primarily a move towards dismantling those institutions by once again removing the communal limits on business activity.[99] Like many other writers in management and social sciences, we argue that continued vitality of US capitalism will require a reassertion of non-market forces. Successful businesses require trust among their employees and a supportive social infrastructure for everything from an educated work force to transportation networks to contract enforcement (Fig. 1.4).[100]

With this longer historical view, we can also see some characteristic patterns within the swings of the pendulum. The *laissez-faire* periods unleash great dynamism and innovation, but at the price of stability: in undermining the institutions that ground trust and mutuality of expectation, they allow new kinds of behaviors, some of which are productive but others of which are not. Inequality increases, as the 'winners' who catch the new wave outdistance the 'losers' still holding the expectations of the past. The loss of shared values leads to the spread of corruption, wider cynicism and alienation, retreat from the public arena, and varieties of fundamentalist reaction. Economic bubbles follow from the decline of stable expectations, as people trying to find their way in the new order follow the crowd.

Over time these problems bring the need for community to the forefront: there is a search for values and organizational systems that can stabilize and unify the economic order, reducing the instability and increasing commitment and justice. These institutions include government regulation, systems of representation, legal codes, and—most difficult—growing moral consensus that affects socialization in schools as well as the shape of public media.

Thus the 'Gilded Age' after the Civil War in the USA was a period of generally strong market expansion driven by the tremendous increase in transportation capacities, especially railroads and steamships, unleashing a manufacturing capacity that had just begun to grow before the war. The severe dislocation of communities and traditional relationships in this age, including the rise of an extremely wealthy class, led to a populist backlash and serious conflicts in the late part of the century which energized the Progressive movement.

A second long period of growth, starting about 1900, was based around electrification and automobile production, and further encouraged by the development of large corporations (though these were still in a crude stage

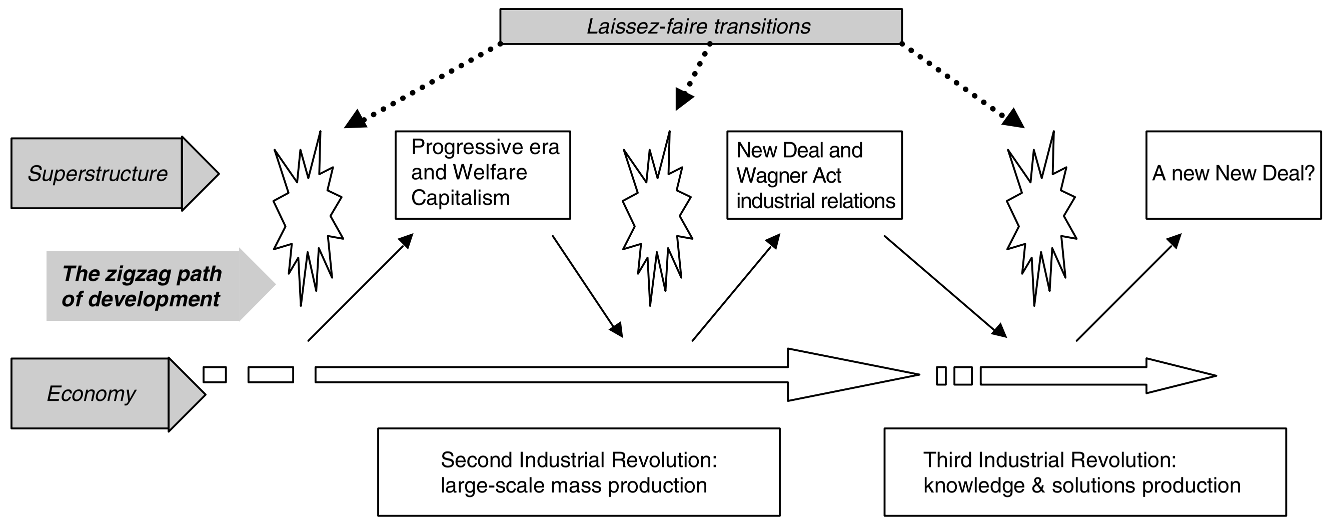

Fig. 1.4 The zigzag path of economy and society

of organization). Both unions and government regulation found themselves increasingly helpless in the face of these new market forces, and were increasingly seen as fetters on them; 'scientific management' began to spread widely and to dismantle earlier forms of worker control of the shop floor. The 'Roaring Twenties' were the culmination of this reassertion of the market: craft unions went into precipitous decline; economic inequality increased sharply, with captains of industry flaunting their unheard-of levels of wealth; the loss of moral unity was evident in everything from the hedonism of the flappers to the corruption of Harding and the many business scandals of the 1920s. The lack of coordinated expectations and shared sense of value contributed to the huge stock run-up prior to 1929. Then, starting with the election of Franklin Roosevelt, the nation entered a period of communal reconstruction, with new types of government regulation and the growth of industrial unionism as the most concrete manifestations. By the 1950s a considerable alignment of expectations and sharply reduced inequality had led to a relatively stable period of economic growth.[101]

There is a widespread sense, backed by some hard economic evidence, that the period since the mid-1970s has been the first part of a third such wave, starting with a *laissez-faire* reassertion of the market.[102] Certainly it has been a period characterized by political deregulation and union decline. In the 1990s signs of corruption began to increase; the growth of inequality became undeniable; and anxiety over the loss of shared values and fears of libertinism has become a potent political issue. The tension between economic transformation and traditional values is growing more fevered. It thus seems likely, on this analysis, that we will soon move towards institutional reconstruction, whether out of crisis (like the Depression) or through some more orderly process. The thrust of our argument is that this reconstruction will occur around collaborative community rather than *Gemeinschaft* or *Gesellschaft* patterns of community described above.

It is thus not surprising from this perspective that there are strong anti-collaborative elements in the current scene—rising efforts at managerial control, increased outsourcing, a sharp decline in labor–management cooperation, rising inequality, the selfish individualism manifest in the corruption at Enron. These are signs of the power of new market forces breaking through and overwhelming previous formal and informal accords. But if our essential claim is correct—that such an economy requires a high level of trust and collaboration—then these 'pure and simple' market logics must give way to institutions of mutual trust in some form.

The challenges ahead

We do not argue that the restoration of community is inevitable. So far the historical pattern confirms Marx's claim, which we have adopted, that capitalist productive forces cannot advance without also developing the institutions of social trust and cooperation—even if this linkage is riddled with tension. But those who have benefited from the trends of the last three decades are not likely to cede easily.

One major danger is the hardening of the current dualistic structures: strong mechanisms of collaboration and community for high-end 'knowledge workers' alongside coercive hierarchical and market control over the lower tier of the workforce. It can be argued that this would not be economically optimal, but that argument need not determine the course of history; a 'good-enough' compromise that preserves the privileges of the elite and avoids major disruption from below might well survive.

Today McDonald's and Wal-Mart stand as emblems of the possibility of a future of control rather than community. These companies have succeeded with a control strategy, squeezing huge savings out of traditional—and woefully inefficient—supply chains and work systems characteristic of a relatively backward retail sales world. Some business analysts have argued that this cannot last—that these approaches represent an old industrial model of organization applied to services, which must be replaced in time by a more collaborative one that re-engages front-line workers in interaction with customers.[103] These proposals, however, have not yet been widely adopted, and we cannot be certain that they will be.

The maximization of the value of knowledge production and collaborative community—the constellation of economic and social sketched in this volume—is not, in other words, a historical inevitability, but depends on action to address certain key challenges and take advantage of opportunities. The two key challenges that loom largest on the horizon are the reform of the stakeholder regime and the redefinition of property rights to accommodate knowledge production.

STAKEHOLDER REGIMES

A stakeholder regime is an ordered societal relation among groups representing different values.[104] The future of collaborative community in the economic sphere depends crucially on the elaboration of progressively more advanced stakeholder regimes.

The recent period since about 1970, which we label 'neoliberalism,' has been marked by a disarray similar to that seen at the beginning of the last century. The new force of knowledge production has led to a reordering of economic activity which escapes the control of the prior regulatory institutions. Both government and unions find themselves grasping at smoke as they try to manage it. The new conditions, like the earlier period of disarray, have opened the way to corporate corruption, growing inequality, and unpredicted cycles of boom and bust; they have also led to lower civic involvement and high levels of anxiety. Even the renewed growth period that (arguably) began in the 1990s is marked by this neoliberalism. The Wal-Mart model, and business process reengineering more broadly, has torn at the social fabric, exacerbating rather than mitigating rampant 'winner take all' inequalities;[105] the erosion of regulation has led to a loss of moral consistency and confidence in business; and the instability of expectations has fueled a series of boom–bust cycles.

The logic of the new regulatory order in the first transitional period (before 1930) was 'modeled,' as it were, within the emergent economic institutions before they developed at the societal level. In that instance, the logic was one of bureaucratic rationality, following consistent rules, in place of the previous craft traditions. Corporations mastered the organization of bureaucracy first, but they were not able to harness it effectively on their own: studies from the 1920s show the degree to which managers tried to retain personal and arbitrary discretion within large organizations, which undermined the consistency and rationality needed for an effective bureaucracy. It was not until unions and government grasped the logic themselves and forced companies to be consistent with their own rhetoric that this powerful organizational form reached its potential for economic productivity as well as for other social goods.

Our argument suggests that an analogous sequence is playing out now: Companies understand the importance of collaboration but are unable to create it on their own. Their rhetoric trumpets the importance of participation and mobility; but their policies continually reassert control, and they also restrict mobility and the full development of knowledge capabilities by trying to draw a sharp line between the valuable employees that they want to keep and the others who are expendable.

If the neo-corporatist institutions are in disarray and the neoliberal ones are insufficient, there is a need for new forms of regulation that institutionalize a new balance between the contending social forces. This must clearly involve a structure of representation which is itself less rule based than industrial unionism, more open to flexible teamwork; it is likely also to involve many social groups that have found their voice in the period since the establishment of the neo-corporatist regime, such as minorities, women, environmentalists, and so on. In order to bring out the most productive aspects of the collaborative order we have described, it must find ways to pressure management once again into living up to its own rhetoric: to ensure true participation that is not subject to arbitrary interference, and to ensure true mobility that genuinely encourages the development of knowledge by most of the workforce and the opportunity to move with security and confidence to the firms and jobs where that knowledge can best be used. It is beyond the scope of this essay to go into more detail.[106]

PROPERTY LAW

The move to mass production involved a shift from individual ownership to the diffuse, socialized form embodied in publicly traded firms, with the correlative separation of management from ownership.[107] This deep shift was essential to the mass-production economy because it enabled the needed scale of investment in the massive new entities. The problem now is equally profound: the development of knowledge cannot be contained within the boundaries of bureaucratic firms, and it therefore presents problems of ownership that are so far unresolved.

Significant knowledge is created through long network processes of experimentation and critique, and it generally combines multiple insights. Assigning ownership rights to the knowledge almost always ignores large parts of this process—it 'cuts the network' arbitrarily.[108] More damaging, it encourages owners, whether companies or individuals, to keep their knowledge secret rather than sharing it as is necessary to realize its full social value.

The tension between traditional forms of ownership and the requirements of a knowledge economy is playing out on many fronts.

- Lawrence Lessig (1999, 2001) describes the internet as a battlefield between those who want to allow equal access to all and those who want to reshape the underlying code so as to distinguish among participants on the basis of ownership; the former is better for innovation, the latter for profit.
- A growing problem concerns the rights of corporations to restrict the use of knowledge by their employees through non-compete covenants or confidentiality restraints. This creates a huge obstacle to mobility: it

often prevents people from leaving companies because they cannot use their knowledge and skills elsewhere. At the same time it severely restricts the exchange and development of knowledge. Litigation over these restraints has been growing in recent years, but courts have yet to find a consistent way through the thicket.

- Intellectual property in both entertainment and biotechnology as well as the broader realm of science and technology are posing acute problems in international relations. Different countries view property rights in these domains very differently, and the stakes are huge and growing.

The debate on what this means for ownership rights has just begun. Lessig proposes treating the basic infrastructure of the internet as a kind of commons, and Alan McAdams suggests customer ownership of networks.[109] More importantly, vast innovations are taking place in practice, in the form of alliances and consortia: the developing collaborative relations with competitors and contributors in many industries have spawned new types of contracts and agreements that parse ownership rights and returns in ways that have not yet been grasped by theorists.[110]

What is clear so far is that the conflict between knowledge production and the assigning of ownership rights is fundamental, and the trajectory is uncertain; and this brings us to our final and most speculative level of analysis.

Community beyond capitalism?

Our argument carries us to a deeper and broader question: Can the move to collaborative community be made within capitalist societies, or are there fundamental obstacles posed by the nature of capitalism that prevent it?

In the past two centuries, major changes in the nature of production have shaken but not sunk capitalism as a system. Notably, as we have discussed, the emergence of mass production and large corporations required deep changes in regulatory frameworks, stakeholder relations, and the legal framework of ownership, but not fundamental change in the core institutions of capitalism. So far in sketching the institutional needs for collaborative trust we have assumed that they could be established with a similar kind of reform.

But extrapolating the tendency sketched in Fig. 1.3 points to the historical limits of capitalism as a system. As production is reconfigured to allowed planful control over ever-larger aggregates—from individual tasks to whole work processes, larger firms, then entire supply chains—the role of the market as a coordinating mechanism is progressively subordinated. As production is reconfigured to support a higher level of interactivity and trust—collaborative relations between and within firms—the central roles of the market and hierarchy are challenged.

Over a century ago, capitalist relations of production morphed to accommodate a more-socialized form of production in large corporations through the remarkable legal fiction that a corporation is an 'artificial person.' Now these relations and their legal expression are facing a strong challenge once again due to the shift to greater knowledge intensity. We do not argue that capitalism is incapable of absorbing this challenge; but rather that in absorbing it, capitalism strengthens collaborative community and sharpens the conflict between collaborative community and the dominant market principle. Marx and Engels wrote in the Communist Manifesto that capitalism creates its own gravediggers: we see a growing challenge to the dominance of the market posed by the persistent minority of impoverished workers and the swelling ranks of knowledge workers.[111]

In the end a central question is: Can knowledge production be performed most effectively in the framework of capitalist institutions of ownership? In prior phases of productive advance, the equivalent question has had an affirmative answer: the capitalist form did survive the industrial revolution and the transition to mass production, but only at the cost of what conservative critics call 'creeping socialism.' As we transition to the knowledge economy, the creeping is likely to accelerate.

In any case, it is worth underlining that this analysis implies that we can neither do without community, nor go backward to familiar forms of community. The temptation is always strong, when patterns of expectation and relationships break down, to long for familiar models from the past that provided a unified sense of meaning and wholeness. We have seen this throughout the modern era in constant, though ultimately futile, attempts to sustain *Gemeinschaft* communities. As Schumpeter and Marx both pointed out, though from very different viewpoints, the advance of capitalism has steadily eroded these traditional remnants. Today many of those who criticize the heartlessness of neoliberalism draw their programs from past images of paternalist bureaucracy, which provided security and a sense of belonging. But that framework for trust is no longer adequate to an economy based on knowledge and continual responsiveness, nor to a society that continues to challenge fixed status distinctions. The way forward lies in the active development of the promise of collaborative community.

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Notes

1. The 'Communitarian' school carries nostalgia for traditional morality and community into the modern era. Selznick (1992), Etzioni (1991), and others are sensitive to the criticism that their approach may constrain individual freedom and development, and they struggle mightily to overcome it—but with only partial success; see Habermas's (1994) analysis.
2. The literature proposing a new form of community can usefully be divided into two major chunks, though there is some overlap: works that approach it 'deductively' from a broad sociological or philosophical perspective, and those that

approach it 'inductively' by generalizing the lessons of some concrete community. In the first camp we would cite as Parsons (1971; Parsons and Platt 1973) and Habermas (1990, 1984). In the second we would emphasize Parsons's (1973) treatment of the professions, and Bell's (1973) emphasis on knowledge work. Others have focused on the film industry (e.g. Meyerson et al. 1996), craft networks (e.g. Powell 1990), industrial districts (Piore and Sabel 1984). We have used some works from the sociology of science as central to our own thinking, but are not aware of this model in the existing general literature on community.

3. W. B. Yeats, 'The Second Coming.'
4. Artists have taken up the theme as well: those who merely escape from old communities, without committing to new ones, are the subject of the great modern tragedies of loss of self—Emma Bovary, Raskolnikov, Gatsby.
5. Marx and Engels (1848/1948/9).
6. Social theory has mirrored these internal contradictions of modern society. Most writers have been bound to one idea of community—the traditional form; they thus see societies as either high or low in trust. Since high trust is (in this view) grounded in traditional community, their recommendations for action involve confusing notions of balance, trying to offset the bad aspects of capitalism through a little tradition but without destroying its good aspects, trying to go a little backwards but not too far. A perfect representative of this type of theory is Francis Fukuyama (1995): his attempt to divide the world into 'high-trust' and 'low-trust' societies produces strange results such as the USA standing alongside Germany and Japan as high trust, and France alongside Korea and China as low trust; his recommendations fall precisely into the uncomfortable a-little-more-of-this-but-not-too-much kind of reasoning. Much of Robert Putnam's earlier work (2000) runs into the same problem, though in his most recent writings (Feldstein and Putnam 2003) he is clearly reaching, if tentatively, for a conception of a post-modern type of trust.

   A somewhat more sophisticated strand has made a core distinction between 'personal' and 'impersonal' trust—notably in Luhmann (1973/1979) and many influenced by him like Silver (1985) and Shapiro (1987), as well as in an important analysis by Zucker (1986). In its essence, however, this is simply a version of the opposition of *Gemeinschaft* and *Gesellschaft*; impersonal trust is based on rational-bureaucratic institutions and fails to create the conditions for active cooperation or coherent identities.

   There has been a recent spate of research on trust, much of it encouraged by the Russell Sage Foundation, which has detailed many aspects of trust dynamics in various situations and has tried to extend game theory by adding relational concepts. The overall picture, however, continues to be as described in a review article by Kramer (1999): the field has a lot more mid-level richness than it did just a few years ago, but still no overarching story line. The exceptions are those that we have underlined, and seek to join, as sketching the move *beyond* the personal–impersonal, *Gemeinschaft–Gesellschaft* contrast.

7. 'Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation' (Marx 1859/1977: preface).
8. Parallel developments can be discerned in the realms of political practice and theory: 'deliberative democracy' is perhaps the strongest thread. See Dryzek (2001); Cohen and Sabel (1997).
9. This threefold division has appeared in many works of the last twenty years, though often the authors seem unaware of the other instances: see Bradach and Eccles (1989), Ouchi (1980), Powell (1990), Adler (2001). As argued below (n. 10), it is also consistent with the Parsonian four-part model.
10. Since this chapter uses a Parsonian framework in part, we should explain the relationship between this three-part formulation and the four-part Parsonian analysis of societies. Markets and hierarchies correspond closely to Parsons's adaptive and goal-attainment subsystems. 'Community' *combines* his other two categories (integration and pattern maintenance). The current social phase as we are describing is really about the redefinition of both those subsystems through differentiation and relinking: what we describe as the 'ethic of contribution' is the pattern-maintenance aspect of the emerging community, and 'interdependent process management' is its integrative aspect. In this work we are analyzing the development of both aspects and the dynamics of their interchanges.
11. The relation between social values and personality runs in two directions. The internalization of values in personality is necessary to stabilize social relations and trust, as we have emphasized; but it is also necessary to stabilize personalities. Durkheim (and, from a different direction, Freud) analyzed the ways in which hierarchical values provided needed constraints and direction to otherwise formless needs; lacking them the personality becomes inchoate and, in Durkheim's (1897/1951) analysis, tends towards self-destruction (suicide). Mead (1934) analyzed the ways in which social relations and associations formed and stabilized the ego, or self-identity.
12. The structure is formally a semi-lattice, which is used by Piaget (Piaget and Inhelder 1958) to model the operations that maintain stable order in cognitive systems. He sees it as one of the fundamental patterns of human action systems, and indeed it seems to have this kind of significance in the maintenance of systems of trust. On the sacred nature of *Gemeinschaft* community, see also Durkheim (1915/1995).
13. William Shakespeare, *Troilus and Cressida*, i. iii, Ulysses' speech. To maximize the readability for this context, the text has been slightly abridged and rearranged without being marked with elisions. The full text can easily be found in any edition of Shakespeare.

14. The individualist morality also supports or frames the nation-state, which is not dependent on a status order but treats each individual as equally connected to the whole by the rights of citizenship. From this structural perspective, the nation-state is the equivalent of the Protestant God in terms of creating universal obligations of good citizenship—as opposed to particularistic status obligations—but leaving it largely up to the individual how this obligation will be integrated into a consistent personality.
15. John Stuart Mill (1869) treated the distinction between public and private realms as the 'one simple principle' that was the key to modern morality. It is a distinction that, however, is not tenable in more developed modern societies, as discussed below.
16. We expand below (in the section 'The growing need for community in industry') on the limitations of rational economic motives and reasoning for this purpose.
17. The concept of a community of purpose has some roots in existing literature, though it has not emerged clearly. We should note that theorists centered on *Gemeinschaft* have explicitly denied that shared purpose is necessary (e.g. MacIver 1917/1970: book II, ch. I). Some of the community thinkers around 1900 like John Dewey and Robert Park, grappling for a concept of community in modernity, stressed the centrality of purpose (see Quandt 1970: 24 ff.). It has often re-emerged in more recent theories that approach the idea of a 'new' type of community, such as Selznick (1992) and Heckscher (1995); also Comfort (1997) on purpose in dynamics of non-linear systems theory.

    We should be more systematic about the relation between *cooperative* and *collaborative* communities: Cooperative community is the general concept, and collaborative community—our focus here—is a subset of it specified to goal-oriented groups. Thus collaborative community adds some restrictions to the general concept. In particular, first, it adds a definition of *purpose* as the key coordinating element of community. Second, it specifies general norms of discourse and cooperation to norms that encourage cooperation *towards the purpose*—what we call here an 'ethic of contribution.' Third, it specifies the general *processes* of dialogue to particular processes organized around 'chains' of value-creation. We do not here analyze in detail the general notion of 'cooperative community' because our base of data and evidence comes from the collaborative form. We argue that the knowledge of collaborative community can illuminate the more general case; and, like others (e.g. Pateman 1970) we argue that the new social character called into being by collaborative interdependent activity in the economic sphere provides both a resource for and a stimulus to emergent cooperative community in the broader social sphere. But a full development of these points would require another essay.
18. Habermas (1990); see also Apel's (1987) treatment of the 'ideal community of communication.'
19. Gerth and Mills (1946: 228).

20. See Satow (1975) on professions as prototypes of Weber's 'missing type' of administration; also Sciulli (1986) on the professions as collegial organizations that exemplify non-authoritarian and non-bureaucratic social order. Spencer (1970) and Rothschild-Witt (1979) focus on other forms of *Wertrational*-governed collectivities: respectively, the USA under its Constitution, and cooperatives. Without going into too much detail, we must recognize the fact that science is more advanced in these dimensions than the older institutions of the professions. First, it is far more centered on collective enterprise, the building of a pool of shared knowledge, whereas the professions for the most part remain centered on individual implementation of the pool of knowledge. Second, science has gone much further in developing institutions to order interaction, including peer review and replicability of results.
21. Spencer (1970), Satow (1975), and Rothschild-Witt (1979) point out that only three of the four types of social action and associated normative bases identified by Weber (affectual, traditional, purposive-rational) were associated with corresponding forms of authority and administration (respectively: charismatic, traditional, and bureaucratic): value-rationality is conspicuous in its absence. In defense of Weber, it might be countered that the history of the professions hardly justifies optimism. Following Waters (1989) and generalizing from the accounts of the case of medicine offered by Starr (1982) and Freidson (1975), Weberians might respond that the collegial form of governance does not appear to have allowed the professions to steer their members through difficult trade-off choices to embrace policies that privilege broader social interests when these conflict with parochial self-interest. See chapters by Adler and Maccoby on the emergence of new forms of professionalism.
22. Weber, as we just pointed out, did not embrace the 'professional' solution as enthusiastically as Durkheim did in the famous Second Preface of *The Division of Labor in Society*—he remained skeptical that this could overcome the power of bureaucracy. But it remained nevertheless his best hope for the future. One of his most sustained discussions for the future, 'Science as a vocation,' is torn between the hope for the triumph of a scientific ethos and doubt about its ultimate value.
23. This is a point made in Parsons's (1937) discussion of Durkheim. Later Durkheim thought the 'corporations' (occupational associations) could serve as the structural forms needed to give substance to organic solidarity. Fascism gave this idea a bad odor. Daniel Bell's celebration of the professions as new 'axes of social organization' is one effort to revive the idea.
24. There has been a great deal of other sociological writing that has explored the notion of deliberate, purposive, dialogic community that breaks out of the *Gemeinschaft–Gesellschaft* dichotomy. The American pragmatists such as John Dewey (1927) were certainly moving in this direction, but they (like Durkheim and Weber) were too early to be able to see the developments we have focused on: in general they remained stuck in seeking for signs of the new community

in unlikely corners that did not develop far (e.g. Dewey's educational experiments), or in remnants of tradition like the small town (Quandt 1970). The recent stream of writing on post-*Gemeinschaft* community might possibly be traced to Suttles's (1972) extraordinary analysis of constructed communities. Habermas (e.g. 1991) has arguably been its most profound and influential spokesperson in his theories of discursive interaction and ethics; and there are other recent efforts in this line like Sabel (1992) and Meyerson et al. (1996). Our treatment falls in this stream but is distinctive in using a *central* social institution, that of corporate organization, as its source of evidence.

We have stuck with Weber and Durkheim rather than these intervening theorists because no one since them, in our view, has stated so clearly the core institutional dimensions and requirements for modern community. Habermas's work is immensely valuable, but most of it has abstracted from real social structures. We find our analysis largely consistent with his at an abstract level, and the treatment of ideal speech appears to provide an ethical frame for collaboration; but we have not found much discussion in his works of the institutional developments in the corporate sphere.

25. Observational studies such as Crozier (1964) and Blau (1963) have vividly shown the pathologies of organizations that approach pure bureaucracy.
26. Barnard (1938: 220). Barnard also emphasized the significance of status and deference in this form of organization, noting both its positive and negative aspects (see Barnard 1946). Note: Barnard's term 'organizational personality' is opaque. It is best understood as signifying what more recent scholarship by Tajfel and Turner (1979) calls 'social identity' as distinct from 'personal identity': they point out that we all have several overlapping social identities as members of various groups, and the salience of each form of identity depends on the circumstances. Organizational personality can be understood as the identity that defines us as members of the organization.
27. See Mayo (1933).
28. The idea of the internal labor market goes back to the early part of the century, but it was not fully put in place until unions embraced it and government legitimized it (in particular in the course of The Second World War)—see Baron et al. (1986), Jacoby (2004).
29. See more extended discussions of paternalist bureaucracy in Heckscher (1995).
30. See Whyte (1956: 32 ff.); also Drucker (1973); Mayo (1933); Jackall (1988). The legal order during this period also based its concept of the rights and duties of employees on master–servant law.
31. The informal organization was extremely strong: most observational studies suggest that middle managers and blue-collar workers alike spent the majority of their time interacting with peers (to whom they had no *formal* connection) rather than with their superiors and subordinates (see Mintzberg 1973; Kusterer 1978; Dalton 1959). Our point here is that these informal relations were not *organized* well enough for knowledge production.

32. Mills (1951); Kanter (1977); and Jackall (1988).
33. The fraction of US 17-year-olds who had completed high school grew from 6% in 1900, to 57% in 1950, to over 80% by the end of the century.
34. These trends have been well documented as early as Bell (1973). The growth of knowledge value in the economy is suggestively highlighted in a startling figure developed by Margaret Blair: As of 1978, plant, property, and equipment (PP&E)—the core of production in the mass-production economy—accounted for 83% of market value of debt plus equity in the non-financial corporate sector, but by 1998, PP&E had fallen to only 31% of market value of debt plus equity (Blair and Kochan 2000: 1).
35. See, e.g., Burns and Stalker (1961); Bennis and Slater (1964); Lawrence and Lorsch (1967); Mintzberg (1979); Scott (1992); Daft (1998).
36. Arrow (1962); Stiglitz (1994).
37. Arrow and Hurwicz (1977); Stiglitz (1994); Miller (1992).
38. Alchian and Demsetz (1972); Williamson (1975).
39. For elaboration of and evidence for these large claims, see Adler (2001) and citations therein.
40. This account of the advance of institutions of science is adapted from Holton (1996: 58–77).
41. Re NUMMI and similar cases see Adler (1993), and Chapter 10 in this volume.
42. See, e.g., Schlesinger and Heskett (1991).
43. See, e.g., Reichheld (1996).
44. A study by a large consulting firm in 1999, based on 230 companies, found that their leaders were predicting that the percentage of sales through solutions would grow markedly in the four industries examined: telecommunications, media and entertainment, electronics, and banking. For example, the percentage of companies with 25% or more of sales through solutions was predicted to grow from 19% to 67% in electronics, and commensurately in the others.
45. See Foote et al. (2001). A similar argument with slightly different language is made by Ramirez (1999) and Ramirez and Wallin (2000).
46. The literature on alliances and business networks has grown very large over the last few years. See, for example, Brown et al. (2002); Gomes-Casseres (1994); Ring and Van de Ven (1992); *Organization Science* (1998).
47. Some firms did establish systematic rotational policies for their 'fast-trackers,' with the intention that they would know all parts of the company before advancing to senior management. This, however, never affected more than a small number of employees, and had little impact on the strength of interdivisional barriers.
48. The best-known paper on 'swift trust' is probably Meyerson et al. (1996); see also Sabel (1993) ('studied trust'); Giddens (1994) ('active trust'), Eccles (1985) ('rational trust'), Adler (2001) ('reflective trust').
49. On simultaneous and sequential engineering in auto production, see Clark and Fujimoto (1989); Womack et al. (1991). On Total Quality Management, see

Hackman and Wageman (1995); Mohrman et al. (1995). Cf. also Bennis and Slater (1998): they reflect the imperative discussed above for increasingly complex recombination of knowledge.

50. Margolis and Donnellon (1990).
51. While the rate of task force success is very hard to measure broadly—since task forces come in very different flavors and success has many forms—the difficulty in implementing them has been well documented in a number of observational studies: see Donnellon (1993); Heckscher (1995).
52. See Lee (1992).
53. In a sense these employees are 'cosmopolitans' as defined by Gouldner (1957); but unlike Gouldner's category they were intensely involved in the local community and held great influence in it—an indicator of the profound change in the nature of trust and relationships.
54. The emergence of collaborative community requires some moderation of the market principle in compensation policy: the interdependent nature of contributions in a collaborative community make it impossible to identify very precisely individual contributions and therefore impossible to tailor rewards sharply to individual performance.
55. Note that 'individualism' comes in two types: one is an absence of morality, a simple refusal to 'conform' to any superordinate obligations; the other, the individualism described by Weber, is a moral obligation to develop and maintain personal integrity and consistency. All sociologists and almost everyone else would argue that the first, non-moral form of individualism is unsustainable. Our claim is that the second kind of individualism, which has been crucial in defining Western culture at least since the Reformation, is (gradually) giving way to a new obligation of contribution.

    On attitudes towards free agents, see Heckscher (1995: 152 ff.).
56. In traditional communities (as Durkheim points out) organizing was directly a moral matter, with deviance leading immediately to moral outrage. This is a limited and rigid way of organizing. In the modern community, by contrast, Durkheim pointed to the realm of restitutive law—rules of interaction whose violation leads not to moral outrage, but rather to corrective action and learning. Process management is an extension of this kind of rule, operating increasingly beyond the economic sphere and extending into all public situations that involve knowledge-based collaboration.
57. Many early efforts in teamwork and participation tried to eliminate these sorts of differences by broadening everyone's skills so as to reduce knowledge differentiation; this has proved to be an impractical route.
58. Underlying this notion of 'control' is a cybernetic view drawn from Parsons. In a traditional bureaucracy the hierarchy controls the community in this cybernetic sense—the former frames and directs the latter—in a collaborative community the cybernetic relation is reversed. We want to underline, however, that this does not mean that community *replaces* hierarchy.

59. The prototypical case is GM: see Freeland (1996).
60. Examples of widespread strategic dialogue are cited below in n. 61.
61. For Ford, see Nasser and Wetlaufer (1999). For GE, see Bartlett and Wozny (2001); Elderkin and Bartlett (1993). For IBM, see Gerstner (2002); Palmisano et al. (2004).
62. See the classic formulation of J. D. Thompson (1967), building on March and Simon.
63. Parsons (1963). It is worth remarking that matrix management was a precursor of the kind of process management we are discussing, though it took only a first step: it recognized the existence of processes not mapped directly to formal hierarchy, but it tried to lock those processes into limited fixed structures rather than allowing them to be reconstituted as needed.
64. See Peiperl (2001); Bohl (1996); Wanguri (1995).
65. The notion of 'understanding' in this sense draws on many sources. Simmel (1950) in general was the master sociologist of understanding and its relation to trust. Habermas has more recently made it a centerpiece of his notion of communicative action, though he remains at a fairly abstract level. (Habermas 1984). In the recent literature on networks, Paul DiMaggio treats 'sympathy' as a key in building networks under uncertainty (1992: 126–7). Claudio Ciborra (1997), an important theorist of process, treats understanding as the most developed form of 'taking care,' which is critical to the success of group dialogues. Simmel notes that understanding can derive from motives other than personal caring: 'Innumerable times, [competition] achieves what usually only love can do: the divination of the innermost wishes of the other.'
66. The negotiation literature has developed this distinction of understanding from commitment, in the form of a phase of *discussing interests without commitment* (Fisher and Ury 1981).
67. On the concept of social character, see Fromm and Maccoby (1970).
68. Thompson (1967).
69. Weber is referring specifically to Calvinism as part of his general analysis of 'the spirit of capitalism' (1904/1958: ch. 4, section A: 'Calvinism').
70. Durkheim (1897/1951) conducted a famous sociological analysis of the connection between loss of social integration and suicide. Michael Maccoby's (1976) description of the dangers of loss of self in modern corporate leaders is very similar; see also his chapter in this volume.
71. Thus we will treat 'social self' and 'social character' as two sides of the same coin, and we will use both terms depending on the focus of analysis. 'Social character' focuses on psychological dynamics, 'social self' on the connection of those dynamics to social situations—both how they are generated by particular communities, and how they can be observed in relationships.

A related term that has been used in an extensive literature is 'self-construal' (e.g. Markus and Kitayama 1991). This is very similar to the idea of the 'social self,' though somewhat less connected to the psychological dynamics. We have chosen to use 'social self' mainly because it is more intuitively sensible and because it has a longer history going back to Mead.

72. On the theory of shame and guilt, see Scheff (2000); Parsons (1968); Lynd (1958).
73. Rothschild-Whitt (1979).
74. Furthermore, they have in practice been composed not of large associational networks but of very small groups who contribute almost all the code and who develop their own norms and enforcement mechanisms through constant interaction. Finally, open source has often failed in the absence of such forms of discipline: it has not worked in areas that are considered 'boring' by the hacker community. For an extended discussion of the limitations (as well as the strengths) of the open-source approach, see Nikolai Bezroukov, 'An annotated webliography on open source software development problems' (www.softpanorama.org/OSS/webliography.shtml, viewed 31 Aug. 2004).
75. As in all these patterns of expectations, a mutually reinforcing cycle helps hold it in place. Those lower show deference in part out of ingrained habit and belief, and in part from the rational expectation that if they don't they will be harmed by higher-ups who themselves expect deference. From the other end, those higher believe in the value of deference, but also believe that if it were given up those lower down would be rebellious or incapable of performing.
76. Hamel (2000).
77. See Chapter 10 in this volume.
78. On the rise of performance-based pay, see Lawler et al. (1998).
79. See, for example, 'Fears force employees to take initiative,' *USA Today*, 2 Mar. 1999. Steven Greenhouse, 'Workers are angry and fearful this Labor Day,' *New York Times*, 2 Sept. 2002.
80. See, e.g., Gordon (1996).
81. For evidence of failure of restructuring initiatives to lead to sustained performance improvement, see Chapter 12, n. 4. On the failure of top-down changes to affect culture, see Beer et al. (1990).
82. See Lawler et al. (1998).
83. See Stanley Holmes and Wendy Zellner, 'Commentary: the Costco way,' *Business Week*, 12 Apr. 2004.
84. See also Porter (1985: pt. III on 'horizontal strategy').
85. Adler and Ferdows (1992); Earl and Scott (1999); Collins and Porras (1994); and Davenport and Prusak (1998) document many techniques designed to encourage a bond of common identity and a norm of sharing needed for the easy flow of ideas across divisional boundaries.

86. e.g. Ashkenas et al. (1993: 240).
87. Stinchcombe (1985). Such hierarchical elements control not only product specifications but also the supplier's internal processes. Korczynski (1996), for example, documents a trend toward a low-trust combination of market and hierarchical relations between management contractors and building contractors in the UK engineering construction industry in the 1980s and 1990s. Hancké (1997) makes a similar diagnosis of the evolution of subcontracting relations in the French automobile industry.
88. e.g. *Organization Science* (1998).
89. Dyer (1996); Sako (1992); Helper (1991); Bensaou and Venkatraman (1995); Ring (1996, 1997). Korczynski's (1996) study, meanwhile, shows the converse: low-trust relations in the UK construction industry enabled schedule and cost improvements but not the creation of new knowledge.
90. Helper and Sako (1995).
91. Nelson (1988); Powell (1990); Liebeskind et al. (1996).
92. Sabel (1992).
93. 'An increasingly perfect division of labour objectively reduces the position of the factory worker to increasingly ''analytical'' movements of detail, so that the complexity of the collective work passes the comprehension of the individual worker; in the latter's consciousness, his own contribution is devalued to the point where it seems easily replaceable at any moment. At the same time, work that is concerted and well organised gives a better ''social'' productivity, so that the entire work-force of a factory should see itself as a ''collective worker.'' ' A. Gramsci, *Selections from the Prison Notebooks*, online at Marxist Writers Archives www.marxists.org/archive/index.htm.
94. For further elaboration of this argument, see Adler (2005). See also Harvey (2003), for discussion of accumulation by dispossession alongside accumulation by expanded reproduction.
95. For the period up to 1990, see Abrahamson (1997); Barley and Kunda (1992). These cycles can arguably be linked to long waves of the economic cycle: periods of rapid economic expansion correspond roughly to periods of management emphasis on control (scientific management to the post-1900 boom; systems rationalization to the expansion around the Second World War), and the periods of decline correspond roughly to an emphasis on commitment (welfare work to the crisis of the 1880s and 1890s, human relations to the Depression, employee involvement to the stagflation of the 1970s).
96. Relying here on Edwards (1979).
97. Hammer and Champy (1993) represents the 'anti-communal' phase; Champy (1995) and Hammer (1996) see a revisiting of the need for trust and commitment.
98. Nyland (1998).
99. See, e.g., Eisner (1993); Piore and Sabel (1984).

100. This analysis of the tension between economic forces and values has a long pedigree in sociological theory. Marx represented this as the interplay between the base and superstructure; Weber called it the economic and value spheres. The bulk of Weber's vast work was devoted to showing that, contrary to Marx's view, the value sphere or superstructure was not a mere reflection of economic interests but had an independent dynamic. He did not, however, disagree about the basic tension and interaction of the two spheres. Parsons's model of social development also reflects this tension: he sees a constant cycling from adaptive primacy (economic) through goal attainment (political) to the communal functions of integrating and pattern maintenance. Another interesting treatment of this same oscillation or cycling is Hirschman (1992), which posits a pendulum swing between public action and private interest.
101. Re inequality, see the historical tracing of the Gini index in 'Income and poverty,' *Left Business Observer*, 9 May 2000: www.leftbusinessobserver.com/Stats_incpov.html 16 Apr. 2004, 5:03:51 p.m. On the recent rise in inequality and income volatility, see also Andrew Hacker, 'The underworld of work,' *New York Review of Books*, 51/2, (12 Feb. 2004).

    The sequence in the USA is somewhat different from that in England and Western Europe. In the latter regions industrialization advanced rapidly in the first half of the nineteenth century, leading to strong anti-capitalist movements in the middle part of the century. In the USA, industrialization was slower to emerge and intertwined with the battle over slavery, so that the mid-century war was much less clearly about capitalism. Thus in the USA the 'first' and 'second' industrial revolutions overlapped more than in Europe: the great expansion of the Gilded Age was entwined with the growth of large corporations such as Standard Oil and the railroads. The main first major reform wave in the USA, the Progressive movement, was directed against corporations, or 'trusts,' whereas in Europe it was directed against factory abuses. But these differences are just variations on the pattern of economic–social oscillation described here.
102. See Greenwood's (1997) argument that the technological pattern resembles that of the earlier period.
103. Heskett et al. (1994); Schlesinger and Heskett (1991).
104. For more elaboration on stakeholder regimes, see Heckscher et al. (2003: ch. 12).
105. Bloom and Perry (2001).
106. Some efforts to envision a new stakeholder regime can be found in Heckscher (1988), Cobble (1991, 1994), and Heckscher et al. (2003). On the ways in which working-class association can stimulate capitalist productivity, see Wright (2000).
107. Berle and Means (1933).
108. Strathern (1996).

109. Lessig (2001, 2003); McAdams (2003).
110. Coleman (1987) on sharing of ownership rights to knowledge as creating new kinds of interdependency, challenging markets.
111. The thesis is hardly new. Gorz (1967) was a well-known proponent in the 1960s. We think he, like Durkheim, was too early.