

Are big companies becoming obsolete?

THE DAWN OF THE E-LANCE ECONOMY

BY THOMAS W. MALONE AND ROBERT J. LAUBACHER

IN OCTOBER OF 1991, Linus Torvalds, a 21-year-old computer-science student at the University of Helsinki, made available on the Internet a kernel of a computer operating system he had written. Called Linux, it was a rudimentary version of the ubiquitous UNIX operating system, which for more than a decade had been a mainstay of corporate and academic computing. Torvalds encouraged other programmers to download his software—for free—and use it, test it, and modify it as they saw fit. A few took him up on the offer. They fixed bugs, tinkered with the original code, and added new features, and they too posted their work on the Internet.

As the Linux kernel grew, it attracted the attention of more and more programmers, who contributed their own ideas and improvements. The Linux community grew steadily, soon coming to encompass thousands of people around the world, all

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sharing their work freely with one another. Within three years, this loose, informal group, working without managers and connected mainly through the Internet, had turned Linux into one of the best versions of UNIX ever created.

Imagine, now, how such a software development project would have been organized at a company like IBM or Microsoft. Decisions and funds would

By changing the way work is done, electronic networks may lead to a new kind of economy centered on the individual.

have been filtered through layers of managers. Formal teams of programmers, quality assurance testers, and technical writers would have been established and assigned tasks. Customer surveys and focus groups would have been conducted, their findings documented in thick reports. There would have been budgets, milestones, deadlines, status meetings, performance reviews, approvals. There would have been turf wars, burnouts, overruns, delays. The project would have cost an enormous amount of money, taken longer to complete, and quite possibly produced a system less valuable to users than Linux.

For many executives, the development of Linux is most easily understood (and most easily dismissed) as an arcane story of hackers and cyberspace—a neat *Wired* magazine kind of story, but one that bears little relevance to the serious world of big business. This interpretation, while understandable, is shortsighted. What the Linux story really shows us is the power of a new technology—in this case, electronic networks—to fundamentally change the way work is done. The Linux community, a temporary, self-managed gathering of diverse individuals engaged in a common task, is a model for a new kind of business organization that could form the basis for a new kind of economy.

The fundamental unit of such an economy is not the corporation but the individual. Tasks aren't assigned and controlled through a stable chain of management but rather are carried out autonomously by independent contractors. These electronically connected freelancers—e-lancers—join together into fluid and temporary networks to produce and sell goods and services. When the job is done—after a day, a month, a year—the network dis-

solves, and its members become independent agents again, circulating through the economy, seeking the next assignment.

Far from being a wild hypothesis, the e-lance economy is, in many ways, already upon us. We see it not only in the development of Linux but also in the evolution of the Internet itself. We see it in the emergence of virtual companies, in the rise of outsourcing and telecommuting, and in the proliferation of freelance and temporary workers. Even within large organizations, we see it in the increasing importance of ad-hoc project teams, in the rise of "intrapreneurs," and in the formation of independent business units.¹

All these trends point to the devolution of large, permanent corporations into flexible, temporary networks of individuals. No one can yet say exactly how important or widespread this new form of business organization will become, but judging from current signs, it is not inconceivable that it could define work in the twenty-first century as the industrial organization defined it in the twentieth. If it does, business and society will be changed forever.

Businesses of One

Business organizations are, in essence, mechanisms for coordination. They exist to guide the flow of work, materials, ideas, and money, and the form they take is strongly affected by the coordination technologies available. Until a hundred or so years ago, coordination technologies were primitive. Goods and messages were transported primarily by foot, horse, or boat, and the process was slow, unreliable, and often dangerous. Because there was no efficient way to coordinate disparate activities, most people worked near their homes, often by themselves, producing products or services for their neighbors. The business organizations that did exist—farms, shops, foundries—were usually small, comprising a few owners and employees. When their products had to reach distant consumers, they did so through a long series of transactions with various independent wholesalers, jobbers, shippers, storekeepers, and itinerant peddlers.

It was not until the second half of the nineteenth century, after railroad tracks had been laid and telegraph lines strung, that large, complex organizations became possible. With faster, more dependable communication and transportation, businesses could reach national and even international markets, and their owners had the means to coordinate

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