DEC Is Dead, Long Live DEC

Lessons on Innovation, Technology, and the Business Gene

The Lasting Legacy of Digital Equipment Corporation

EDGAR H. SCHEIN
with PETER S. DELISI, PAUL J. KAMPAS,
and MICHAEL M. SONDUCK

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Preface

My collaborating authors and I have, from the very beginning of this project, struggled with the question of who is our audience and who might benefit from the lessons that one can glean from such a story of one company. We have identified many possible audiences—founders and entrepreneurs; investors; executives who are trying to change their companies to become more innovative, or perhaps more efficient and less innovative; management theorists interested in the growth, evolution, and death of an organization; organizational consultants; students going into business and wondering what sort of a world they might be entering; professors interested in teaching about leadership, organizational culture, and technology; and, of course, Digital Equipment Corportion (DEC) alumni, many of whom are still wondering what happened and why.

My own answer to the question of audience is that we are writing to the *thinking* and *reflective* person in all of the above categories. Too many of our business books just focus on what to do. They make glib assumptions about a situation that an organization might face and propose a few action steps to solve the problem. The DEC story should make you think and reflect and make you aware of the tough choices and trade-offs that have to be made in the real world all the time. The DEC story illustrates that every company's evolution is unique but that certain kinds of events are universal because they derive from the inevitable consequences of success, growth, and age. What DEC should have done, what another company in the same situation should or might have done, what you should do in your unique organizational situation requires some deep thought and insight into the dynamics of organizational evolution.

As I hope the reader will see, the implementation of even the simplest prescriptions like "Have a strategy," something all management books agree on, becomes quite complex in the context of a particular company, with a particular history, and with particular personalities that create a certain kind of culture.

My contributing authors and I have had many arguments about what are the "lessons" to be learned from the DEC story about governance, leadership, entrepreneurship, technology, innovation, strategy, marketing and, perhaps most important, organizational culture. What makes the DEC story both so interesting and so complicated is that there are lessons to be learned about all of these things, but they don't fall out nicely into ten principles, or five things to avoid, or seven steps to business success.

One of our interviewees who spent most of his career within DEC kept reminding me that "DEC was a coat of many colors, so don't try to write a simple one-dimensional history of it. It won't work." He was, of course, correct, and we found this out the hard way in our own discussions of how to write this book because each of us saw DEC from our own perspective, drew our own lessons, and our his own biases in how the story should be told. We tried to integrate these points of view, but just as DEC failed at many levels to integrate the agendas of its various subgroups, so we also failed in this task and have, therefore, a story that is itself also a coat of many colors.

This preface is written in the first person because I felt that ultimately my outsider perspective and my interest in organizational culture and leadership added a dimension to the analysis that is missing in most books about organizations and management. I have tried to learn from my supporting authors and have encouraged them to write their own views to be included wherever possible, but in the end I tried to write what seemed to me to be the aspects of the story that are typically not told by insiders, either because they are not of interest to them or because, by being insiders, they cannot see their own culture sufficiently clearly to understand its power and ubiquitousness.

So we have here a book about culture and leadership, a book about technology, innovation, organizational success, and failure. The DEC story is to me a story of how technology, organizational growth, and business functions such as strategy, marketing, and finance not only interact with one another but are deeply colored by the cultural forces that are at play in the organization. To grasp this *interplay* requires something from the reader—some thought and reflection. The lessons are there for all the audiences mentioned above, and we try to bring them out as clearly as possible, but none of these lessons are simple because, in the end, real organizations founded and run by real people are not simple. This book is an attempt to pay tribute to those real people who were solving difficult real problems and to identify how their efforts left an important legacy.

Edgar H. Schein
May 2003

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Acknowledgments

My collaborating authors, Peter DeLisi, Paul Kampas, and Michael Sonduck, not only contributed directly to various chapters of this book but were also invaluable in helping me to think through how to tell the DEC story. They each had different experiences and different biases but our long discussions and exchanges of phone calls and e-mails gradually enabled me to think through how best to tell the story. The Sloan School of Management's research committee generously supported this three-year project, and my colleague John Van Maanen provided helpful comments on the final manuscript.

My most heartfelt thanks go to Ken Olsen, the founder of Digital Equipment Corporation. Not only did his willingness to keep me around as a consultant for thirty years enable me to perceive what was going on in DEC in a way that most outsiders never have a chance to see, but his support for this book was unflagging. He has spent many hours in the past couple of years giving me his thoughts on what happened and why, sent me many documents, and encouraged me to reveal to the world how his vision of science and technology created a unique kind of organization and culture.

I am also greatly indebted to Rod Sutherland, who turned over to me twenty years worth of DEC reports, management memos, and other materials that he had accumulated in his marketing role. I sent out general inquiries through the DEC Alumni Association and thank them for helping me to locate many of my informants. Gordon Bell was particularly helpful in structuring the technical side of this story and in providing his "final words" on what he thinks really happened. I am also especially grateful to Tracy Gibbons for offering to write a chapter on how DEC contributed to leadership development. We also received great help from Reesa Abrams, Debra Amidon, Crawford Beveridge, George Chamberlain, Jeff Clanon, Jim Cudmore, Denzil Doyle, Pier Carlo Falotti, Bob Ferrone, Jay Forrester, Steve Frigand, Sam Fuller, Rose Ann Giordano, Bob Glorioso, Bill Hanson, Win Hindle, Bea Mah Holland, Michael Horner, Ann Jenkins, Bill Johnson (BJ), Jeff Kalb, Peter Kaufmann (now Peter Chipman), Andy Knowles, Ed Kramer, John Leng, Jesse Lipcon, Sue Lotz, Kevin Melia, Bob Metcalfe, Stan Olsen, Dave Packer, Jamie Pearson, Bob Puffer, George Roth, Grant Saviers, Willow Shire, John Sims, Ron Smart, Jack Smith, Bill Strecker, and Bob Supnick. I also want to thank the many people who volunteered to help but were in the end not called because I ran out of time. I do not pretend that I have captured the whole DEC story, and I apologize to those who feel they have crucial insights that I somehow overlooked or ignored.

My publisher, Berrett-Koehler, and Steve Piersanti in particular were most helpful in formulating how to present this story. The five reviewers who saw the first draft were outstanding in providing both general comments and detailed suggestions. I found that I used most of what they suggested.

I have thought about the lessons of the DEC story for many years and have worked on pieces of this book for a long time. My DEC experiences were crucial in helping to formulate my concepts of consultation, organization development, and organizational culture. For this I will be forever grateful to Ken Olsen; his trust in people allowed me full access to all of DEC.

Producing this final manuscript has been difficult because there are potentially so many materials and stories to be processed. As the reader will discover, I ended up leaning heavily on my first-hand experience because I found that materials and stories always had some degree of spin in them that was not always easy to decipher. To ensure that I was not too far off in my accounts I sent various chapters to select people, and I thank them for their responses and corrections.

As always when I go into a writing funk my wife has to deal with my psychological absence. I am forever grateful for her patience and support during those times. I have also sworn never to write another original book based on historical data.

Edgar H. Schein
May 2003

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one

Purpose and Overview

The story of Digital Equipment Corporation (DEC) is fundamentally a forty-year saga encompassing the creation of a new technology, the building of a company that became the number two computer company in the United States with $14 billion in sales at its peak, the decline and ultimate sale of that company to the Compaq Corporation in 1998, and the preservation in its many alumni of the values that were the essence of the culture of that company. (The company's official name was Digital Equipment Corporation, and its logo was "D.I.G.I.T.A.L." or "Digital," but common usage around the company was typically "DEC," so we will adopt that usage throughout this book.) That culture was an almost pure model of what we can think of as a "culture of innovation." It created the minicomputer revolution and laid the groundwork for the interactive computing that today is taken for granted. The managerial values and processes that were at the heart of that culture produced an almost uniformly positive response in DEC employees throughout its history.

The DEC culture emphasized—to an extraordinary degree—creativity, freedom, responsibility, openness, commitment to truth, and having fun. Not only were these values central in its early formative years but even when it was an organization of 100,000 people and over $10 billion in sales, these values held firm. DEC's management model empowered the people who worked there, and most of the employees internalized these values and expressed them in their careers with other companies.

In choosing the title of this book, we thought about the British Empire, which disappeared as a major political entity yet instilled its values in the former colonies that eventually became stronger than the parent. DEC disappeared as a company, yet former DEC engineers and managers populated the computer industry and became major contributors to other companies. The DEC culture lived on in the "colonies" that it spawned or helped to develop.

WHAT IS TO BE LEARNED FROM THE DEC STORY?

The lessons to be learned from this story are many. In our effort to learn from it, we will be asking the following questions:

1. How is a culture of product innovation created, and how does it evolve?
2. What are the essential ingredients of such a culture in terms of the managerial values and practices it displays?
3. What contributions did DEC make to the growing technology of computing and to management practices?
4. How did the "genetic structure," the DNA of such a culture, produce extraordinary results without containing what can be thought of as a pure commercial or "money gene"?
5. How were the traditional business functions handled in such a culture of innovation?
6. How did success, growth, and age create particular organizational problems that had to be managed?
7. How did technical progress create changes in competition and in the marketplace that required cultural evolution?
8. How was that cultural evolution inhibited by the very success that the organization experienced?

9. How is it that essential elements of a culture survived, while DEC, the economic entity, disappeared?

Why is it important to learn more about these nine issues? Primarily because every organization as it matures goes through developmental stages that require the making of choices, and these choices often involve difficult trade-offs between conflicting values. Yet these choices determine the future of the organization. The DEC story is a unique opportunity to study in some detail how the choices made at various developmental stages had both desirable and undesirable consequences. Entrepreneurs, investors, consultants, managers, and organization theorists can all benefit from seeing how complex these choices can become when one looks at one organization in detail and over a long period of time.

WHY IS DEC AN ORGANIZATION WORTH STUDYING?

DEC as a Classic Case of Entrepreneurial Leadership

One of the key values in the DEC culture was "Do the right thing." In emphasizing "Doing the right thing," the DEC culture created a unique climate that stimulated leadership at all levels. The DEC story is therefore also a story about the triumph and, in the end, the "tragedy" of technical, organizational, and social leadership. Warren Bennis, the eminent researcher of leadership, has pointed out that the difference between leadership and management is that managers "do things right," while leaders "do the right thing." In DEC "Do the right thing" was a license both to insubordination and to leadership. As we will see, DEC, more than any other company of its size and scale that I am aware of, created leaders at every level of its organization. And, as we will also see, a culture built around leaders creates its own turmoil and difficulties.

The DEC story is about leadership not only in technical innovation but also in management practice, manufacturing, community relations, affirmative action, sales and service practices, and, perhaps most important, human development. Ken Olsen, DEC's founder, articulated values that are frequently touted as being the essence of what a good organization should be, and it maintained those values for thirty-five years. Those same values created in the end an economic problem that led to disaster for the company. But the DEC story leaves us with two huge questions. Would it have been possible to save the economic entity without giving up those values, that is, without destroying the culture? And, in the end, what is more valuable—the culture or the company?

Fundamental questions also arise as to whether DEC's ultimate contribution was to technology or to management practice. Did the technological vision dictate a certain management style, or did a certain management style enable extraordinary technical achievements? Was it Ken Olsen's technical vision that created DEC's successes, or was it his organizational genius that fostered what came to be known as a world-class engineering organization under the leadership of Gordon Bell? Was it the culture that Olsen created that attracted talents like Gordon Bell and made possible the building of an organization in which world-class engineers wanted to work? Or was DEC's success the product of the interaction of Ken Olsen's and Gordon Bell's visions and management practices?

A Classic Example of Organizational Culture Dynamics

Why focus on culture? Culture creation and culture change are a constant source of preoccupation these days for entrepreneurs and executives. Hardly a day goes by without seeing a newspaper story or a book announcement about an executive who is "changing the culture" or "creating a new culture" in his or her company, usually to stimulate innovation in a rapidly changing technical environment. We see calls for "service cultures," "cultures of empowerment," "teamwork cultures," "cultures of openness," "trust cultures," and, most recently and emphatically, "cultures of innovation." Everyone seems to want to know how to create innovation, especially in older companies that seem to have lost their innovative edge. And it is increasingly recognized that culture creation and culture management are the essence of leadership.

One of the main preoccupations of entrepreneurs and company founders is how to "create the right culture" or "preserve the culture that they have created." Yet little is known about creating or preserving a culture. Leaders in more mature companies seem to believe that announcing a culture of innovation from a position of influence is sufficient to make it happen or that they can "change" culture to fit the new requirements of the market. Few of these executives question whether cultures of innovation formed around products, processes, or management systems would actually solve the particular business problems that they are encountering. Few of them question whether certain cultures should be retained even if they produce economic difficulties.

We don't have a coherent theory or set of concepts for culture "process." We don't understand well enough how culture works—how it is created; how it evolves; how it changes; and how it influences strategy, structure, and business processes. It is precisely this absence of knowledge that makes executives nervous about culture as a concept. Culture appears to be something that is difficult to control; hence, it is often avoided when strategy and process are discussed. Yet as we will see, in a mature organization culture pervades everything, even the most fundamental economic decisions that the board and senior executives make. A better understanding of cultural dynamics in relationship to technology and organizational evolution is therefore not a choice; it is a necessity.

One can write about how culture and leadership work in the abstract, providing case illustrations as one goes. I have done this in two of my previous books, *Organizational Culture and Leadership* (1992) and *The Corporate Culture Survival Guide* (1999). What remains to be done is to look at one or more of these cases in greater depth to appreciate the subtle dynamic processes that are at work in organizational cultures and to show how these processes explain the rise and fall of organizations, particularly ones that seemed to be on the road to success yet could not sustain themselves. And it is especially important to understand better the role of leadership in the creation, maintenance, evolution, and ultimately destruction of a given organizational culture.

One of the most dramatic of these cases is DEC, an organization my contributing authors and I came to know intimately as consultants or employees or both from 1966 to 1992. DEC virtually transformed the computing landscape and rose to be the number two computer maker with a $14 billion sales volume in 1992, which put it in the top fifty corporations in the United States. Ed Roberts in his seminal book on high tech entrepreneurs calls DEC "the most successful MIT [Massachusetts Institute of Technology] spin-off company" (Roberts 1991, p. 12). Ken Olsen was called by *Fortune* magazine in 1986 "arguably the most successful entrepreneur in the history of American business." DEC's economic rise was accompanied by a myriad of contributions to technology, to management theory and practice, to production processes, to the utilization of women and minorities in industry, and to community relations. Common to all of these contributions was a set of cultural dynamics that made extraordinary things possible. What can these cultural dynamics teach us?

Culture works its influences in many ways. First of all, DEC was created at a time in U.S. society when social values were moving toward more individualism and where technology was facilitating this trend. Not only was Ken Olsen, the key architect of the company, brought up at a time when certain postwar values were salient, but the whole design thrust of DEC's products toward distributed interactive computing reflected decentralization, rejection of formal authority, empowerment of the individual, and, at the same time, the networking of individuals for greater efficiency. Peter DeLisi, coming from IBM, noted immediately that the IBM mainframe was symbolic of authority and centralization, while DEC's time-shared and networked computers were symbolic of individualism and freedom (DeLisi 1998). In other words, product design does not occur in a vacuum; it reflects social trends and social issues. When DEC appeared on the scene, social norms supported and stimulated the kinds of products that were designed.

DEC as One of the First Dot-Coms: A Knowledge Company before Its Time

As the world gets more complex, organizations are more than ever dependent on knowledge workers and knowledge management. Many observers and analysts of DEC saw it as one of the first and most vivid examples of a knowledge-based company with a culture in which knowledge creation and management were highly valued and in which networking and open exchange of knowledge was a central management principle. (Debra Rogers Amidon noted this in a 1991 management memo that is reproduced in appendix C. Two of the first books on networking as a business organization concept were published by DEC employees Jessica Lipnack and Jeffrey Stamps [1993, 1994]. Debra Amidon has also published two books on the "knowledge economy," based on insights first gained at DEC [Amidon 1997, 2003]). Several alumni have pointed out that because of DEC's early use of networking, it was one of the first companies ever to be assigned a "dot-com" address by the U.S. government. As we will see, there are many lessons to be learned from DEC, both about how one creates an effective knowledge-based company and what managerial dilemmas and dysfunctions can arise in such an organization as it gets larger and more differentiated. Even though DEC failed as a business, the management systems and principles it instituted around networks and knowledge management are seen by many as a blueprint for how future organizations will have to be designed and managed. In particular there are lessons for decision-making theory. Knowledge workers operate from different premises when they have to reach consensus in a network in the absence of hierarchical authority.

DEC as a Classic Case of Values-Based Management

Much is written these days about values-based management and the need for management to clearly articulate its values. DEC is a classic case of an organization that was built on its founder's very clear set of values. Ken Olsen's values were written down, articulated throughout DEC's history, used explicitly in the training and socialization of new employees, restated explicitly in company documents of all sorts, and adhered to with a passion right to the end. In most organizations there is a disconnect between articulated values and actual management practices. In DEC, to a surprising degree, the values were reflected in actual work practices and became thoroughly embedded in the culture. Many DEC values had a strong moral imperative, which gave them stability and which makes it possible to see both the strengths and weaknesses of this degree of values-based management.

DEC created what would, by any definition, be thought of as a strong corporate culture. The basic question then is to what extent such a culture can evolve as technology and organizational requirements change. An even more fundamental question is whether such highly valued managerial practices should evolve and change. Should values change to support organizations, or are organizations an expression of human values? And if they cannot sustain those values, should organizations die?

DEC as a Classic Case of Technological Evolution to Commodification

The DEC story illustrates clearly the difficult challenge of modifying an organization to adapt to changing market conditions as its own technological innovations create new markets. Especially difficult is the move from a culture of innovation, based on one set of managerial values, to an organization geared to producing commodity products that typically require a different set of managerial values and practices. As Paul Kampas's analysis in chapter 9 shows, the failure of DEC's culture of innovation to coevolve with changing market conditions lead to inefficiencies and ultimately to economic failure. The very success of the early innovation created competitive forces that changed the nature of the innovation, stimulated disruptive technologies and market demands, and therefore created a need for organizational transformation. That transformation may have been beyond the organization's ability or will to manage, even if the leadership recognized the need. Could DEC have survived? We will see that the answer to this question is fraught with complexity and lessons for both young and mature organizations.

Was DEC a Case of Strategic Myopia or a Case of Deliberately Diffuse Vision?

In its early years DEC had a clear technical vision built around high-quality, new, and innovative products. The market supported this vision and started DEC on a thirty-five-year path of financial success. Eventually, though, the market evolved, and DEC found itself in strategic turmoil. Some argued that DEC needed to focus and stop trying to do everything, while others argued that DEC's ability to continue to produce powerful innovative products across the board was precisely its strength and that therefore it had to continue to support a wide range of innovations.

DeLisi feels that this issue was complicated by the lack of a strategic process that would resolve the dilemma and enable the company to set priorities, as he points out in appendix D. Olsen and other senior executives always believed that DEC had a strategy, but, according to DeLisi, they did not in fact understand what business strategy really is, how one forges it, or why it is needed more and more as the organization grows and matures. Most managers use the concept of *strategy* glibly without considering how one actually formulates strategy and what functions it must perform for an organization at different stages of growth. And then the question arises: what is "strategy" in a peer-to-peer network such as DEC attempted to maintain, even on a large scale?

DEC as an Illustration of Classic Problems of Entrepreneurial Succession, Governance, and the Role of the Board

The recent rise and fall of dot-coms highlights the problem of how investors and entrepreneurs can and should relate to one another. How long should an entrepreneur be in control of his or her company? When is an optimal time to go public and, if successful, how should the founder relate to an outside board of directors? When should a founder be replaced by professional management? What are the problems of governance at the different stages of an organization's evolution? How do technological changes create new dilemmas of governance?

The DEC story bears directly on these questions, especially on the role that the initial investor plays in controlling who is on the board even after the company has gone public and the role that the founder plays in selecting board members. As we will see, the relationship between General Georges Doriot in the venture capitalist role, the board members he selected, and Ken Olsen as founder and chief executive officer (CEO) created a complex "governance system" that had both strengths and weaknesses. The DEC story raises questions about how a board can and should evaluate the ability of the founder to manage a growing and mature business, when and how succession problems should be raised, and what kind of manager should succeed a founder. In the late 1980s and early 1990s DEC faltered financially, which raised these very issues. There is much to be learned from how the scenario played out and how Ken Olsen's successor in 1992, Robert Palmer, managed in the years until DEC was bought by the Compaq Computer Corporation in 1998.

DEC'S FATE: THE RESULT OF ROOT CAUSES OR A COMPLEX INTERDEPENDENT FORCE FIELD?

In the managerial world there is a great need to find simple explanations that will enable us to avoid the errors of the past, but simple answers are usually so abstract that they do not really enlighten us. DEC's demise has been explained very simply but not convincingly. One simple explanation is that Ken Olsen in his later years lost his vision, failed to take appropriate action, and stuck to values that were no longer appropriate for the business situation. This explanation turns out to be a gross oversimplification and is, to a considerable degree, incorrect. We will never know what might have happened if Olsen had left ten years earlier, but, as this analysis will show, what happened to DEC in the 1980s and beyond was predictable from events that could be observed already in the 1960s, and much of the difficulty that DEC ran into was endemic to successful growth and differentiation, based on a culture and management system that employees and managers alike really liked, valued, and wanted to preserve at all costs. The culture did not coevolve with the technology and the organization. We need to understand better all the forces that made the culture so strong and the forces that kept it from coevolving, and that takes us well beyond Olsen and his own behavior, as we will see.

Many other so-called root causes have been proposed to explain DEC's sharp decline. "Failing to see market changes," "arrogance," "failure to control costs," "lack of strategic direction," and other explanations abound, but the question remains: if any of these diagnoses are correct, why did these failures occur? What underlying cultural dynamics were operating to explain why DEC "missed the PC market opportunity," why DEC "chose to stay with a proprietary system" rather than embracing "open architectures," why DEC in its later years "was not able to achieve a clear sense of strategic direction"?

Paradoxically, even as DEC was declining as an organization, it was creating projects that led to state-of-the-art new products and organizations—AltaVista, the Alpha chip, and the Enterprise Integration Service Organization, to name just three. Ex-DEC executives were increasingly playing key roles in other organizations in the growing computer industry. When these DEC alumni tell you that they learned critical lessons about how to manage during their years at DEC; when they choose to get together in meetings to reminisce about the good old days at DEC; when they use their alumni directory to maintain contact with friends from the DEC years, it says something about the stability of the culture that Ken Olsen and the early leaders of the company fostered. What was so special about this culture?

The lessons to be learned here are about how culture works at different stages in an organization's life cycle. The very same processes can have very different outcomes at different times in the life of an organization. Culture is a complex force field that influences all of an organization's processes. We try to manage culture but, in fact, culture manages us far more than we ever manage it, and this happens largely outside our awareness. The most dangerous error in the analysis of culture is to overlook its tremendous yet invisible coercive qualities and its extraordinary stability. The DEC story provides an opportunity to examine culture as a complex force field and to bring to awareness forces that are often ignored.

THE "DATABASE"

Most of the DEC story will be told from the point of view of participants who worked in the company. I worked as a consultant to Ken

Olsen and the Operations Committee from 1966 to 1992. I spent many weekends with the entire top management of the company at the various Woods Meetings that occurred over the years and was involved in a variety of projects in different groups and functions within DEC. Though Ken Olsen was the primary client, his style made it not only possible but also mandatory to treat the entire organization as a kind of "ultimate client," which resulted in meeting many managers and employees from many functions over the years. As will be noted in various chapters, my experiences within DEC were also instrumental in evolving my own concepts of *organization development* and *process consultation* (Schein 1987, 1988, 1999b).

Peter DeLisi was recruited in 1977 from IBM into the role of a product line manager. He later held positions in sales, sales training, marketing, and as a consultant in Enterprise Services. He left the company in 1993. Paul Kampas's career at DEC spanned engineering, strategic planning, and competitive analysis from 1976 to 1994. Mike Sonduck worked primarily in manufacturing from 1976 to 1981 as an internal organization development consultant.

During 2000 and 2001 we conducted over fifty intensive interviews with senior managers and with key engineers around whom so much of the story evolved. I spent many hours with Ken Olsen in 1999 and 2000 reminiscing about past events and trying to make some sense of them. Olsen strongly supported this project because he felt that the real story of how DEC succeeded and what caused its decline had not been told. Olsen the scientist wanted a more "scholarly" analysis even though he realized that some of that analysis would involve criticism of him and some of his decisions. He wrote many memos articulating his managerial philosophy, and these will be liberally quoted throughout the text.

In June 2001 the Computer Museum of Menlo Park, California, sponsored DECworld 2001, a two-day conference attended by two hundred DEC alumni, including many of its former senior managers and engineers. The reminiscences, formal talks, and informal conversations provided valuable input to me in thinking through this project. Perhaps most remarkable of all was the high attendance and the

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