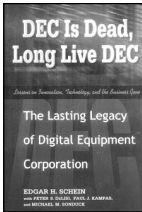




RISING FROM THE ASHES OF DIGITAL

BY GREG HENNESSY

**DEC Is Dead, Long Live DEC**

by Edgar Schein et al.

Ask three people who worked for Digital Equipment Corporation (Digital or DEC) what went wrong during the rise and fall of one of America's pioneering computer companies, and you are likely to get at least four answers. But as is the case with any complex system, the "true" story about DEC can only be reached by honoring each perspective as a lens on the system and combining them to build an internally consistent "big picture." In *DEC Is Dead, Long Live DEC: The Lasting Legacy of Digital Equipment Corporation* (Berrett-Koehler, 2003), MIT professor Ed Schein and supporting authors Peter DeLisi, Paul Kampas, and Michael Sonduck weave together a myriad of disparate views to gain insight into what went wrong when everything seemed so right.

Rarely will a company retrospective be written by someone whose involvement with an organization's senior management team can compare to Ed Schein's relationship with DEC. From 1966 through the early 1990s, Schein coached DEC's senior management team on problem solving and worked with founder and president Ken Olsen on a wide range of other matters relating to organizational behavior. Schein's perspective on DEC is supplemented by those of the supporting authors, a bevy of historical documents, and interviews or correspondence with an extensive list of former DEC employees.

All told, what emerges from *DEC Is Dead* is an insightful, three-dimensional picture of Digital through its

growth and maturity. Although the book is well organized and well written, be prepared for some hard thinking. Unlike so many business case studies that oversimplify the story, *DEC Is Dead* presents a sophisticated view of the company and rich lessons for other organizations.

Three Developmental Streams

Schein centers his analysis of Digital on three developmental streams that can be used to uncover the forces behind the evolution of any organization: technology, organization, and culture. Here's how the author describes these streams:

The Technology Stream. The technological environment in which a company operates and its own contribution to that environment through its products

The Organizational Development Stream. The ways in which an organization working in this technological context begins, grows, evolves, and, in the case of DEC, dies; the structures and processes that result from success, growth, size, and age

The Cultural Stream. The founding values that are shared through early and continued business success and eventually become embedded as shared, taken-for-granted assumptions about how an organization should be run

The author's primary proposition is that early on, these three streams were aligned at Digital, creating a highly innovative and entrepreneurial organization. But the streams evolve at different rates. Technology can advance rapidly, sometimes through spurts of extremely rapid change. Culture, on the other hand, is slow to change; by serving as the "brakes" on an organization's development, it can gradually erode the company's capability to suc-

ceed in the marketplace and can cause an increasingly poor alignment among the three streams.

At DEC, the powerful culture stream had served the organization well during the formative years of commercial computing. But following the emergence of open architectures, microprocessors, and numerous other innovations in the industry, the culture became a barrier to making the changes in the technology and organizational streams that were required for ongoing success. A look at DEC's formative years describes the culture and how early success entrenched the cultural beliefs.

The Early Years

Technologically, DEC was at the cutting edge and was responsible for many of the innovations in computing that moved the industry from mainframe to networked minicomputers. Its engineering prowess enabled the company to continually churn out new products that delighted the technically oriented buyers of the era.

Organizationally, DEC was structured around product lines, driven in large part by the engineering focus of the leadership team. Supporting business functions, such as finance and marketing, were centralized. Decision-making was decentralized, with Ken Olsen preferring to let his management team wrestle things out. Olsen typically played the role of devil's advocate, challenging any stance his managers would take to ensure that it was robust. Because the organization was still relatively small, local leaders felt responsible to the whole of DEC, and decentralized decision-making usually resulted in decisions being made by the most informed party.

Underlying the technology and organizational streams was DEC's engi-

neering-oriented culture, which adopted many traits from MIT. As Schein makes clear in his account, in the early years, there was tremendous harmony among DEC's three streams. The culture suited the organizational structure, which in turn buoyed an engineering effort that was giving the nascent IT market well-made and highly desirable products.

Resistance to Change

Nevertheless, as the marketplace evolved and the technological context shifted, the strong culture impeded DEC's ability to match these changes. Success in its early years reinforced the belief in and support of the "DEC way of doing things." Any attempt to effect a change that violated a core cultural tenet triggered the "cultural immune system," a host of behavioral responses that resist the intended alteration. The statement "That's not the way we've done it before" is perhaps the most common example of an immune system response. Such responses are not explicitly designed by anyone; rather, they usually arise from the well-meant defense of an organization's core cultural assumptions.

Perhaps the most important example of how the dominant culture was hampering the organization's development had to do with marketing. Because like in many engineering-dominated environments, marketing was almost a bad word at DEC, early attempts to strengthen its role were met with stiff resistance. DEC engineers held the long-standing beliefs that good products will sell themselves and that customers just needed to be educated on the features and quality of DEC products in order to be persuaded to choose them. Marketing executives arrived, found it virtually impossible to make a dent in the way DEC's products were presented, and left for more receptive environments. Meanwhile, DEC was beginning to fall behind its competitors in terms of technological innovation and fulfillment of customers' needs.

Too Little, Too Late

By the time Olsen left DEC in 1992, the alignment between technology,

organization, and culture had deteriorated dramatically. In an effort to save the company, new CEO Robert Palmer made wholesale changes to the organization and culture in order to bring them in line with the realities of the current marketplace. Many DEC employees, recognizing that the changes meant an end to the company they knew, moved on to other firms in the computer industry. Although these changes were inadequate to provide for DEC's survival as an independent entity, they helped the company hang on long enough to be acquired by Compaq in 1998.

Lessons Learned

What does the DEC experience teach us? Schein identifies 15 lessons for other organizations (see "Lessons from DEC").

Depending on the reader's background and interests, *DEC Is Dead* is more than a comprehensive case study of one company's growth, maturity, and eventual decline. Organizational development consultants are offered fascinating historical accounts of

Schein's early innovations in the realm of change management and process consultation. Leadership coaches can draw insight from the book's extensive coverage of Ken Olsen's management and leadership style and its strengths and weaknesses across time. System dynamicists are offered a detailed example of how structure drives behavior. And strategists can benefit from seeing the company's evolution from an entrepreneurial organization with an emergent strategy to one with a more modern, analytical one. The richness of the tale—and of Schein's telling of it—will surely make it a classic for a variety of audiences long after the computer industry has moved on to its next set of established technologies and companies. ■

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LESSONS FROM DEC

- Don't judge a company by its public face.
- A culture of innovation does not scale up.
- The organization must either find a way to spin off small units that continue to innovate or abandon innovation as a strategic priority.
- A culture that breeds success becomes stable and embedded even if it contains dysfunctional elements; changing the culture necessarily means changing key people who are the culture carriers.
- Cultures are sometimes stronger than organizations.
- A successful technical vision will eventually create its own competition and therefore changes in technology and market conditions.
- Successful growth based on a technical vision will hide business problems; recognizing these problems will not necessarily produce remedial action.
- If a growing business lacks the "business gene" (a set of behaviors and skills that drive profitability-oriented decision-making), the board must act to introduce that gene.
- If you try to do everything, you may end up not doing anything very well.
- How the market evolves may not reflect either the best technology or the most obvious logic.
- A technical vision that is right for its time can blind you to technical evolution.
- The value of "listening to your customers" depends upon which customers you choose to listen to.
- The type of governance system an organization uses must evolve as the organization matures.
- One cannot understand an organization's success or failure without thinking systemically and considering a number of factors in combination.
- Knowledge workers cannot make efficient decisions together.