

Chapter 5 Building a Framework for Innovation

The climate in which I operated, the physical facilities, the milieu made all the difference in productivity.

—Jack Rabinow, *Inventing for Fun and Profit*

The scope and depth of innovation in Control Data was very great indeed. To a large degree, that innovation was not in the form of invention—new creations or discoveries. Rather, most innovations with known technologies worked in novel ways. There were exceptions. Jacob (Jack) Rabinow was an inventor of the first rank. A quote from his book *Inventing for Fun and Profit* appears at the head of this chapter. When Control Data acquired his company, Rabinow Electronics, in 1964 Jack was fifty-four years old and had already achieved wide acclaim for his patents. He was of Ukrainian descent, emigrating with his family from Russia in the wake of the 1917 revolution. The family first went to China, and then to the United States in 1921. He received his bachelor's and master's degrees in electrical engineering from the City College of New York.

Among his many noteworthy inventions were the first magnetic disk computer memory; a mechanism for the automatic regulation of clocks used in automobiles, the automatic letter sorting machine used

by the U.S. Post Office; the so-called straight line phonograph, whose cartridge moved along a straight track rather than at the end of a swing arm; and the creation that brought Jack and Control Data together, a unique methodology for optical character reading machines. He became a vice president of Control Data, and was head of its Rabinow Advanced Development Laboratory. In addition, outside of his Control Data role, he established RABCO, a company to manufacture his straight line phonographs. RABCO was subsequently sold to the Harmon-Kardon Corporation. Over his lifetime he accumulated 230 patents, a remarkable achievement!

In his quote at the head of the chapter, Jack uses the words “climate,” “physical facilities,” and “milieu” to describe the reasons behind a high degree of productivity at Control Data. More broadly, there are two general influences on attitudes and behavior: the person and the situation. There is a tendency to think of ourselves as autonomous actors who make our way in the world based on a constellation of character traits. We sometimes fail to see the extent to which our actions are regulated by context. Yes, we are sentient actors but always situationally placed. To ignore what the company is implicitly telling us to think and do through its overall organization is to miss a great deal of how innovation is able to surface in social settings.

There is no truly satisfactory word or phrase to describe the explicit and implicit organizational policies and practices that make up the framework within which a group of people try to carry out the task of meeting an economic need. The word “organization” is insufficient. To most people it simply means a hierarchy of lines of authority depicted in some chart. “Culture” likewise is incomplete since it involves only the values and mores of the organization. “Infrastructure,” while sounding a bit like something in the province of a mechanical design engineer, is a more promising as well as more encompassing term.

INFRASTRUCTURE

The thread of innovation should be cohesively entwined in all that constitutes the corporate infrastructure in a manner that is consistent with the corporate strategy. Infrastructure to Control Data specifically meant five things: values, human resource policies, compensation and benefits, employment practices, and governance.

Values

Values find expression in the company’s products and services, its dealings with customers, communities, stockholders, suppliers, and the various governments within whose purview it conducts its business.

84 Habitats for Innovation

Today, as strategy and management action have been forced to be more reactive to fast change, the need for enduring beliefs and values to guide action have assumed greater urgency. Control Data had a very strong set of values: an abiding belief in the individual; belief that innovation is the wellspring of individual, corporate and societal growth; technological collaboration as an essential component in finding solutions to complex problems; and the belief that the more complex the need, the more rewarding it is to answer its challenge.

Human Resource Policies

The Employee Advisory Resource (EAR) and Staywell were developed with employee interests at the core. Building trust requires a genuine concern for someone else's well-being and respect for others' thoughts and opinions.

Control Data also was a pioneer in U.S. industry in implementing a peer review process. The peer review program was conceived and implemented to give employees with a grievance an opportunity to be heard in a relatively structured but informal setting right up to the highest echelons of the company. This process did not just ensure fairness, it also served to minimize lawsuits through informal dispute resolution.

But innovation in employee relations was not limited to problem solving as in peer review, EAR, and Staywell. One of the company's more successful employee programs was its Employee Entrepreneurial Advisory Office (EEAO). Any employee could approach EEAO on a completely confidential basis with a business idea that they wished to undertake outside the company. They could receive free technical, marketing, financial, and general business counsel with regard to their idea and the development of a business plan. If the idea involved company technology, it had to be affirmed that there was no internal interest in its development. The office consisted of one person: Bob Perkins. A network of volunteer experts did the counseling. Perk's experience and technical expertise, not to mention his reputation and coaching abilities, made him an ideal person for this unusual employee benefit.

The standard reaction to the EEAO concept was and still is: "What? You're encouraging talented, innovative employees to leave the company?!" The fact is that the most talented employees who have a burning business idea will leave anyway. As long as the company's intellectual property can be protected, it is far better to have them leave openly and with a positive relationship. In a surprising number of instances, these entrepreneurs ended up with a mutually beneficial business relationship with the company. Moreover, experience showed that nine out of ten of the would-be entrepreneurs, when faced with the reality of a