### **Lessons from the Past**

# Stories about World-class Collaboration by Jessica Lipnack and Jeffrey Stamps



## Turning Hierarchy on its Side Eastman Chemicals

It is in this valley conveniently situated on both a navigable river and railroad that, at the urging of a local entrepreneur, George Eastman decides to invest in a defunct chemical plant in 1920. He needs a reliable chemical supplier for his developing photography business some 700 miles to the north, Eastman Kodak Company in Rochester, New York.

Three quarters of a century later, Eastman Chemical Company, which spins off from Kodak in 1994, is a \$4.6 billion global operation with approximately 15,000 employees manufacturing more than 400 products. It's an e-commerce leader in the chemical industry. Although you cannot go into the corner store and buy anything with the Eastman label, you would have a hard time not buying something with an Eastman product in it. Need a toothbrush? An Eastman chemical is an ingredient in the plastic handle. Soft drink, beer and liquor bottles, pain killers, peanut butter, tires, carpet, cosmetics, stonewashed jeans, computer chips, garden hoses, medical devices, laundry detergent, latex paint, tennis balls, and, of course, photographic film all contain Eastman chemicals.

Today Kodak is still one of Eastman Chemical Company's largest customers, but it is only one of 7,000 who buy its products around the world. Nestled in the northeast corner of Tennessee, Kingsport is the chemical company's world headquarters. Manufacturing operations stretch across five American states, as well as Argentina, Belgium, Canada, China, the Czech Republic, Denmark, England, germany, hong Kong, Ireland, Italy, Japan, Malaysia, Mexico, The Netherlands, Singapore, South Africa, Spain, Taiwan, and Wales.

#### **Teams Every Which Way**

In 1993, Eastman becomes the first chemical company to receive the U.S. government's highest kudo for quality, the Malcolm Baldrige National Quality Award. We first report on Eastman in *The Age of the Network.*<sup>i</sup> There we tell the story of a traditional firm that reinvents itself as a networked organization while still retaining important elements of hierarchy and bureaucracy.

It takes a quality crisis of business threatening proportions—and nearly two decades of work—to move the company to the network structure it now has. The company begins its renaissance in the late 1970s when it loses market share of a major product due to poor quality. With a focus on traditional quality approaches and a lot of common sense and creativity, Eastman goes about redesigning how it does its work from the shop floor to the very top of the company. Today, *everyone* works in teams and usually in multiple teams.

Ask people at Eastman why they win the Baldrige Award and they will point to their quality philosophy that rests on team alignment. "It's a consensus style of management," says Earnest Deavenport, who becomes Eastman's CEO in 1989, "that is much more based on team than individual decisions. There is more empowerment of teams than you find in a conventional organization. Many fewer decisions get bumped up to me to make individually."

Eastman is a complex mix of permanent, temporary, face-to-face, ad hoc, geographically distributed, culturally diverse, vertical, and horizontal teams. Some have traditional team leaders. Some rotate leadership. Some are quite formally chartered. Others less so. There are multiple executive teams and hundreds of shop floor teams.

Almost all Eastman teams cut across space, time, and/or organization boundaries.

Eastman has all types of virtual teams. It has shift teams that are responsible for keeping operations going around the clock. Short-term project teams are invariably crossfunctional. While sometimes co-located, more often these teams follow the typical pattern of coming together and then going apart. They meet as necessary to plan and align their work then carry it out individually or in smaller groups.

Longer-lasting process teams are distributed and cross-organizational, like customer and supplier teams. Although most virtual teams need some face-to-face time together to function effectively, especially at the beginning, they can become "more virtual" over time. Eastman has a supplier team, for example, that had many face-to-face encounters when it began but increasingly fewer as time passed. Once the group established trust and set up its processes of interaction, it continued to make quality improvements without meeting. The virtual team functioned asynchronously in different places and organizations.

#### Quality

Because Eastman is a manufacturing operation, good teamwork on the shop floor is synonymous with good quality in its products. One of its earliest "improvements" comes as a simple recognition in the late 1970s: the four shifts per day are simply one ongoing team spread out over 24 hours.

"At that time, we have a 'tag and you're it' shift change mentality, four different people around the clock running four different shift teams," says Will Hutsell, Eastman's senior associate in Corporate Quality. Very little information passed between shifts. When one shift leaves, the next would come in and readjust all the control room dials, as if the people before them have no idea what they are doing. Operators have to ask permission to make any changes and, of course, they punch time clocks.

During the initial implementation of continuous improvement efforts, Eastman takes groups of the shift foremen off the job for quality management training. Instead of working their normal shifts, they come together as a group for training and planning improvement projects. These foremen (who are now called team managers) then go back to their work areas and hold team meetings with their operators to develop plans for implementing the projects.

Change comes quickly. The operators have the skills and information they need to do their work without asking anyone's permission. In time, they stop punching time clocks. Operations improve enormously and control rooms are clean. Eastman is on its way to a Baldrige.

Today, Eastman's training process is a sophisticated operation that reaches across the company. For example, to be trained as coaches, people leave their jobs for 12 weeks of intensive education in modern management thinking, skill building, and practice. Initially, they set up training programs and had people attend individually, but they find that approach not to be very effective. So groups of managers start attending together, creating sufficient critical mass of shared experience in the organization to sustain the learning when people return to their jobs.

At the same time that Eastman reinvents work on the shop floor, it also makes many other significant changes that raise the trust level in the company:

- It equalizes benefits across the organization. Everyone has the same vacations for years served and everyone has access to the same healthcare plan.
- It eliminates the traditional performance appraisal system that distributes people's performance across a bell curve and replaces it with an employee development system.
- After experimenting with team rewards, it stops them because it proves impossible to draw indisputable lines around "the team." Individual teams depend on the overall inter-team environment; they cannot succeed without it. Eastman now has a company-wide bonus program tied to the company's financial performance.

### **Begin with Purpose**

All Eastman teams have a vision and a mission and most have charters and sponsors. In many cases, teams accept a written charter with a signing ceremony that commissions the teams.

"Because there are many teams at Eastman, it is essential that we always define the purpose of each team," Hutsell says. Without clear purpose and an established process for defining it, confusion not quality would rule at Eastman.

"Typically a broad charter is put in place and the team is empowered to see if it makes sense," he says. "The team can modify its own makeup." Using Eastman's Quality Management Process, teams pay attention to such questions as: Do we have the right purpose? And do we have the right membership? This helps keep teams on track.

"You must look at the purpose," Hutsell cautions. "Only when you have that right can you get from here to there." Eastman's early attempt to use one of the most fundamental quality tools, Statistical Process Control, a quantitative method for improving quality, fails when the company tries to implement it without fully making clear its connection to purpose.

#### From Intent to Results

The best predictors of virtual team success are the clarity of its purpose and the group's participation in achieving it.

Eastman teams thrive in a culture infused with purpose. Purpose starts at, but is not dictated by, the top. The Senior Management Team is the keeper of the Strategic Intent, the document that contains the company's vision ("To be the world's preferred chemical company") and its mission ("To create superior value for customers, employees, investors, suppliers, and publics.") The Senior Management Team is also custodian of the document known as "The Eastman Way" that sets out its values and principles. The document makes explicit the culture required to support teams working across organizational boundaries. It also serves as the touchstone for innumerable changes that make a difference in the day-to-day working life of Eastman employee-owners.

While written down and published, the Strategic Intent is also a dynamic document. It serves as the framework for overall long-term company strategy and shorter-term initiatives known as MIOs, Major Improvement Opportunities. Everyone in the company is involved in the planning process. Organizations bring the knowledge of their part of the business—specifically including customer needs, competitive comparisons, company and supplier capabilities, and risk assessments—together with the Strategic Intent to develop Strategic Alternatives. These are then formally submitted to the Eastman Executive Team that forms the overall strategy and makes selections among alternatives.

With the strategies set, the organizations develop goals, their own MIOs, and their criteria for success, known as the key results areas. With concrete measures in hand, the

virtual teams develop plans using Eastman's Quality Management Process in which everyone in the company is trained. Eastman's version of the familiar "plan-do-check-act" continuous improvement cycle adds a step at the beginning. Before "plan," there is an "assess organization" step where the team focuses on clarifying its purpose in interaction with customers and in alignment with the company's strategy.

Early in its team journey, Eastman makes a mistake that many companies do: They convene teams and focus on the mechanics of the meetings such as following agendas and drafting plans without giving the teams a clear purpose. That turned around when the teams took on specific projects with clearly defined expectations. Eastman values time spent gathering information, developing and choosing among alternatives, creating implementation plans, monitoring and documenting progress, celebrating results, and even formally disbanding. The process itself generates continuously increasing value.

#### The Eastman "Pizza" Organization

For people interested in organizations, Eastman is famous for its unique organization chart, its "pizza with pepperoni." Hierarchy, bureaucracy, networks, and teams all have their place in this organization-in-the-round. The company expects people to communicate horizontally not vertically. There is no going up a chain of command, across to another function, and then coming back down another chain of command to get something done.

Deavenport creates the now-famous circular chart in 1991, he says, because he wants "to signal the organization that this was a different structure, a networked structure, a team effort, not business as usual. We're all in this together." While the chart preserves the logic of hierarchical levels, "the artist in you has to come out to see the pizza chart as different from a hierarchical one," Deavenport comments.

Eastman uses a truly cross-sectional approach in showing how its hierarchy, bureaucracy, and network fit together in a 21st-century organization. The central and foreground position of the chairman and CEO, Earnie Deavenport, symbolizes hierarchy. Structurally, his position anchors the hub-and-spoke locations of the six major corporate components. Bureaucracy is well represented both in the general use of specialization and purpose—every sub-group has a unique name and mission—and in specific components devoted to maintaining traditional bureaucratic functions.

What makes the Eastman chart uniquely indicative of an Information Age networked organization is its periphery. This heavy outer circle attaches directly to all the major components and represents the direct connections among the divisions. Deavenport talks about the "white space," where collaboration takes place and work gets done. In the circle, he repeats, "no one is on top."

"Work gets done across and within and between functions. Major processes in the organization have to go horizontal. A lot of important work doesn't get done in the vertical sense," Robert Joines, a former manufacturing vice president explains. Still, there's a place for hierarchy, he says. "Sometimes Earnie [Deavenport] has to make decisions no one else can. You can't stamp out hierarchy and run an organization. You have to have vertical alignment. To be successful, you have to learn to do both of these together. Our interlocking teams are a hierarchy in a sense, and then we turn hierarchy on its side."

<sup>&</sup>lt;sup>i</sup> Lipnack and Stamps, *The Age of the Network*, pp. 52-58