

2001, the company recognized water quantity and quality as one of the biggest risks to the company and cited it in its 10-K filing with the Securities and Exchange Commission.

The think tank began by assessing its water use and associated risks and then set out to ensure that this assessment was accurate by working with plant managers across the Coca-Cola network. While the company historically had focused on operational issues such as water efficiency and wastewater management, it became clear that there were also many systemic issues in the watersheds and local communities where it operated. To ensure it was focused on the correct risks, the company took two bold steps. The first was to interview over 200 water experts, local officials, and company employees around the world to understand the emerging water challenges. Because water problems are so diverse, it was important to understand the local problems facing the company and to develop customized solutions depending on local priorities—from sanitation to watershed protection to groundwater depletion and contamination. By listening to local stakeholders and company employees who faced these challenges every day, the company developed a risk management methodology to identify the 100 riskiest plants around the world. The company assessed and prioritized on the basis of empirical evidence about both physical and social aspects of water use. In contrast to the original focus of internal water use—efficiency and wastewater management inside the plant walls—the risk assessment revealed that the biggest threats to company profits and reputation were related to degrading watersheds and social conflicts with other users.

After the risks were identified, a series of two-day workshops was organized with company employees and bottler partners around the world to share the findings and to plan effective mitigation strategies. This was a two-way learning process whereby Coca-Cola could refine its understanding of water challenges and set priorities and the local partners could better understand and address the water risks they were facing. It also created partnerships with local communities more than an operational plan for Coca-Cola. Based on the risk assessment, it became clear that the company needed to pay more attention to the systemic water issues affecting watersheds and communities and begin to develop metrics and support to actively mitigate these challenges. Therefore, phase two of the water initiative was focused on supporting community water partnerships. Local company divisions and bottlers used the risk assessment to define new goals of improving water sustainability in their watersheds. Of course, the company couldn't do this alone; it required a proactive approach of forming partnerships with local NGOs, governments, and other stakeholders to create more systemic interventions. By forming alliances with organizations such as WWF and USAID, the company was able to bring attention and resources to address pressing water problems. Interestingly, the risk assessment process shifted the company from a narrow and reactive approach to a much more proactive and collaborative strategy. To reinforce this broader approach, Coca-Cola developed the following water goals:

- **Reduce:** By 2020, improve water efficiency in manufacturing operations by 25 percent compared to 2010.
- **Recycle:** Treat wastewater in 100 percent of bottling plants to a level that can support aquatic life.
- **Replenish:** Facilitate water to communities and watersheds to produce volumetric benefit equivalent to global water production volume by 2020.
- **Manage Risk:** Assess water quality and quantity at every plant “to make sure we do what we can to avoid adversely affecting the ability of others to access water.”

In an attempt to maximize its positive impact on water resources globally, Coca-Cola also helped to launch multistakeholder efforts such as the CEO Water Mandate and the Global Water Challenge. It extended its water efforts beyond manufacturing to address sustainability challenges in its supply chain, for example, by helping to launch the Better Sugarcane Initiative (now Bonsucro). In establishing its “Replenish” goal, the company aspired to be a net positive contributor to water sustainability globally. In August 2016, the company announced that it had replenished 115 percent of its operational water use through community and watershed partnerships, five years before its stated deadline.

Impact of Strategic Uncertainties

Each strategic uncertainty involves potential trends or events that could have an impact on present, proposed, and even potential businesses. For example, trends in the microbrewery market can impact a beer firm's proposed microbrewery entry and its current imported beer offering. A trend toward natural foods may create strategic uncertainties while also presenting opportunities for a sparkling water product line for Coca-Cola Inc. The impact of a strategic uncertainty will depend on the importance of the impacted business to a firm. Some businesses are more important than others. The importance of established businesses may be indicated by their associated sales, profits, or costs. However, these metrics might need to be adjusted to account for the future growth potential in such businesses. The number of involved businesses can also be relevant to a strategic uncertainty's impact. The higher the number, the greater the impact of the uncertainty. Finally, if there is a low probability of the event occurring, this reduces the expected impact. For example, although a bill introduced to Congress could reshape a business, if trends show no support from members, the expected impact of the legislation is low.

IMPACT OF NEW TECHNOLOGIES

It can be important, even critical, to manage the transition to a new technology. The appearance of a new technology, however, even a successful one, does not necessarily mean that businesses based on the prior technology will suddenly disappear. A group of researchers at Purdue studied fifteen companies in five industries in which a dramatic new technology had emerged:³⁵

- Diesel-electric locomotives versus steam
- Transistors versus vacuum tubes
- Ballpoint pens versus fountain pens
- Nuclear power versus boilers for fossil-fuel plants
- Electric razors versus safety razors.

Two interesting conclusions emerged that should give pause to anyone attempting to predict the impact of a dramatic new technology. First, the sales of the old technology continued for a substantial period, in part, because the firms involved continued to improve it. Safety-razor sales have actually increased 800 percent since the advent of the electric razor. Thus, a new technology may not signal the end of the growth phase of an existing technology. In all cases, firms involved with the old technology had a substantial amount of time to react to the new technology.

Second, it is relatively difficult to predict the outcome of a new technology. The new technologies studied tended to be expensive and crude at first. The most spectacular erroneous forecast was market for computers as maybe five. New technologies also sometimes start by invading submarkets, and it can be hard to imagine the full market potential. Transistors, for example, were first used in hearing aids and pocket radios.