9

Alliances Rather than Solo-runs

No single organization can solve the big problems alone. Collaboration is therefore important for companies that want to develop sustainable and profitable solutions, and it is becoming more widespread, both within and across markets and sectors. To assess the sustainability efforts of companies properly, we must look at entire ecosystems of companies and their collaborative efforts for doing business more sustainably. Such collaboration requires that they are willing to open up their business models to each other and work together in ways that make the whole more than the sum of its constituent parts.

Fig. 9.1 Alliances Rather than Solo-runs

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9.1 Unite and Collaborate!

The French car manufacturer Renault promotes itself with the slogan: "Recycle, Reuse, Renault". Renault is among the many companies collaborating with the Ellen MacArthur Foundation, which specializes in developing and implementing circular-economic solutions in companies. Circular-economic ideas are not new to Renault—the company actually began reusing engine parts in its cars already in 1949. Since then, the company has expanded the number of parts significantly. Currently, Renault works to redesign its business model to become more sustainable, which involves closing its value chain and implementing a circular business model. As part of this process, Renault has invested in new production facilities to move from a "take, make and dispose" model to a model of reuse and recycling. Moreover, the company has developed entirely new units that work to collect and process used parts for reuse. At Renault's plant in Choisy-le-Roi, near Paris, the company upcycles engines, transmissions and other components for resale. According to a report by McKinsey, this facility's recovery operations use 80 percent less energy, 90 percent less water and approximately 70 percent less oil and detergent waste, compared with the units that produce new components. The facility in Choisy-le-Roi also captures higher operating margins than does Renault overall (Fig. 9.1).

To attain these benefits, Renault has created joint ventures with several companies. Among them is a partner company that recycles steel and a recycling company that manages waste. Renault has established these alliances to access the resources, knowledge and competence of companies in this part of the value chain, so that it characterizes the way in which the company designs and produces cars. Renault collaborates with its suppliers to identify opportunities to create and distribute value along its entire value chain, thus making it attractive for other companies to join the collaboration. For instance, the company has helped a provider of cutting fluids to change its business model from a sales-based to a performance-based model. The change has led to a 90 percent reduction in waste from this supplier while reducing Renault's costs by 20 percent.

Between Competition and Collaboration

Researchers from MIT and a team from the Boston Consulting Group conduct an annual global survey in which they ask executives worldwide questions about sustainability-related issues. In 2015, the survey examined the role of collaboration in companies' sustainability efforts (see Kiron et al. 2015). While 90 percent of respondents believed that collaboration is necessary to become more sustainable, still less than 50 percent of companies say that they are actually engaging in such collaboration. This is perhaps embedded in the DNA of companies—they are intended to compete rather than to cooperate. Interestingly, there is increasing collaboration even between companies that are usually competitors (Brandenburger and Nalebuff 2011). Arguably, developing such collaborative willingness and competence will be important in trying to design more sustainable business models (see, e.g., Peloza and Falkenberg 2009).

As we have seen, Renault has made major changes in its business model to improve its sustainability performance and to attain the benefits of a circular economy. Not at least, the company has made changes in its organizational ecosystem, that is, its network of affiliated companies, including suppliers, distributors, customers, competitors, government agencies and so on. Successful alliances require investments, and such risky investments are not costless, even though the rewards can be big for those who succeed (cf. Das and Teng 2001). The challenge of collaboration is that it requires that different players with different objectives must come together and find mutually beneficial solutions. Collaboration also typically requires opening up the business model of the company and providing potential competitors with access to internal processes (see, e.g., Drechsler and Natter 2012). This is particularly true since such innovation projects often imply collaboration with companies that can simultaneously compete with the company in other markets.

It is naive to believe that such changes will take place without big and conscious efforts by the parties involved, especially since some of them will typically benefit more from the collaboration than will others. While

barely 50 percent of companies report that they are collaborating on sustainability projects in the aforementioned survey, only about 60 percent thereof report being satisfied with their collaborations (Kiron et al. 2015). Meanwhile, alliances may be a virtue of necessity, especially for small- and medium-sized companies. However, large companies like Renault also have much to gain by solving problems together with others.

Companies are experts at solving problems profitably. However, they also create problems for society and the environment to varying degrees and in different ways. A car manufacturer solves the mobility problems of its customers, creates jobs, works to reduce emissions in line with regulations and customer expectations and pays taxes. The car manufacturer, however, also creates problems since cars pollute, people die in traffic, roads are clogged with ever more cars and large amounts of scarce resources are used to produce cars. A reasonable expectation must be that companies at least solve more problems than they create. In other words, they need to shed more light and less shadow and scale their solutions so that positive effects for the business, society and the environment increase.

The field of strategy devotes much attention to competition. The strategy literature has used metaphors from war and from "survival-of-the-fittest" biology. Moreover, its theories have focused on how companies can develop and leverage bargaining power to gain competitive advantage over suppliers, customers and other stakeholders. This knowledge is still important—a successful business model creates, delivers and captures value. However, a successful business model also involves collaboration with various stakeholders. As the father of stakeholder theory, R. Edward Freeman (1984) points out: a key role for leaders is to try to identify overlapping interests between the company and its stakeholders and to try to expand such overlap in a way that benefits both parties. The company can create greater value for customers, employees, suppliers and other stakeholders through collaboration, and it enables many types of innovation projects.

Above, we showed how Renault collaborates with a supplier of cutting fluids, which resulted in less reduced emissions and resource waste, and thus higher profitability for both partners. One could argue that

companies compete to be the most attractive transaction partner, for example, in the market for skilled labor and vis-à-vis other important suppliers. It is easy to forget that companies must be attractive to all their transaction partners, and it is not sufficient to be an expert only at solving customers' problems. Companies do not necessarily attain profitable growth by being at war with their employees, suppliers, governments and other key stakeholders. It can therefore benefit companies to act as an ally, rather than as a competitor.

From Value Creation to Value Capture

In a simplified sense, we can compare value creation with baking a cake. Through collaboration in the supply chain, companies can improve their ability to satisfy the needs of both customers and suppliers. This would be the equivalent of baking a bigger cake. Customers who perceive the company as offering products and services that cater to their needs have better customer experiences and are therefore generally speaking willing to pay more for the products or services and to be more loyal. A supplier that perceives the company as more attractive to work with will perhaps be more willing to stretch to meet the company's needs. Employees may be willing to work more, be more loyal and even require less pay if they see the company as a great place to work (cf. Koys 2001; Harter et al. 2002; Frank 2004; Turban and Greening 1997). In addition, governments and regulators may be willing to invest in and facilitate education and infrastructure that benefit the company if they believe that the company creates considerable value to society and the environment. Collaboration can increase value creation for suppliers, companies, customers and other stakeholders, and thus the size of the cake increases as well. Companies that manage to build appropriate value-adding alliances can thereby improve their value capture by getting a slightly smaller piece of a much larger cake (Fig. 9.2).

Although alliances can increase the size of the proverbial cake of value creation, companies must of course also make sure to get a bargaining position that allows them to capture their fair share. Companies must

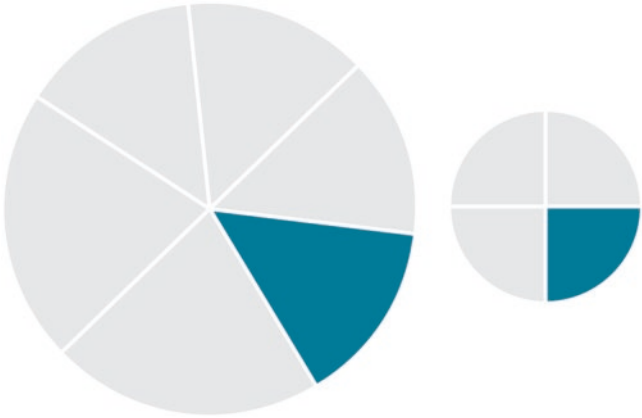

Fig. 9.2 A smaller part of a larger cake

therefore deal with a paradox: They must collaborate and compete at once. Managers face this reality continuously, regardless of whether sustainable business is the goal. When sustainability is part of the problem, however, it is perhaps even more important to collaborate since the complexity of the problems companies face requires complex competence, technology, inputs factors and other resources. This may require extensive alliances across both industry and sector boundaries.

9.2 Creating and Sharing Value

Who would have thought that it is possible to use the oil industry's surplus carbon dioxide (CO2) to make fish feed? The innovative company CO2BIO does just that. By using CO2 captured by the energy company Equinor at Mongstad in Norway, CO2BIO creates biomass that is rich in important Omega-3. There is a great shortage of Omega-3 in the oceans, and aquaculture completely relies on Omega-3 in its fish feed. This nutrient is also very important for the customers who eat the fish. At the same time, there is excess CO2 in the atmosphere, and emissions from large companies exacerbate the problem. CO2BIO receives CO2 free of charge from Equinor and leads it into a pipeline, wherein it grows algae. Water

flows in the tubes, and the tubes are illuminated from all sides at all times, while water and CO2 circulate in the pipes. In this way, algae grow and thus form the basis for the resulting fish feed that is rich in Omega-3. CO2BIO's business model helps solve two major problems at once: it reduces harmful greenhouse gases in the atmosphere while contributing nutritious fish feed for the aquaculture industry.

The technology used by CO2BIO is a type of biomimicry based on natural processes (see, e.g., Harman 2013). Currently, the project is still in the pilot stage. In other words, it is still an experimentation with new technology and a new business model. If CO2BIO manages to commercialize the product successfully, it can build a unique and advantageous business model. One of its main resources, CO2, the company (for now) gets free of charge from Equinor's Mongstad operations. In the future, will perhaps companies with excess CO2 emissions even pay CO2BIO to get rid of their emissions? On the customer side, the company may sell its product to companies in need of fish feed of high quality, which is an industry that is expected to grow significantly in the coming years. At the same time, however, various competitors using many different technologies are trying to capture this market with novel fish feed products.

CO2BIO would not have been able to implement this project on its own. Through cooperation and alliances with entities from the private and as public sectors as well as from academia and research institutions, the company has gained access to potential customers, knowledge, raw materials and capital. Interestingly, the parties in the alliance are also competitors in other markets. For instance, fish-farming companies like Marine Harvest, EWOS, Lerøy Seafood and Grieg Seafood are among the partners and shareholders of the project. In addition, various academic institutions such as the University of Bergen and UniResearch are central to the project.

There are several interesting characteristics of the CO2BIO business model related to how it aims to solve sustainability issues. Firstly, the business model is a collaborative model in which several organizations join forces to solve a problem that each of them could not successfully solve on their own. Secondly, one of the partners—Equinor, which provides the "raw material" of CO2—helps to create parts of the problem that CO2BIO aims to solve. The project, after all, makes use of Equinor's

CO2 emissions. Rather than attempting to minimize its emissions problem by producing less, or otherwise reduce its emissions, Equinor thus finds a solution in a collaborative innovation project. The project turns Equinor's problem into a solution for another company. In order to solve the big problems we face, this kind of collaboration across organizational boundaries and business models will probably be necessary.

CO2BIO is located in a Norwegian industrial park, and the use of such parks for building circular collaborations has great potential and shows good results. This business model is often referred to as industrial symbiosis, and one of the most exciting examples in Europe is arguably the Danish industrial park Kalundborg Symbiosis. This industrial park was established already in 1959, but during the 1970s and 1980s, the first steps were taken toward making it into the eco-industrial park it is today. The concept behind Kalundborg Symbiosis is that waste and surplus resources from all companies are important inputs for other companies in the park. That is, the industrial park is based on a circular model, not for each individual company but for the park as a whole (see, e.g., Ehrenfeld and Gertler 1997; Jacobsen 2006). For instance, Gyproc uses the emissions from Dong Energy as input for making plasterboard; agricultural operators use the organic waste from Novozyme as fertilizer; and Asnæs Power Station uses excess water from Equinor's operations. In addition, excess energy from the industrial park generates heat and lighting for households in the vicinity of the industrial park, thus literally shedding light also on the nearby community. This symbiosis has also reduced Kalundborg's CO2 emissions by 275,000 tons a year and the saving and reuse of three million cubic meters of water every year.

The Company as a Coalition of Stakeholders

In our conversations with executives and other managers in companies, we often find that many of them are preoccupied with customers. This makes sense of course, and there is nothing wrong with being concerned with the company's customers. The company is after all reliant on them, seeing how they pay for the company's products and services. As we will see below, however, there are numerous other key stakeholders that also

greatly affect companies' ability to align sustainability and profitability in their operations (see, e.g., Berman et al. 1999). In companies' work with an effective network strategy, it is therefore crucial to understand the interaction between companies and other stakeholders in its environment.

In an expanded view, companies can be seen as a coalition of stakeholders. Some of these stakeholders are formally transaction partners with the company, as customers, employees or other kinds of factor suppliers. Such partners provide something of value to the business—be it time, money or products and services—and they naturally expect something in return. Companies thus depend on them, and the dependence may be mutual. Other stakeholders are not in formal transactions with the company. Such entities are often called institutional (or external) stakeholders, and although they may not affect the company directly, they can still greatly affect the company indirectly, for example, by influencing the company's reputation. NGOs, media organizations, lobbyists and various opinion makers are examples of such stakeholders, which can influence the company's standing in the marketplace, without being in a formal relationship with the company at all (cf. Mitchell et al. 1997).

Figure 9.3 gives an overview of various key stakeholders in the corporate environment, and we have placed the company in the middle. The total scope of stakeholders that companies have to deal with may be even greater than what the figure captures. However, these key stakeholders are relevant for almost any organization and will influence its functioning and performance:

- Customers, who buy the company's products or services, whether they are end users (B2C) or other companies (B2B)
- Employees, who offer their competences and efforts to the company and the local community of which these employees often part
- Partners and competitors, which influence how successful the company's strategies are in the market through various interactions with the company
- Investors, who own the company and offer the necessary capital to finance its activities

Fig. 9.3 The organization and its stakeholders

- Lenders, which cover short-term and long-term capital needs through loans
- Governments and regulatory agencies, which make and enforce laws and regulations relating to corporate activities
- NGOs, which speak the voice of the interests of society and the environment
- Idea generators and thought leaders, such as media and academic organizations, which create and spread ideas and beliefs that affect the company's reputation and performance.

Seeing the company as a coalition of stakeholders involves understanding it as an organism that depends on the support of key stakeholders contributing to its activities and to achieving its objectives. In different ways and to varying degrees, stakeholders influence the ability of the company to achieve these goals (Mitchell et al. 1997; Freeman 1984). In a stakeholder perspective, there may be at least two reasons to build stronger ties to such partners. The first, and most fundamental, is that partners may be important to the success of a project. CO2BIO has, for

instance, probably been highly dependent on the research expertise of scientists in UniResearch, who have been involved in developing the technology that allows CO2BIO to develop its product. In addition, there is another reason to enter into alliances, namely, that it provides access to knowledge, technologies and insights to which the company might not otherwise had access (see, e.g., Mowery et al. 1996). When competitors like Marine Harvest, Lerøy Seafood and Grieg Seafood all join the CO2BIO alliance, this can also in part be because they see it as too risky to stand on the outside, in the event that the project becomes successful. There can thus be varied motives for entering an alliance or a joint innovation project (Varadarajan and Cunningham 1995). Different organizations will consequently enter with different levels of commitment and varying levels of gain from their participation, with respect to the goals they have set.

There is an ongoing trend in the direction of opening up companies and business models in more than one sense. So-called open innovation is increasingly prevalent, and such processes aim to drive innovation by drawing on external ideas, perspectives and voices (Chesbrough 2006). It may include letting customers influence product development, in the way that computer game developers and toy manufacturers like LEGO have done for a long time. It can also involve engaging in innovation projects in networks with other companies, research institutions and other actors, which in different ways can integrate in the project and benefit thereof. However, even in the design of companies' business models, companies are increasingly inclined to organize in ways that integrate other organizations in their value chains. This creates an interdependence between them that gives companies incentives to attend to each other's interests over time.

When Renault decides to go into joint ventures and long-term collaborations with companies from completely different industries, it reflects the fact that the company sees them as crucial for succeeding with a circular business model that can be profitable over time. Likewise, CO2BIO's business model would hardly have been possible without the fruitful interaction with organizations both upstream and downstream in its value chain, as well as knowledge partners who can contribute to the company's ambitious innovation project on which its business model is

built. In sum, this is about finding new ways to create, deliver and capture value, both alone and in collaboration with others. In doing so, companies can achieve results they would not have achieved on their own. In the next topic, we turn to the challenge of prioritizing the right kinds of results.

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