

21. Co-operative innovations

ANU PUUSA AND TIM MAZZAROL

Outline of the topic

Cooperation has always been inherent in human society. The modern co-operative movement takes its starting date in 1844, with the establishment of the Rochdale Society of Equitable Pioneers in England. However, the movement was preceded by many forms of co-operative activities and friendly societies with antecedents dating back to the sixteenth century.

Co-operatives, friendly societies, and mutual enterprises are a response to economic and/or social problems (market failures) that cannot be, or are not being, addressed by other business models such as investor-owned firms (IOFs), or state-owned enterprises (SOEs). One of the key distinguishing features is that co-operatives create wealth for the many members of co-operatives who engage in their businesses as service users, producers, independent business owners, consumers, and workers. Moreover, unlike IOFs, where control is vested in the ownership of share capital (e.g., one-share-one-vote), the co-operative is democratically governed, with the principle of one-member-one-vote. This creates a basis for understanding the unique mission of co-operatives: they aim to improve both the economic and social well-being of their members through cooperation and collective ownership.

Over 3 million co-operatives are estimated to be operating worldwide across all countries and industries. The International Cooperative Alliance (ICA), the peak body of the co-operative's movement, defines a co-operative as an 'autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.' Thus, the co-operative business model was an innovation in offering an alternative to the IOF and SOE models. In the first, ownership and control is concentrated into few hands and its purpose focuses on the maximization of investor returns. In the second, ownership and control is by the state, and its purpose is to achieve government policy objectives. By contrast, the co-operative business model places ownership

and control in the hands of its members, who enjoy democratic governance, and its purpose is focused on the economic and social benefits of the members and their communities.

The co-operative is therefore a unique form of business that is guided by internationally recognised principles and values, and creation of value to members through active participation and patronage rather than the remuneration of investment capital. The movement's still current values and principles distinguish it from other forms of business and create potential for co-operatives to act as innovation platforms, which we will address in this entry. In doing so, the entry recognizes that innovation is a multidimensional construct.

At its core innovation is a process of applying new ideas to create value for customers, shareholders, and other stakeholders. It can take numerous forms, including new products and services, new industrial processes, new approaches to marketing (e.g., online vs. physical shopfronts), new organizational forms, new business models, and new ways to address social problems. Innovations can be 'radical' (e.g., piston vs. jet engines), incremental, or 'synthetic' (e.g., Apple Macintosh) where existing technologies are formed into new designs. Co-operative enterprises have a well-demonstrated track record in applying innovation across these forms to address economic and social problems.

Conceptual overview and discussion

Multiple roles and objectives are naturally inherent in the co-operative business model and these enterprises' practices. This complex nature derived from the co-operative mission has been conceptualized as dual nature. Due to their focus on addressing both economic and social objectives and balancing the needs of the individual via a collective ownership model, co-operatives have been viewed as 'hybrid' organizations, which fall between profit-maximizing IOFs and not-for-profit enterprises (NFPE) (e.g., philanthropic or social enterprises). Many co-operatives are NFPEs and even registered philanthropic charities, referred to as 'non-distributing,' as they do not pay dividends to shareholders. Other co-operatives are 'distributing' and do pay dividends to member shareholders.

However, share capital within a co-operative serves a different purpose to that within IOFs. While share capital provides the

necessary funding to allow both these businesses to operate, in the IOF its purpose is to return financial value to the investor shareholder. By contrast, within the co-operative its purpose is to reward active membership and encourage future patronage (e.g., trading with the co-operative), while providing the capital to address members' economic and social needs. 'Innovation to meet the needs of co-operative members has always been the mother and father of co-operative enterprise and will remain so,' states the ICA Guidance notes (<https://ica.coop>).

Co-operatives possess a duality whereby they are both collective associations of their members and independent business enterprises, a point first conceptualized by Draheim in 1952. According to Novkovic and colleagues, this duality refers to the tension in values between economic and social characteristics of co-operatives. This dual nature is a source of both strength and weakness. Although it is innovative from an organizational perspective, it is also complex to understand. This is because any in-depth assessment of the meaning of duality, its manifestation in practice, micro-economic foundations, and their interconnectedness are still largely under-theorized.

The innovative nature of the co-operative business model can be examined through the lens of the seven co-operative principles, which have been a guiding framework for these firms since their initial emergence in the Rochdale Society in the mid-nineteenth century. The first principle of *voluntary and open membership* was innovative in the formative years of today's global co-operative movement, but still has resonance in the present. Its recognition that membership is unrestricted in relation to an individual's race, gender, religion, political views, social status or wealth contrasts with the IOF, SOE and even many NFPE business models. In this regard co-operatives are an example of a social innovation.

As regards the second principle of *democratic member control* the one-member-one-vote system of governance within the co-operative business model stands in contrast to the IOF and SOE business models that are inherently anti-democratic, and even most NFPEs, which, although they may have philanthropic and benevolent aims and objectives, are not democratic in their governance. The combination of free and open membership and

democratic governance serves to empower socially and economically disadvantaged communities. Worker co-operatives serve as an example of this, with their origins traceable back to the late eighteenth century. While well-established in Europe, they existed in the United States from 1768. More recently they have been enjoying a renaissance with a 30 per cent increase in these co-operatives during 2021, states Democracy at Work Institute, US Federation of Worker Cooperatives. These co-operatives offer greater job security and better conditions for workers representing a business model innovation.

The third principle of *member economic participation* is closely linked to the second principle. As shown in the case of worker co-operatives, the business model gives workers enhanced ownership and control over their own workplace, and removes the need for worker unionization, and confrontational industrial relations bargaining between the workers and the employers. This also applies to other types of co-operatives, such as producer co-ops where farmers, working collectively, can enhance their bargaining power by controlling critical stages of the supply chain (e.g., processing, manufacturing, marketing and distribution). More recently, platform co-operatives, which create digital online business models, owned and controlled by their members, can challenge incumbent monopolies. An example of this are platform co-operatives owned by musicians to secure enhanced marketing and distribution, royalties and copyright control over their creative work in response to incumbent IOF models such as Spotify and Apple iTunes.

The fourth principle of *autonomy and independence* is important because it recognizes that the co-operative, when applied in conjunction with the first three principles, is a unique and separate business model. Co-operatives have demonstrated their innovativeness by providing services in environments where IOFs and SOEs have been unwilling to do so. For example, the Ord River District Co-operative (ORDCO) Ltd., was established in 1963 to provide support for cotton farmers in the newly created Ord River Irrigation Area in the East Kimberley District of Western Australia. This required an autonomous and independent, grower-owned business that could supply farm inputs and manage cotton ginning facilities, bulk handling and storage, and export marketing

services in one of the most isolated areas of the world. Its success over the past 61 years was due to its innovative response to environmental, political, economic, and social challenges that saw it apply research and development (R&D), strategic alliances and continuous innovations the diversification of crop types and cultivation techniques to create sustainable agriculture in a harsh tropical environment.

The fifth principle of *education, training, and information* also forms a foundation for the innovation of co-operatives. For example, ORDCO invested and continues to invest heavily in the education and training of its members in best practices in tropical agriculture, collaborating with state and federal governments, scientific research agencies, universities, and private IOFs to apply new varieties of cotton that are resistant to weevil infestation and the use of biological controls for other pests. This member education about best practices can also be found in the cases of Co-operative Bulk Handling Group Ltd. (CBH), Australia's largest co-operative, which has been responsible for the application of state-of-the-art technologies in bulk grain handling and storage since its inception in 1933. Its application of best practices in grain handling and storage, and the tracking of all grain from seed to final distribution to end-user customers, using technologies developed within its own R&D centres, provides quality control for customers.

The sixth principle, *cooperation among co-operatives* and the seventh principle, *concern for the community* can also relate to innovation within co-operatives. The examples of ORDCO and CBH referenced earlier illustrate examples of collaboration, joint-venture formation, and exchange of technologies, personnel, and services in addressing economic and social problems. These two principles also relate to the six co-operative values of self-help, self-responsibility, democracy, equality, equity, and solidarity. The members of co-operatives believe in the ethical values of honesty, openness, social responsibility and caring for others. These principles and values play a key role in defining and guiding co-operatives, although research shows that there can also exist a gap between these ideals and actual practices. However, we argue that each of the co-operative principles may be seen as an engine for innovation, which we will address next.

The nature of co-operative innovation

Some innovations are motivated by scientific and technological inventions generated by analytical knowledge, forming a science-driven technology-push model referred to as the science, technology, and innovation (STI) mode. Many co-operatives invest in R&D that leverages STI approaches, but their common approach is that of the doing, using and interaction (DUI) mode. This form of innovation is driven by responses to the market and uses synthetic knowledge that integrates existing innovations to address specific market needs. This STI/DUI model is explained by Libaers et al. (2016), and the DUI approach has been referred to by Jensen et al. (2006) as a market-pull model.

Co-operatives adapt their business model to address market failures and follow a DUI mode. Their responses are similar to those found in other business models, although their collective ownership, member focus, and democratic governance, result in some important differences. Benavides and Ehrenhard observed that co-operatives must be economically efficient. However, due to their organizational configuration and purpose, differences emerge between types of co-operatives (e.g., producer, worker, consumer, shared-service, social, housing, utilities, and platform). Each of these co-operative types addresses specific member needs, and they are best addressed by different types of innovation (e.g., product, service, process, marketing, organizational, business model, and social).

As with any other business, the co-operative is impacted by market competition, government regulation, social and political change, technological transformation, and environmental turbulence. It must adapt and innovate in order to survive. However, according to Benavides and Ehrenhard, relatively little attention has been given to the co-operative business model and its operation at the individual, group and inter-organizational level.

Application: case study in innovation

As already discussed, there are numerous examples of innovation in co-operatives. Rath and Joshi (2020a, 2020b) provide an interesting and worthwhile example from the Indian dairy industry. India is the world's largest producer of milk, with a national bovine herd

of over 303.8 million cattle, buffalo, oxen and yak. However, the average herd size per farmer is only two to three animals. Major problems facing India's dairy farmers are lack of affordable fertilizers and energy, and an overabundance of manure. Farmers have traditionally used dried cow dung as a fuel for cooking and heating, and raw manure as fertilizer, although both are inefficient and laborious. To address these problems Indian dairy co-operatives, working with the national government and state government of Gujarat, established pilot plants for converting manure into biogas and both wet and dry fertilizers. This led to the establishment of the Sakhi Khad Sahakari (Fertilizer) Co-operative, founded entirely by women. Farmers supply both milk and manure to their local co-operatives, who pay them for these supplies; the dung is then taken to biogas and fertilizer processing plants operating across 11 states.

Critical summary

The examination of the co-operative principles shows that these enterprises were a business model innovation when the movement was established, and they remain innovators today. The co-operative has provided an innovative and effective business model for addressing economic and social problems for centuries. However, it has been ignored and marginalized by mainstream economics and management theories. Academic research focuses on neoclassical, transaction cost economics (TCE), and the new institutional economics (NIE) theories that became dominant during the second half of the twentieth century. TCE is useful in its ability to address the hybrid nature of the co-operative business model, and NIE (an evolution of TCE) provides a useful framework for understanding the co-operative within its stakeholder context. However, they have been applied more to producer co-operatives than consumer or other types (e.g., social co-operatives). They also ignore or at least de-emphasize the social capital value creation of co-operatives, which is a focus of public and co-operative economics. This lack of attention to the social capital building role of agricultural co-operatives is a major gap in the research literature.

It is relevant to increase the level of understanding about the co-operative business model and its potential to deliver innovation, not only from its organizational configuration,

but also its ability to deliver product, service, process, marketing, and social innovations just as readily as IOFs. As humankind wrestles with the idea of stakeholder capitalism and seeks new solutions to balance profits and purpose, the co-operative business model remains as relevant today as it was in previous centuries. Faced with rising social and economic inequality, capitalism seeks to reinvent itself. Throughout the world, IOFs are embracing the UN Sustainable Development Goals (SDG) concerned to demonstrate their social licence to operate. More research is needed into how co-operatives deliver on these UN SDGs and the role played by innovation in this process.

The co-operative business model, as a values-based enterprise, has existed for at least two centuries. Its foundation of cooperativism, a system of running a business that puts people at the centre (maximizing member benefit), anchors wealth in a community, sets a multi-generational strategy and is competitive in the market offers an alternative to the IOF model. As an alternative to the IOF, the co-operative business model's ability to navigate between profit-maximizing IOFs and state-controlled SOEs has been recognized since the eighteenth century. This is evidenced by the concept of *associationalism* (associative democracy) that was originally proposed by Alexis de Tocqueville. These ideas align with the concept of the collective economy initially advocated by Charles Fourier and Edgard Milhaud and referenced by Whyman in 2012.

Co-operatives provide a middle path alternative to mainstream neoliberal or socialist business models; not replacing them but offering an alternative. In other words, co-operatives provide an innovative solution to the capitalistic dilemma. They combine making good business and doing good due to their dual nature. They deserve more attention from university business schools, and their economics and management departments.

Further readings

- Benavides, F. A. C., & Ehrenhard, M. (2021). Rediscovering the cooperative enterprise: A systematic review of current topics and avenues for future research. *Voluntas, International Journal of Voluntary and Nonprofit Organizations*, 32(5), 964–978.

- Jansen, J. J. P., Van Den Bosch, F. A. J., & Volberda, H. W. (2006). Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science*, 52(11), 1661–1674.
- Levi, Y., & Davis, P. (2008). Cooperatives as the ‘enfants terribles’ of economics: Some implications for the social economy. *Journal of Socio-Economics*, 37(6), 2178–2188.
- Libaers, D., Hicks, D., & Porter, A. L. (2016). A taxonomy of small firm technology commercialization. *Industrial & Corporate Change*, 25(5), 371–405.
- Mazzarol, T. (2024). *Co-operative and mutual enterprises research: A comprehensive overview*. Routledge.
- Mazzarol, T., Reboud, S., Clark, D., Moore, M., Malone, P., & Soutar, G. N. (Eds.) (2022). *Commercialisation and innovative strategy in small firms: Learning to manage uncertainty*. Springer-Nature.
- Novkovic, S., Puusa, A., & Miner, K. (2022). Co-operative identity and the dual nature: From paradox to complementarities. *Journal of Co-operative Organisation and Management*, 10(1), 100162.
- Puusa, A., Mönkkönen, K., & Varis, A. (2013). Mission lost? Dilemmatic dual nature of co-operatives. *Journal of Co-operative Organization and Management*, 1(1), 6–14.
- Rath, D., & Joshi, Y. C. (2020a). A holistic manure management model by leveraging dairy cooperative network. *International Journal of Rural Management*, 16(2), 131–155.
- Rath, D., & Joshi, Y. C. (2020b). Prospects and strategies for accelerating the growth of the agriculture and allied sector in Odisha with specific reference to dairying. *Agricultural Economics Research Review*, 33(2), 251–262.
- Whyman, P. B. (2012). Co-operative principles and the evolution of the ‘dismal science’: The historical interaction between co-operative and mainstream economics. *Business History*, 54(6), 833–854.