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A Framework for Developing Co-operative Benchmarks

Daphne Rixon and Fiona Duguid

The objective of this research is to identify a framework to develop multi-sectoral co-operative benchmarks. This is accomplished by first reviewing the literature on benchmarking, followed by the scant literature on co-operative performance reporting and benchmarking specifically. From this review the small number of resources and tools that directly relate to co-operative benchmarking are analysed. While these resources and tools have been developed with specific motivations in mind, they do not meet the requirements for a co-operative benchmarking or performance measurement tool. This study is important as it begins to address the lack of co-operative specific social, environmental, and co-operative benchmarks through the development of a co-operative benchmarking framework.

Introduction

Not everything that counts can be counted, and not everything that can be counted counts (attributed to Albert Einstein).

Stakeholders from all business sectors are increasingly looking to businesses to address pressing social and environmental concerns (Adams, 2004; Adams & Frost, 2006; Gao & Zhang, 2006; Knox et al., 2005; Reynolds & Yuthas, 2008). Like other business enterprises, co-operatives are expected to demonstrate that they are operating in a socially and environmentally responsible manner. Furthermore, from an identity differentiation perspective, it is important for co-operatives to demonstrate that they are distinct from other business enterprises. The co-operative difference is illustrated through the adherence to seven principles as established by the International Co-operative Alliance (ICA): voluntary and open membership; member economic participation; autonomy and independence; education, training, and information; co-operation among co-operatives; and concern for community. There is an understanding that because of the seven underlying principles, there should be observable and predictable outcomes that differ from outcomes observed in other corporate forms (Birchall, 1998, 2005; Co-operatives UK, 2006; Fairbairn, 2004). Co-operatives are providing goods and services in almost every sector in Canada (MacPherson, 2011) and play an important role in Canada's economy (Karapilllis et al., 2017), and yet, very little is known or understood about their social or environmental impact. Throughout this paper, we consider the following terms to be interchangeable: social, environmental, sustainability, triple-bottom-line, corporate social responsibility, corporate citizenship, corporate responsibility, and sustainable development.

The objective of this research is to identify a framework to develop multi-sectoral co-operative benchmarks. This study is important as it addresses the following gaps: the lack of co-operative specific social, environmental, and co-operative benchmarks; and the limited analytical and financial resources of small to medium-sized co-operatives to develop benchmarks and data.

According to Ettorchi-Tardy, Levif, and Michel (2012), benchmarking is often viewed as a way to compare indicators and is not perceived as a comprehensive tool based on voluntary collaboration among multiple organisations to create an environment of competition that provides an opportunity to apply best practices. Ettorchi-Tardy et al. (2012) note that a distinguishing feature of benchmarking is its integration within a participatory approach of continuous quality improvement. The authors define benchmarking as comprised of identifying a point of comparison and explain that since it became more widely known through its use by Xerox in the late 1970s, benchmarking has evolved from a method to compare production costs to become a framework for continuous quality improvement. When Xerox found production costs were higher in the US, the company started the process of competitive benchmarking.

Benchmarking has since gained widespread acceptance in the business world. Ettorchi-Tardy et al. contend that benchmarking has evolved from a quantitative approach of comparing performance against the competition to a qualitative approach whereby knowledge is shared about various stakeholders.

Co-operatives operate in a vast number of industrial sectors, including: grocery stores, agriculture, dairy, petroleum, fishery, health care, long-term care, housing, insurance, and banking. Each co-operative sector may wish to compare its performance with similar co-operatives in the same sector or with investor-owned companies (IOCs) in the same sector. For example, credit unions (CUs) typically compare their performance to other CUs as well as to banks (Rixon, 2013). Given the unique nature of co-operative enterprises with their focus on both financial and nonfinancial performance, it can be argued that they would benefit greatly from comparison to not only co-operatives in their industrial sector, but also to co-operatives across other sectors. Such comparisons could easily provide an opportunity to identify best practices not only in their own industry, but also in other co-operative industrial sectors, as well as to share these across industrial sectors.

When considering how to report on performance, it is often taken for granted that industry benchmarks are readily available. In the case of co-operatives, this is considerably more complex since the benchmarks need to be available for specific co-operative sectors as well as for all types of co-operatives in general. Currently, there are no publicly available benchmarks to measure a co-operative's social and environmental performance. Additionally, there are no universal benchmarks identified that measure co-operatives' co-operative performance (i.e., member engagement, patronage, governance, etc.). Furthermore, there is a paucity of research on how to develop co-operative-specific benchmarks.

The other gap we attend to is the limited analytical and financial resources of small to medium-sized co-operatives to develop benchmarks and data. According to a study conducted by Duguid and Balkan (2016), financial co-operatives (banking and insurance) have sustainability reporting that is leagues ahead of non-financial co-operatives. Their study also found that larger financial co-operatives had more sustainability reporting than smaller financial co-operatives (Duguid & Balkan, 2016). Furthermore, the smaller financial co-operatives were doing a better job of sustainability reporting than all sized (small, medium, and large) non-financial co-operatives (Duguid & Balkan, 2016). These findings may be attributed to an organisation's size, or financial and other technical resources available to prepare sustainability reports. Overall, non-financial co-operatives are likely to have limited staff with limited time and ability to prepare such data compared to financial co-operatives. Similarly, small CUs have fewer resources than larger CUs to accumulate and report on social and environmental performance. Indeed, large co-operatives have the financial resources to hire consultants and to gather data from other co-operatives to develop their own benchmarks.

The goal of this paper is not to develop a new reporting tool; instead the focus is on identifying a framework that can be used to develop benchmarks for co-operatives to measure their social, environmental, and co-operative performance. Irrespective of the reporting tool that co-operatives use to measure and report their performance, they still need to use benchmark data to compare their performance to their peers.

Methods

Our review looked at online resources and tools, industry reports, and journal articles for measuring and/or benchmarking performance. This included investigating general performance/benchmarking, social performance/benchmarking, environmental performance/benchmarking, both social and environmental performance/benchmarking (CSR), and co-operative-specific performance/benchmarking. We focused only on English language resources, tools, industry reports, and journal articles. We realise this limitation as there could be many other resources and tools developed specifically for co-operatives that we have not been able to include or assess.

While the review found a significant body of research on social and environmental reporting, for the purposes of this paper, we are concentrating only on the literature that included co-operatives. The broader topics of social and environmental performance research involving non-co-operatives provided us with insights into the scope of the benchmarking literature. However, the immediate focus of this paper is on co-operatives; consequently, our literature review relates to benchmarking for co-operatives.

Contextual Framework

Our literature review found a wide array of classifications related to benchmarking: internal, competitive, functional, generic, strategic, financial, investors, operational, products, process, technical, customer service, research and development, information technology and formal, informal, best practices, geographical, public/private sector, organisational structure and collaboration (Adebanjo et al., 2010; Albertin et al., 2015; Wever et al., 2007; Hong et al., 2012; Mehregan et al., 2010; Williams et al., 2012).

Over the years, a number of theorists have contributed to defining the benchmarking practice. Wever et al. (2007) note that benchmarking is more than looking for the best in class. Instead, it is comprised of measuring performance and identifying enablers (the solution that leads to a best practice) (Wever et al., 2007). Mehregan et al. (2010) define benchmarking as first identifying what to benchmark, then identifying the gap between the organisation and the benchmark, followed by a plan to close the gap. As previously noted, the authors define benchmarking as comprised of identifying a point of comparison.

Providing a succinct description of the evolution of benchmarking theory since its inception, Albertin et al. (2015) describe the following six generations of benchmarking and note that the goal was always the same — to compare with the best and learn from them. It is evident from this evolution that the trend in benchmarking has been one of increasing scope and comprehensiveness:

1. Reverse benchmarking — which focuses on the features and functionality of products.
2. Comparison of performance and identifying best practices.
3. Process and systems knowledge.
4. Learning successful strategies from external partners.
5. Global geographic coverage further enhancing comparison and learning.
6. Identify changes in the ability to meet new challenges.

Theoretical commentary has been present throughout the various generations of benchmarking that demonstrate the appetite for an increasing scope and comprehensiveness. Two new terms coined by Freytag and Hollensen (2001) introduced the concepts of 'benchlearning' and 'benchaction'. Benchlearning is the process of learning from industry leaders for the purpose of establishing best practices, while benchaction refers to implementing changes (Freytag & Hollensen, 2001). These terms do not appear to have been widely adopted. Elaborating on the second generation of benchmarking evolution, a study by Adebanjo et al. (2010) found that although benchmarking was used by the majority of 435 organisations they surveyed in 40 countries, only a small minority used best practices benchmarking. Despite this, they maintain that benchmarking is not a management fad, but has become an established practice. Building on the need for more recent advances in benchmarking, Hong et al. (2012) contend that there is an increasing need to benchmark global industry standards. Throughout the benchmarking generations, it remains evident that the benchmarking approach adopted by an organisation depends on product type, corporate and national culture, resource costs, and stakeholder demands.

In terms of the benefits associated with benchmarking, Tee (2015) posits that there are several: set achievable goals and improved performance; achieve better practices and processes; feedback to assist with implementation; and set new standards. Wever et al. (2007) suggest that benchmarking can lead to environmental improvements in products as well as cost reduction and opportunities for innovation. This is supported by Acquaye, Genovese, Barrett, and Koh (2014), who contend that companies are held accountable for their environmental performance by three stakeholder groups: organisational (suppliers, employees, management); societal stakeholders (media, consumers, community, and interest groups) and regulatory bodies. Albertin et al. (2015) and Shaw, Grant and Mangan (2010) argue that corporate benchmarking is essential to achieving continuous improvement since it helps organisations identify best practices and it provides a motivation and force for change.

Although benchmarking has many benefits such as improved performance, it nevertheless presents a number of challenges. Jenkins and Hine (2003) point out several difficulties encountered in benchmarking: securing suitable benchmarking partners who are willing to participate; availability of comparable data; differences in regulatory environmental standards in various jurisdictions; and the time commitment necessary to complete the benchmarking studies. In addition, benchmarking initiatives are fraught with challenges relating to developing standardised ways to compare organisations, as well as challenges surrounding scope selection, time, and cost (Francis, 2008 as quoted by Shaw et al.). Rothenberg, Schenck, and Maxwell (2005) argue that it can be complicated to choose measures that present the company in a positive light to employees and external stakeholders, and that it is difficult to identify which variables to use and how to measure them. They maintain that there are potential biases in organisational decisions regarding which metrics to use since they can give very different perceptions of the business (Rothenberg et al., 2005).

Synthesising these challenges, Williams et al. (2012: 266) outline four main reasons for a reluctance to become involved in benchmarking:

1. Questions regarding soundness of benchmarking.
2. Concerns about lack of resources to do the benchmarking work.
3. Organisational inertia regarding new practices that might result from benchmarking.
4. Concerns about impact of implementing new practices.

The challenges identified are only the tip of the iceberg. As with collecting any data, there are additional logistical, technical, and time-consuming challenges with which to contend. While benchmarking is intended to provide data regarding best practices for businesses, an overwhelming number of benchmarking best practices have been identified by researchers and practitioners. To be beneficial, Tee (2015) notes that benchmarking initiatives require support from the top down and there needs to be a focus on data quality, where the most useful data is employed, rather than what is easiest to measure. Tee (2015) also stresses that it is important to analyze the measures and identify performance gaps after data collection.

As potential solutions to the main challenges, Williams et al. (2012: 266-271) present four best practices to overcome benchmarking reluctance:

1. Front-end analysis.
2. Secure initial buy-in.
3. Establish formal methodology and plans.
4. Sustainment of benchmarking process.

To summarise and foreshadow the theoretical application to co-operatives, benchmarking has evolved from a simple comparison of best practices to involving complex measurements to assess change and transformation, and in doing so has become standard practice for many businesses.

Business enterprises, including co-operatives, may be motivated to benchmark performance for a variety of reasons. The most common reason is to identify best practices, adopt them, and ultimately improve performance. To identify best practices, it is first necessary to compare an organisation's performance to its peers. Through such comparisons, organisations can identify which peers have superior performance. However, it should be noted that although an organisation may be able to identify those peers that have superior performance, they may not be able to determine exactly what the best practice is that contributed to the superior performance. This is due to organisations wanting to protect their competitive advantage. In contrast, in the co-operative sector, competing co-operatives often willingly share best practices.

Many organisations build their strategic plans by identifying performance targets for each major objective. For example, they may set a target for recycling that is based on the industry standard. In order to set targets, it is helpful for an enterprise to know what the industry benchmark is for various aspects of performance, hence the importance of establishing this criteria for co-operatives.

The following section examines the benchmarking literature as it relates specifically to the social, environmental, and co-operative performance of co-operatives.

Analysis

Co-operative performance reporting and benchmarking

The connection between co-operatives and benchmarking or performance measurement is scant. Mayo (2011) argues that the basis of CSR as developed by and for commercial enterprises does not provide a suitable framework for co-operative enterprises. While there are many CSR tools and techniques, Mayo contends they focus on investor owned organisations and do not address other models of ownership such as co-operatives. Instead, he calls for co-operative enterprises to develop appropriate accounting frameworks to understand member value and business performance. Furthermore, Mayo posits that sustainable development is a core principle of being a co-operative and is part of the co-operative identity. Consequently, since co-operative performance is distinct from business performance, the metrics need to reflect input and outputs that support co-operative values and principles.

While there is a considerable body of literature on Global Reporting Initiative (GRI) applications in commercial enterprises, there is limited research on its use in co-operatives. However, a study by Toit and Buys (2013) examined the applicability of GRI to an agricultural co-operative in South Africa. They found it performed well under economic indicators, but it was more difficult to report on environmental performance. Toit and Buys (2013) found social performance was addressed through training and education, human rights were reported on through number of incidents, and society performance was highlighted through the co-operative's contribution to the community.

In the previous sections, we have highlighted the literature we found that can relate to co-operative benchmarking or performance reporting. While searching for relevant literature, we also discovered a few co-operative-specific resources and tools that co-operatives could use for performance measurement or benchmarking purposes (Table 1). We assessed the potential benchmarking effectiveness of these resources and tools based on the following criteria:

1. Whether it provided benchmarks on social, environmental, and/or co-operative performance.
2. Whether it included multi-sectoral co-operative data. This means key performance indicators (KPIs) across multiple co-operative industrial sectors. Multi-sectoral data facilitates identifying best practices outside each co-operative's own industry. However, comparisons of social and environmental performance across industrial sectors provides co-operatives with much broader and more comprehensive information about what is

going on outside their own sector, and consequently offers the opportunity to extend their knowledge of best practices which they might wish to adopt for their respective co-operatives.

3. Whether it comprised of a minimal number of KPIs — less than 15 in order to be accessible for small to medium-sized co-operatives that do not have a large staff and IT resources to produce the annual data.
4. Whether it was developed by co-operatives in a participatory manner, rather than led by consultants or industry experts.

Our review identified the following resources and/or tools for measuring co-operative performance, as illustrated in Table 1. We acknowledge that this is not a complete list of resources or tools available for co-operatives that are co-operative specific. Not only are these resources and tools only in the English language, but they are also the ones we were able to find online. We are confident that there are other resources available that individual co-operatives have designed for proprietary use, but have not published on the web. We assume that there are resources and tools developed in other languages. However, for the purposes of this paper, we are also confident that the findings show there is a gap in terms of co-operative benchmarking and performance measurement.

The four criteria are essential in developing a framework for benchmarking social, environmental, and co-operative performance of co-operatives. While the resource and tool review found a broad array of resources and tools to measure performance, provide inspiration, and/or provide information about or to co-operatives, it did not identify a tool that met all four criteria. A tool designed by co-operatives, for co-operatives that is doable in that there are a limited number of indicators that encompass social, environmental, and co-operative performance, and provide benchmarking abilities, could be helpful for co-operatives. Not unlike the expanded performance measurement and benchmarking tools that have been developed for investor-owned businesses, a tool that supports co-operative-specific benchmarking could better support co-operatives.

Table 1: Resources to Measure Co-operative Performance

Resource	Description	Suitability as a Co-operative Benchmark
Simply Performance (Co-operatives UK) http://www.proveandimprove.org/tools/Co-operativesUK.php	This tool's virtuous circle model reflects that co-operative enterprises are in business to fulfil their co-operative purpose; by achieving commercial success they are able to invest in their co-operative and social goals, creating a co-operative advantage. Co-operative, environmental and social performance indicators (CESPIs) were developed by Co-operatives UK to help co-operatives determine how they are living their co-operative principles and delivering on their social purpose (NEF Consulting, 2018).	While this framework does focus on helping co-operatives in various industrial sectors determine performance relative to the co-operative principles and was developed by co-operative experts, it does not provide benchmark data for social and environmental performance and has many more indicators.
Simply Finance and Simply Governance		
Co-operative Index http://www.coopindex.coop/	This tool aims to bring co-operative values to the awareness of managers and workers. The Co-operative Index is a tool to assist worker co-operatives with the challenge to align their values with their work.	It was developed by co-operative experts, looks at social, environmental, and co-operative performance, and has some co-operative benchmarking. However, it focuses on worker co-operatives and has many indicators.

The Consumer Co-operative Sustainability Reporting and Planning Scorecard http://ec.msvu.ca:8080/xmlui/handle/10587/1766	A self-assessment and planning tool that measures co-operative sustainability, including social, economic, and environmental performance, in relation to targets and priorities set by the co-operative's key stakeholders. This electronic tool allows co-operative retail grocery stores to measure and track their progress from year to year on a variety of indicators.	While this scorecard concentrates on social, economic, and environmental performance, it includes only one sector — grocery stores. It does not include multi-sectoral benchmark data, nor does it have any co-operative indicators.
Seward Co-op Scorecard http://seward.coop/coop/scorecard	Seward Co-op Scorecard was created in 2006 to share the effects of the business in numerous areas. The scorecard's creation was a staff-led process, and the writing of it gave several staff the opportunity to develop language defining the co-operative's success.	This scorecard has been developed by Seward Co-op for the proprietary use of Seward Co-op to measure their social and environmental impact in the grocery retail industry. It is not intended for multi-sectoral use and has many indicators.
TSE Services http://www.tseservices.com/	TSE Services, a co-operatively owned market research organisation founded in 1998 by North Carolina's electric co-operatives, provides tactically actionable market research and intelligence to electric co-operatives throughout the United States.	This system, designed by co-operatives, collects data and provides benchmark data on one co-operative sector — electric co-operatives. It does not include multi-sectoral data and it contains many more indicators.
Eurocoop http://www.eurocoop.coop/coop-page/csr-7indicators.html	These CSR indicators are the most relevant ones to show the co-operative difference. These seven indicators have been developed by the European Community of Consumer Co-operatives.	These are a slate of CSR-type indicators that illustrate the consumer grocery co-operatives' values. They are not benchmarks, nor are they transferable to other sectors.
Gerard Perron Co-operative Certificate http://archive.cooperativedifference.coop/assets/files/Webinar_materials/Perron.Certification.pdf	This framework is intended to evaluate co-operatives' co-operative impact using the seven principles as indicators. It has gone through development but has not been implemented.	While this framework can be used by multiple sectors, it was developed with and by co-operatives, and seems to provide some benchmarking ability. It is only focused on the co-operative performance based on the principles, and therefore does not include social and environmental performance.
Co-operative Housing International Good Governance Test http://www.homerun.coop/homerun/ASPNET/en/home.aspx	Facilitates comparison with others in a peer group through benchmarking. While every co-operative is unique, comparisons can inspire a co-operative to boost its performance.	This system collects data and provides benchmark data on one co-operative sector — housing co-operatives. Importantly, it does not include multi-sectoral data, has many indicators that include social, economic, and environmental related to housing.
Sustainability Scorecard http://www.coopzone.coop/co-operative-sustainability-scorecard/	The scorecard was designed for small and medium sized co-operatives as an affordable, easy to use self-assessment tool. However, large co-operatives could also benefit from its use. The tool uses the Creative Commons copyright. This allows people to share the information freely, without worrying about copyright violations.	This scorecard is a self-assessment tool; it does not include benchmark data on multiple co-operative sectors.

Co-operative Green Pact http://www.aciamericas.coop/Cooperative-Green-Pact	This pact is a response of the co-operative movement in Latin America to environmental problems. A large number of co-operatives demonstrated their commitment to Planet Earth by carrying out activities aiming at the protection of natural resources and sustainable development.	The pact is intended for co-operatives in multiple sectors, but does not have benchmarks attached to the pact, nor co-operative or social indicators.
Co-operative Board Evaluation http://www.grocer.coop/articles/assessing-board-performance	An appraisal provides the board with a chance to reflect on and assess its areas of strength and weakness. Additionally, a review of this type can provide a board with an invaluable yardstick by which it can prioritise its activities for the future. Finally, such an assessment can serve an educational and consensus building function — by clarifying and defining the overall standards of performance for the board.	The Co-operative Board Evaluation is less of a tool for evaluation and more of a resource for co-operative boards to think about the evaluation of themselves.
Co-operative Questionnaire https://www.slideshare.net/jobitonio/performance-report-questionnaire-for-cooperatives?next_slideshow=1	Developed in the Philippines for co-operatives, this is an extensive questionnaire that asks questions mostly about financial data.	This is an extensive questionnaire with many questions asking mostly about financial data. It is intended for multi-sectoral use, but has very few questions about social or environmental, and nothing about co-operative performance. It does not contain co-operative benchmarks.
CoMetrics https://www.cometrics.com/our-mission/	CoMetrics enables independent businesses, co-operatives, and nonprofit organisations to use data to transform their performance and impact. CoMetrics serves over 300 organisations in eight sectors ranging from retail grocery to nonprofit affordable housing developers to impact investors. It also offers database development services.	CoMetrics is a database development service, and therefore does not focus on benchmarking.
Sustainability Reporting for Co-operatives: A Guidebook; International Co-operative Alliance, April 2016 http://ica.coop/en/media/library/publications/sustainability-reporting-co-operatives-guidebook	A guidebook for co-operatives — large or small, in any sector, across the world. It builds on a Sustainability Scan and includes the feedback of primary co-operatives around the world from the Sustainability Advisory Group.	It does not include multi-sectoral benchmarks for social and environmental performance.

Proposed benchmarking framework for co-operative social and environmental performance

As illustrated through our literature review of the various co-operative performance reporting tools, there are no frameworks that met all four criteria: (1) benchmarks on social and environmental performance; (2) multi-sectoral comparative data; (3) minimal number of key performance indicators (social, environmental, and co-operative) that are feasible for small to medium-sized co-operatives to report; and (4) developed by co-operatives in a participatory manner.

In order to address the lack of a co-operative benchmark data, the authors are working with the Centre of Excellence in Accounting and Reporting for Co-operatives (CEARC, based at Saint Mary's University, Nova Scotia) to co-create with co-operatives from across Canada a Co-operative Performance Index, which will hopefully address the dearth of co-operative-specific benchmarks and performance measurement tools.

The proposed framework was developed to meet the needs of the co-operative sector as a whole rather than one type of business enterprise. Consequently, the framework does not focus on one co-operative's strategic plan. Instead, we aim to identify, through a participatory process, 15 social, environmental, and co-operative indicators that become the benchmarks for any co-operative performance. Our proposed framework development is comprised of five main phases that includes 12 steps:

Phase 1: Planning

Step 1: The first step entailed developing a comprehensive project description essential to the success of developing a benchmark. The project description includes the timeframe, scope, participant expectation, and methodology, including a description of the pilot project and identification of the project leaders.

Step 2: A vital component of the planning stage has been the formation of an external Advisory Committee. The Advisory Committee is comprised of 6 to 8 people with extensive experience in social and environmental measurement and reporting. It is expected that the Advisory Committee will provide advice initially to the project leaders and subsequently to the pilot participants.

Step 3: Securing support from industry associations has been helpful in terms of identifying participants and in offering advice. The industry associations helped provide legitimacy for the project and play an important role in disseminating information about it.

Step 4: Identifying industry participants in a manner to include small, medium, and large co-operatives from rural and urban areas from all regions of Canada. Pilot participants have been selected from small, medium, and large co-operatives in rural and urban regions, operating in various industrial sectors including insurance, banking, agriculture, housing, and health care.

Phase 2: Research

Step 5: A key component of the framework involves conducting a literature review to gain an understanding of prior research on the development of benchmarks for social and environmental performance. This is beneficial in terms of identifying similar studies and best practices, the results of which have been included in this paper.

Step 6: The project leaders aim to conduct semi-structured interviews with potential participants to gauge their suitability for the project and time availability.

Step 7: Based on the literature review and interviews, a summary of the information gathered will be provided to the selected participants. In addition, 1 to 2 one-hour webinars should be held with the participants and Advisory Committee to discuss the project, literature review, and interview findings.

Phase 3: Select KPIs

Step 8: A half-day kick-off meeting with the participants. This meeting will be held in person and take the form of a brainstorming session to identify 15 KPIs that reflect social and environmental performance.

Phase 4: Data Collection and Analysis

Step 9: To facilitate data collection and analysis, a web-based tool will be developed to store the KPIs. The tool should include the KPI name, definition and calculation methodology and have the ability to produce pre-determined reports as well as data downloads.

Step 10: Gather data from participants for the KPIs for a one-year period. During this timeframe, the project leaders should document any issues/concerns regarding data availability and comparability.

Step 11: Based on the participants' feedback and project leaders' observations, the KPIs should be reviewed and recalibrated as necessary.

Phase 5: Go Live

Step 12: Expand the number of participants for year two.

Conclusion

The objective of this research was to identify a co-operative benchmarking tool that was developed by co-operatives in a participatory manner; could be used by any co-operative; provided benchmarks on social, environmental, and co-operative performance; and had a minimal number of KPIs, making it feasible for small to medium-sized co-operatives to use. The research found that multi-sectoral benchmarks to measure social, environmental, and co-operative performance in a way that is not complex and is accessible to small and medium-sized co-operatives does not exist.

This research adds to the benchmarking literature by proposing a framework to address expanded performance of the co-operative sectors. This research is unique since it incorporates a wide array of industrial sectors that have a co-operative ownership structure. Given the limited research on benchmarking for social and environment performance of co-operatives, there are opportunities for future research.

As a result of our research, we have proposed a framework whereby co-operatives would work in a participatory manner to develop 15 KPIs to measure social, environmental, and co-operative performance. The focus is on identifying benchmarks that can be used by all co-operatives to support their strategic plans and meet related targets, as well as identify the co-operative difference.

The Authors

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References

- Acquaye, A., Genovese, A., Barrett, J., & Koh, S. (2014). Benchmarking carbon emissions performance in supply chains. *Supply Chain Management: An International Journal*, 19(3), 306-321.
- Adams, C. A. (2004). The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17(5), 731-757.
- Adams, C. A., & Frost, G. R. (2006). The internet and change in corporate stakeholder engagement and communication strategies on social and environmental performance. *Journal of Accounting & Organizational Change*, 2(3), 281-303.
- Adebanjo, D., Abbas, A., & Mann, R. (2010). An investigation of the adoption and implementation of benchmarking. *International Journal of Operations & Production Management*, 30(11), 1140-1169.
- Albertin, M., Pontes, H., Frota, E., & Assuncao, M. (2015). Flexible benchmarking: A new reference mode. *Benchmarking, An International Journal*, 22(6), 920-944.
- Birchall, J. (1998). Co-operative values, principles and practices: A commentary. *Journal of Co-operative Studies*, 30(2), 42-69.
- Birchall, J. (2005). Co-operative principles ten years on. *ICA Review of International Co-operation General Assembly Edition*, 98(2), 45-63.
- Co-operatives UK. (2006). *Demonstrating co-operative difference: Key social and co-operative performance indicators*. Available at <http://offline.cooperatives-uk.coop/Home/miniwebs/miniwebsA-z/cespis>
- Duguid, F., & Balkan, D. (2016). 'Talking the talk': Canadian co-operatives and sustainability reporting. *Journal of Co-operative Accounting and Reporting*, 4(1), 1-34.
- Ettorchi-Tardy, A., Levif, M., & Michel, P. (2012). Benchmarking: a method for continuous quality improvement in health. *Health Care Policy*, 7(4):101-19.
- Fairbairn, B. (2004). *Cohesion, adhesion and identities in co-operatives*. Saskatchewan: Centre for the Study of Co-operatives: Co-operative Membership and Globalisation.
- Freytag, P., & Hollensen, S. (2001). The process of benchmarking, benchlearning and benchaction. *The TQM Magazine*, 13(1), 25-30.
- Gao, S. S., & Zhang, J. J. (2006). Stakeholder engagement, social auditing and corporate sustainability. *Business Process Management Journal*, 12(6), 722-740.
- Hong, P., Hong, S.W., Roh, J., & Park, K. (2012). Evolving benchmarking practices: A review for research perspectives. *Benchmarking: An International Journal*, 19(4/5), 444-462.
- Jenkins, B., & Hine, P. (2003). Benchmarking for best practice environmental management. *Environmental Monitoring and Assessment*, 85, 115-134.
- Karaphillis, G., Lake, A., & Duguid, F. (2017). Economic impact of the co-operative sector in Canada (2009 and 2010). *International Journal of Social Economics*, 22(5), 643-652.
- Knox, S., Maklan, S., & French, P. (2005). Corporate social responsibility: Exploring stakeholder relationships and programme reporting across leading FTSE companies. *Journal of Business Ethics*, 61(1), 7-28. doi:10.1007/s10551-005-0303-4
- MacPherson, I. (2009). *Century of co-operation*. Ottawa: Canadian Co-operative Association.
- Mayo, E. (2011). Co-operative performance. *Sustainability Accounting, Management and Policy Journal*, 2(1), 158-164.
- Mehregan, M., Nayeri, M., & Ghezavati, V. (2010). An optimisational model of benchmarking. *Benchmarking. An International Journal*, 17(6), 876-888.
- NEF Consulting (2018). *Towards the new economy: co-operatives*. Available at www.nefconsulting.com
- Reynolds, M., & Yuthas, K. (2008). Moral discourse and corporate social responsibility reporting. *Journal of Business Ethics*, 78(1-2), 47-64. doi:10.1007/s10551-006-9316-x
- Rixon, D. (2013). *Credit union performance reporting in North America*. Madison, Wisconsin: Filene Research Institute.
- Rothenberg, S., Schenck, B., & Maxwell, J. (2005). Lessons from benchmarking environmental performance at automobile assembly plants. *Benchmarking, An International Journal*, 12(1), 5-15.
- Shaw, D., Grant, D., & Mangan, J. (2010). Developing environmental supply chain performance measures. *Benchmarking, An International Journal*, 17(3), 320-339.
- Tee, K. (2015). Identifying critical performance indicators and suitable partners using a benchmarking template. *International Journal of Productivity and Performance Management*, 64(3), 434-450.
- Toit, M., & Buys, P. (2013). An evaluation of the co-operative business model within the context of the global reporting initiative. *International Business & Economics Research Journal*, 12(2), 179-191.

- Wever, R., Boks, C., Marinelli, T., & Stevels, A. (2007). Increasing the benefits of product-level benchmarking for strategic eco-efficient decision making. *Benchmarking: An International Journal*, 14(6), 711-727.
- Williams, J., Brown, C., & Springer, A. (2012). Overcoming benchmarking reluctance: A literature review. *Benchmarking: An International Journal*, 19(2), 255-276.