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Shifting Mindsets for Managing Complexity: A Municipal Case Study

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A Phase 1 study report from the project: *Developing decision making in municipal planning to enable recovery, future adaptability and long-term resiliency*

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Executive Summary

Why did we conduct this research study?

As the world continues to change at an accelerating rate and is becoming increasingly complex, business as usual is being disrupted, and conventional management practices are falling short. From the COVID-19 pandemic to social justice issues, increasingly unaffordable housing, digital transformation, demands for racial justice and Indigenous reconciliation, and our climate emergency, leaders are being forced to respond to the growing impact of a widening range of external conditions. As a result, municipal leaders are finding it more challenging to match past performance results while adapting to accelerating change, and recognizing their existing strategic management capability may no longer be sufficient. There is an increasing need to more systematically understand how municipalities adapt to better deal with these increased complexities and share best practices of successful approaches. The initiative of the City of Kitchener to engage in a process of reviewing their own needs for adaptation of their strategic management practices is an ideal case study for our research on this topic.

At the core of this research are the City of Kitchener's Corporate Leadership Team (CLT) and selected management staff. These administrative City leaders engaged with REFOCUS, a Canadian cooperative non-profit organization, in applying the organizational change approach Enterprise Evolution (EE) to the municipal context, a global first. Enterprise Evolution is a methodology for co-creatively working with organizational leaders to build their system leadership capacity with innovative methods for managing for complexity. The first step in the EE programming is a series of workshops intended to lead to a mindset change among leaders by developing a more holistic understanding of emergent forces of change and appreciating the risks associated with maintaining the status quo. The EE theory of change defines this as an important step before engaging in a longer-term coproduction process of adapting strategic management practices. The focus of this study was to understand this initial process, its effectiveness within the specific context of the City of Kitchener, and its impact with the corporate leadership team. While there has been much theorizing about the need for a mindset change for deep and meaningful system change, empirical research reveals few successful, practical approaches that facilitate mindset change.

What did the case study involve?

Our research team conducted 60- to 90-minute, remote, semi-structured interviews with members of the City of Kitchener administrative staff who participated in the EE Introductory Workshop series, and interviews with the three REFOCUS team members who led the workshops. In addition, we reviewed a variety of relevant documents. The research was supported by a Partnership Engage Grant from the Social Science and Humanities Research Council of Canada (SSHRC). We would like to thank the participants from the City of Kitchener and REFOCUS for their trust and generosity in participating in the research.



What did we learn?

From a scholarly perspective, we determined that EE relates to the general class of organizational development and learning approaches grounded in systems theory. Specifically, EE applies leverage theory (Murphy & Jones, 2020), which holds that the further the layer is down the system (visualized as an iceberg), the greater its potential as a leverage point for enabling long-term and transformative change. At the deepest level are mental models of key system stakeholders, which includes mindsets. However, this is also among the most difficult layer to change.

What we are sharing in this report is some promising evidence that the City leadership and REFOCUS were able to set a strong foundation for a major transition in their strategic management approaches. This foundation is a shift of mindsets that opens the door for much more fundamental changes than the incremental changes that are all too common and we can no longer afford without severe consequences. Enabled was the foundational shift by the specific delivery approach that the REFOCUS team took with the leadership team of the city. This included co-creatively tailoring the engagement, finding a common language, experimenting with possible new methods and tools to understand their value for Kitchener-specific needs, and a respectful, supportive, and safe learning environment. The appealing characteristics of the Enterprise Evolution approach in combination with this positive delivery approach of REFOCUS resulted in an interest by the City of Kitchener to consider a future longer-term process of co-learning and change, a level of engagement that is rare within the municipal sector. At the time we are finishing this report, the City has engaged in a 2-year coproduction process with REFOCUS taking the next step in the Enterprise Evolution process.



1. Introduction

As the world continues to change at an accelerating rate and is becoming increasingly complex, business as usual is being disrupted, and conventional management practices are falling short. From the COVID-19 pandemic to social justice issues, increasingly unaffordable housing, digital transformation, demands for racial justice and Indigenous reconciliation, and our climate emergency, leaders are being forced to respond to the growing impact of a widening range of external conditions. As a result, municipal leaders are finding it more challenging to match past performance results while adapting to accelerating change, and recognizing their existing strategic management capability may no longer be sufficient. There is an increasing need to more systematically understand how municipalities adapt to better deal with these increased complexities and share best practices of successful approaches.

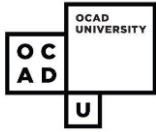
For this purpose, our research team took advantage of a unique opportunity. We designed a case study of a city at the forefront of innovation, Kitchener, which has embarked on an exciting journey in working with REFOCUS, a unique cooperative non-profit. REFOCUS developed Enterprise Evolution, a methodology for co-creatively working with municipal leaders to build their system leadership capacity with innovative methods for managing for complexity. This report presents a case study of the introduction of Enterprise Evolution to the City of Kitchener Corporate Leadership Team.

Our team hopes to gain a deeper understanding from this case study that can be shared broadly and will inform a much larger effort by our team working with municipalities across Canada and internationally on related challenges. In our Towards Equity and Accessibility in Municipal Climate Action (TEAMCA) project, for example, the research aim is to address equity and accessibility within municipal climate action by working with municipal leaders to create deep changes within their organizational systems, which are seen as needed for better managing interconnected issues such as climate action and social justice.

We provide background about the rationale for this study before introducing the case study and our research in more detail. We will then present our preliminary findings from the engagement of REFOCUS with the City of Kitchener leadership team. Finally, we will share some concluding thoughts about the implications of our research. Whether you are a municipal leader facing similar challenges, a policy maker influencing the frameworks and mandates guiding municipal actions, an organization working with municipalities, or a scholar with interests in this area, we hope that the information shared in this report is useful to you.

2. Background & Rationale

When examined through the lens of systems theory, a municipality, like any organization, represents a complex social system that is part of many larger and complex systems. We can define complexity in two ways. In the most visible way, it is the degree to which a large system of constant, dynamic processes are deeply interconnected. A higher number of interconnecting relationships, and feedback between them, leads to emergence of coherent patterns and unexpected outcomes. Another, simple definition from systems scientist John Warfield suggests a focus on better cognitive models to resolve complexity.



“Instead of presuming that it is a property of some ethereal system that is in the eye of some observer, complexity is the frustration that occurs when people cannot understand a problematic situation that is of great importance to them.” (Warfield, 2001)

The complex system components of great importance to a municipality include the relevant population, our economies, the changes in broader society, and the natural environment. When a complex system is relatively stable, uncertainty is low, and organizational actors can take action toward predictable desired outcomes (Espejo, 2008). As a complex system becomes perturbed, such as a municipality by the pandemic emergency, actions may have unpredictable effects because they are interacting with one or more change processes. Actions that reliably produced desired outcomes in the past may no longer be effective; even apparently helpful actions may produce any number of new, unintended consequences.

The uneven impact of the pandemic on already marginalized members of the community, for example, further increased existing inequalities. From the perspective of systems theory, these complex challenges cannot be overcome by a single team or system actor (such as a city’s corporate administration). It requires “requisite variety,” a principle of meaningful inclusion of all perspectives that are consequentially affected by a decision. In practice, requisite variety suggests we include the necessary stakeholder representatives that together comprise all perspectives of an issue, with their collective understanding engaged to make better decisions together (Beer, 1979; Ciasullo, et al., 2017). The better these actors comprehend the key system dynamics (e.g., the complex interaction of system components) and their own contribution to the system behaviours, the better they will be able to influence the system in collaboration with other system actors in a positive way and avoid unintended consequences.

As the world is becoming increasingly complex and volatile, the consequences of following conventional strategic management practices that were not designed based on the complex, systemic nature of our world, pose an ever-increasing risk to municipalities (Dunleavy, et al., 2006). As leaders deal with the more immediate impacts of these complex challenges, such as responding to increasing COVID-19 cases, it is easy to ignore these long-term risks. There can be significant consequences of waiting too long to adapt management practices toward a more holistic, complexity-minded approach using a systems orientation, just like the proverbial frog in the pot of water that slowly warms to a boil. As such, municipal leaders have a significant responsibility to guide the transition to a new type of strategic management.

In municipal leadership, adapting a complex systems orientation can provide opportunities for positive changes across multiple key functional areas. In the context of this report, when we refer to *leadership using a complex systems orientation* we refer to leadership that, with a systems perspective, continuously pursues a deeper understanding of the complexity they are facing and with that understanding practice strategic management that is grounded in systems thinking by applying approaches, methods and tools that are aligned with this thinking (referred to as systems-based management by REFOCUS). In doing so, the leadership fully and holistically integrate environmental, social, and economic aspects of our societal system.

The Figure 1 table below was created by REFOCUS to illustrate how management practices may evolve toward a complex systems-oriented leadership and how those changes contribute to positive strategic outcomes.

Figure 1: Transitioning from traditional to complex systems-based management approaches as envisioned by REFOCUS (Source: REFOCUS EE overview document)



3. The Research Case Study

3.1 Overview

While there is a growing recognition among municipal leaders of the need to address complex system interactions in strategic management, there is a gap in our knowledge of how municipalities can adopt a complexity orientation most effectively from a practical standpoint. The integration of major global issues such as climate change into strategic management, practicing applied systems thinking, breaking through organizational silos, and engaging with key stakeholders in co-creative partnerships, ultimately require major organizational transformation. Research allows us to systematically study how municipal leaders facilitate these transformations providing an opportunity for co-learning and reflection. This case, in particular, provides an in-depth investigation of key processes, experiences, and outcomes within the recent period. The experience of the City of Kitchener and REFOCUS in applying the Enterprise Evolution approach (see below) provides a meaningful case for our research because we are afforded the ability to follow the process changes in the municipal organization, following the systematic presentation of the EE process from the very start. This enables us to evaluate this case from both a theoretical lens and empirical observations. Our research with the City of Kitchener and REFOCUS provides a great opportunity for co-learning; learning that can be shared with other municipal leaders as they are facing similar challenges. Below we will first introduce the context of the case study before briefly describing our approach and methods.



3.2 City of Kitchener

Kitchener is a mid-size city in Southern Ontario, Canada. It is one of the top 20 fastest-growing cities in North America, a high-tech industry centre, recognized for their leadership in public engagement, climate action planning, stormwater management, financial stability, continuous improvement and community well-being. Kitchener has been at the forefront of previous municipal innovations and is known for its forward-thinking leadership and Council. Just like many other municipalities around the world, the COVID-19 pandemic challenged the local government to quickly adapt, create solutions to complex emergencies, coordinate with multiple levels of government and respond to changing guidelines, and forge new partnerships with a variety of external stakeholders. At the same time, the increasing public attention being drawn to issues of racism and other injustices in the wake of the Black Lives Matter and the Canadian Indigenous “Land Back” movements heightened the awareness of the inequitable impact COVID-19 had within cities.

While in many ways Kitchener has been a leader in adapting their management practices, their leadership also recognizes that there is a need for a deeper transformation to better enable their organization to respond to complex challenges, such as the pandemic and global climate change. As such, the City of Kitchener is an ideal case study for the purpose of our research. At the core of this research are the City of Kitchener’s Corporate Leadership Team (CLT), made up of the Chief Administrative Officer (CAO) and five General Managers; selected staff addressing sustainability, economic development, strategic planning, corporate performance and IT CAO staff and Sustainability staff worked with the three REFOCUS team members on the tailoring of the overall engagement and delivery of the workshops to the specific context and needs of the city.

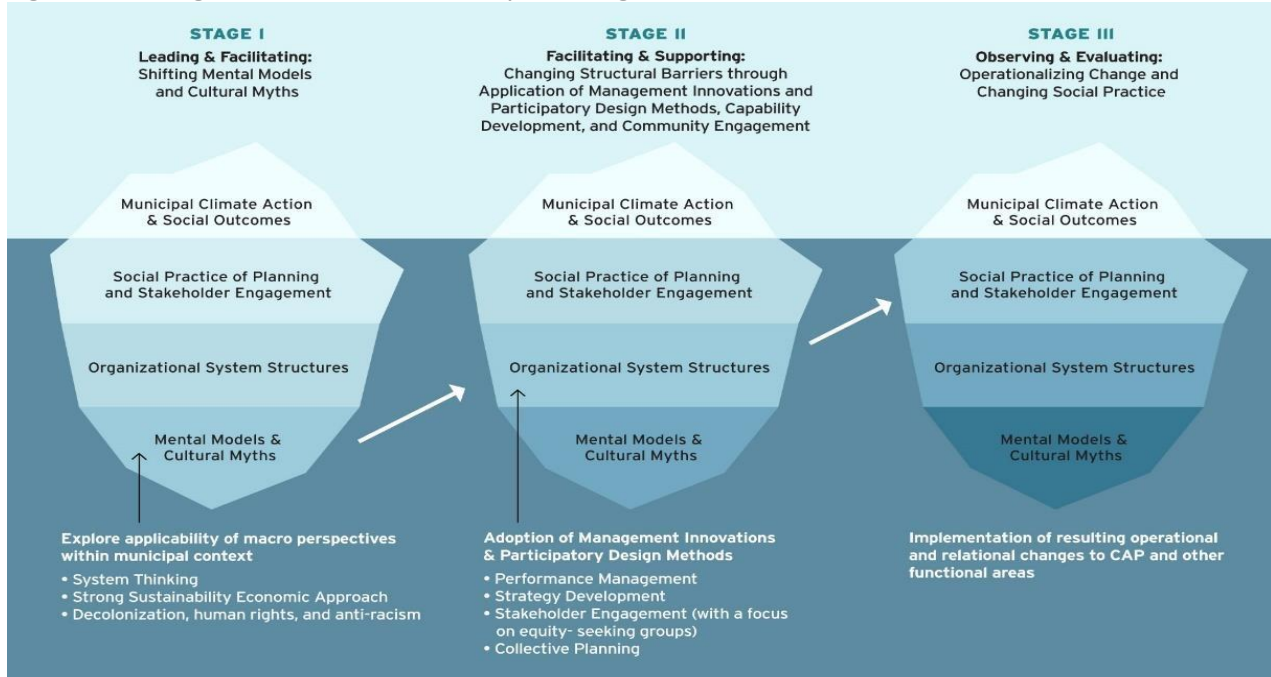
3.3 REFOCUS

REFOCUS is a Canadian cooperative non-profit, founded in 2017 by Executive Director, Randy Sa’d. REFOCUS delivers a unique combination of professional education and advisory services designed to help senior leadership teams build new capabilities and more effectively respond to accelerating change. They train and work with leaders to enhance their strategic management practices by applying innovative, systemic management knowledge, methods and tools that are grounded in systems thinking and designed to handle the increasingly complex conditions that are emerging. REFOCUS’s work is grounded in a specific theory of change, which is important to briefly describe to understand how the REFOCUS team structured the engagement with the City of Kitchener.

3.3.1 REFOCUS Theory of Change

The REFOCUS theory of change is shown in Figure 2 below. An Iceberg Model (e.g., Mental Models, System Structure, Patterns of Behavior and Events) visualizes the process of transforming management practices in response to complex, systemic challenges and suggests the lower the layer within the iceberg (i.e., the system), the greater its potential is to enable change. Change is also more challenging to make at layers further down the iceberg. Municipalities are commonly addressing complex, systemic issues at the surface level of Patterns and Behaviours, through mid- and lower-level planning and policy development (Hölscher, et al., 2019). Affecting change at this level of the ‘Iceberg’ is unlikely to contribute more than slow and incremental progress. Adapting to the increasingly complex future emerging must be driven by fundamental change at the level of System Structures through the adoption of systems-based strategic management knowledge, methods and tools.

Figure 2: Iceberg Model – REFOCUS Theory of Change



Within the current paradigm of conventional (non-systemic) management thinking, the inadequacy of best practice and the risk associated with maintaining the status quo is less likely to be fully visible or meaningfully understood. As such, building the capability for managing complexity begins at Stage I with senior leaders experiencing a mindset shift at the level of Mental Models. This is a necessary step that is largely ignored or, at best, ineffectively addressed by educational programs, NGOs and other organizations focused on enabling municipal transitions. During Stage 2, leaders and teams form new social practices, gain new knowledge and champion the adoption of complex systems-oriented management knowledge, methods and tools. Stage 3 is dedicated to the operationalization of strategic-level change at lower levels and across the organization.

The initial engagement with Kitchener’s Corporate Leadership Team focused on Stage I in this theory of change. If we are able to observe a mindset shift at the level of Mental Models during this phase, then a first important step in the process of change according to this theory of change has been accomplished. Further below, we will describe how specifically the REFOCUS team has implemented strategies to facilitate this mindset shift and what evidence exists that they were successful.

3.4 Enterprise Evolution

Enterprise Evolution is an applied learning program that draws on systems theory and management, including the relevant natural and social science, to elevate how strategic management is understood and practiced. It was originally co-developed in 2018 by Randy Sa’d with Antony Upward, Stephen Davies, and Dr. Tim Posselt. In recent years, a wide range of systems-oriented management methods and tools



have been developed to address the shortcomings of conventional management practices. According to REFOCUS, the Enterprise Evolution program supports senior leadership in building the understanding, confidence and capability to adopt and effectively apply a combination of systems-thinking management innovations especially well-suited to deal with complexity. These methods and tools are being selected in close collaboration with the corporate leadership team to match the municipality's unique profile, challenges, needs, and priorities.

Enterprise Evolution was originally developed for a leading innovation cluster dedicated to enabling the success of businesses within the offshore drilling sector in Norway. As external conditions rapidly shifted – oil prices plummeting, the Norwegian government divesting from fossils fuels, cultural change around the ethics of using fossil fuels – the Global Centre of Expertise Norwegian Offshore Drilling & Engineering (GCE NODE) decided it would be necessary to develop and deliver an innovative and future-focused program to enable the senior leadership teams they serve to adapt. Rather than focusing on sustainability issues, the program was to be focused on better management as part of appealing to their audience.

A successful entry-level, three-company pilot led the program to be scaled up to reach the majority of ~100 business members. The positive impact drew the attention of innovation clusters and agencies across sectors, which led GCE NODE to develop a model through which they could train and license other organizations to scale the program's delivery across Norway.

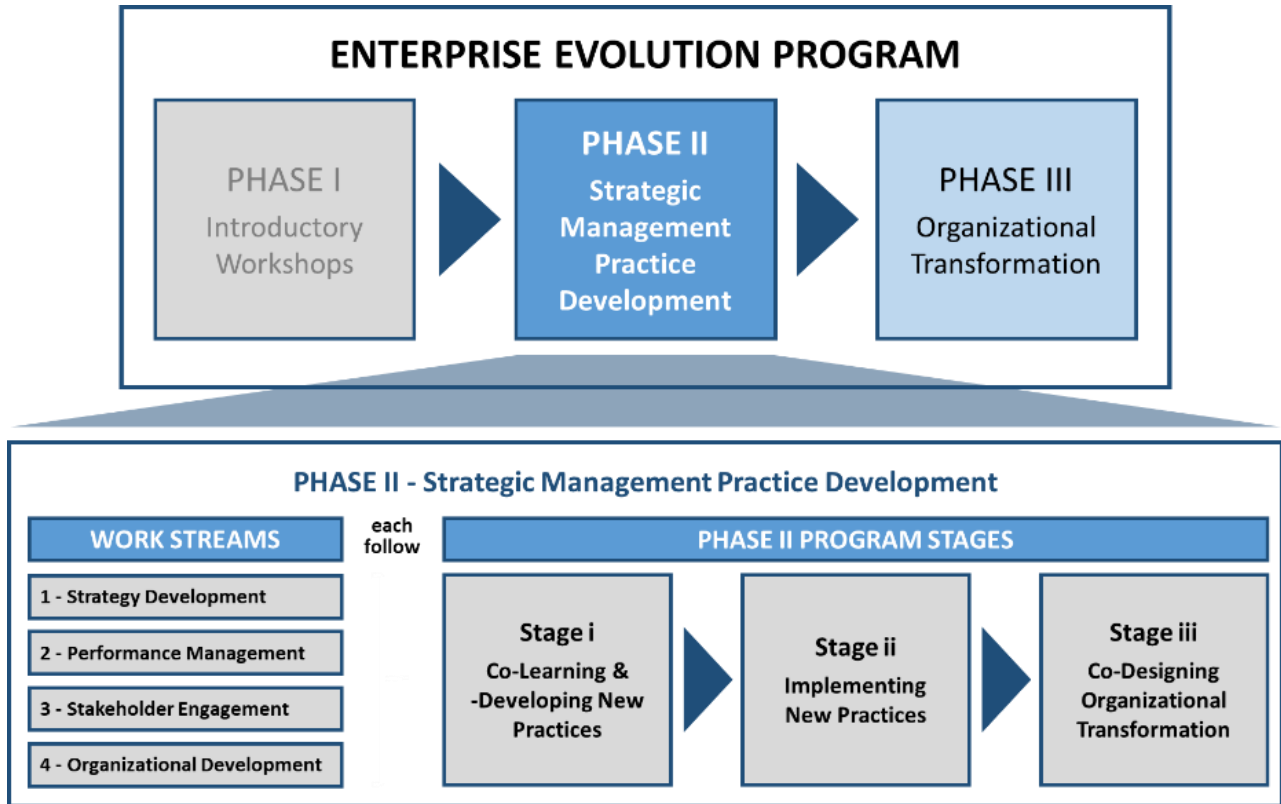
The complete Enterprise Evolution program as envisioned by REFOCUS is depicted below in Figure 3:

Phase I - Introductory Workshop Series: Through several facilitated interactions, leadership teams have the opportunity to develop a more holistic understanding of emergent forces of change and appreciate the risks associated with maintaining the status quo. These workshops are designed to deliver a practical understanding of how applying Enterprise Evolution will lead to better outcomes through improved strategic planning, performance management and stakeholder engagement.

Phase 2 - Strategic Management Practice Development: To plan how management practices will be adapted across key work streams, leadership teams are engaged in an intensive co-learning and -design process. Leaders will gain a deep understanding of several systems-based management methods and tools (selected because they best meet the organization's needs) and collaborate in planning how they will be applied in practice. The leadership team will then be supported through the process of implementing the selected innovations and building capabilities that will ensure they can continue effectively applying them without continued support.

Phase III - Organizational Transformation: Leadership teams are supported through the process of facilitating cross-organizational transformation that is necessary in responding to the adaptation of strategic management practices and plans developed during Phase II.

Figure 3: Overview of Enterprise Evolution Program



By 2020 the program was recognized as adaptable for municipal leadership, and the City of Kitchener took interest in the applicability of Enterprise Evolution as a first foray into the municipal sector and participated in three introductory workshops.

3.5 Research team, approach, and methods

This report is based on a preliminary analysis of an ongoing research study. This study is being conducted by Dr. Peter Jones (OCAD University; Flourishing Enterprise Institute), Dr. Manuel Riemer (Wilfrid Laurier University; VERiS), Gryphon Loubier (University of Waterloo; VERiS), and Brittany Spadafore (Laurier; VERiS) in collaboration with Randy Sa'd from REFOCUS and the City of Kitchener¹.

For the first phase of the research, our research team conducted 60 to 90-minute online, semi-structured interviews with those who participated in the Introductory Workshop series, and interviews with the three REFOCUS team members who led the workshops. The interviews were conducted between December 2020 and March 2021.

¹ The research is funded by a Partnership Engage Grant from the Social Science and Humanities Research Council of Canada (# 1008-2020-0134).



Interview questions related to the participants' experience and key insights drawn from the EE workshops, strategic planning approaches, community engagement, and issues particularly related to the climate emergency and related community concerns. In addition, we inquired about the leadership's current planning and complexity management practices, especially concerning the adaptation to dealing with the COVID-19 pandemic. Through conversations with REFOCUS team members, our research team tried to better understand their guiding theory of change and how the Enterprise Evolution program is intended to work in a municipal context. We also tried to capture perspective on how the implementation of the workshop series resonated with the participants. In addition, to the interviews, we also reviewed key documents, such as the workshop slides and descriptions of the theory of change and Enterprise Evolution.

Ultimately, we are interested in learning about the process of transitioning the strategic management of the municipality towards a system orientation in the aim to prepare to manage complex challenges. This starts with the leadership team's initial motivation to engage with Enterprise Evolution. In this report, we are presenting the findings from the experience with the introductory EE workshops, the process leading up to those, and their impact.

Before we present the empirical findings, we will reflect on the potential of this case study and the Enterprise Evolution program from a theoretical and scholarly perspective. This will provide important context to understand why this case study is so relevant and interesting.

4. The Potential from a Scholarly Perspective

From the scholarly literature, we can locate Enterprise Evolution in the general class of organizational development and learning approaches grounded in systems theory (Voros, 2005; Senge, 1990). According to Jones (2014), "systems theory and its guidelines in practice- systems thinking- have been promoted as the best techniques for raising social awareness about interconnected complex systems, which might determine human destiny." (p. 92). However, rather than being a single self-contained program, Enterprise Evolution is a framework that serves as a framework for a variety of promising management approaches that share in common that they have adapted systems thinking and integrate contemporary knowledge practices from the natural and social sciences. Each of these approaches addresses a different aspect of strategic management, and are combined for each application of Enterprise Evolution in a complementary and targeted way. As such, in the design of their own unique approach, REFOCUS and their partners are applying principles of systems thinking that suggest that complex challenges cannot be solved by a single actor or approach.

The REFOCUS theory of change embedded in Enterprise Evolution follows a popular applied systems model, the Iceberg Model, which was introduced above. This model is an application of leverage theory (Murphy and Jones, 2020), which specifies that the functions in a social system that have the most reach or influence demonstrate the highest impacts over time, across a range of options (Meadows, 1997). The iceberg model applies this theory by suggesting that the further the layer is down the system (visualized as an iceberg), the greater its potential as a leverage point for enabling long-term and transformative change.



At the surface level are those system aspects that are easier to be aware of and respond to. For example, it is relatively easy to design another public health campaign as a response to a new virus following a known approach, while it is much more difficult to reconsider the type of thinking that informs the one-directional nature of most public health campaigns. These deeper layers are not as easily accessible and often require a process of reflection and learning to fully appreciate how impactful they are in shaping leaders and employees' decisions and behaviour. This learning takes time and may be difficult to justify in times of crisis. However, without breaking down existing mental models, paradigms, and worldviews, the transformation of the municipal organization towards a system orientation will be prone to fail right from the start with significant consequences. Each new crisis, such as the current pandemic, provides a reminder of that.

Only if municipal leaders recognize the constraints of their current paradigms and mental models is it likely that they will be motivated to step into a new paradigm of management that is adequate for the emerging complexities. An important aspiration of REFOCUS is to create a practical and relatable approach that empowers municipal leaders to engage in this level of self-reflection and change. The great potential of this approach has been recognized by leading municipal organizations such as ICLEI-Local Governments for Sustainability and the Federation of Canadian Municipalities, as well as increasingly by municipal leaders themselves.

The first phase of the EE program can be seen as a learning experience intended to begin shifting shared mental models of the municipal leadership team in situ. This phase enables the study to appreciate the dynamics of complexity and management approaches necessary more deeply for decision-making in a VUCA (volatile, uncertain, complex, ambiguous) world. Mental models are deeply ingrained assumptions, generalizations, or metaphors that develop over time and experiences and influence how we understand and make sense of the world and how we take action, including an approach to managing organizations (Senge, 1990). Seeing the municipality as a service provider to its customers (i.e., taxpaying citizens and organizations) is one example of an influential mental model that shapes the way the municipal staff engage with other system actors in the community, including the design of a public health campaign. By increasing consciousness of the mental models at play and the ways their utility may be constrained or limited and engaging leaders in self-reflection, they are able to more easily recognize the growing risk associated with maintaining the status quo in the face of increasing complexity. A deep inquiry process within the workshops enables participants to appreciate the range of mental models that shape their approaches to strategic management and the potential for organizational change necessary to put new models into action.

Besides the unique umbrella structure of Enterprise Evolution and its systems orientation, other important aspects are worth highlighting. The accessibility to management tools and methods grounded in systems thinking that enable municipal leaders to more easily integrate a systems orientation and the latest scientific knowledge within their strategic management reduces the likelihood that the municipal leaders will be reluctant to engage in major change efforts. This assumption is grounded in the application of psychological theories of cognitive dissonance, self-efficacy, and causal attribution that pose that people are more likely to engage in positive change following negative feedback (including from personal insights) if they are provided with effective tools and methods that enable that change (Riemer & Bickman, 2011).



Furthermore, the REFOCUS delivery program is an interesting hybrid of a professional development program and solution-focused management consulting, which differentiates it from many of the traditional consulting and professional educational approaches. Traditionally, professional education is generally case study based and designed to help participants gain new knowledge and insights. It is up to the participants to then figure out how to effectively apply the knowledge and insights gained within their own situation in practice. Management consulting, on the other hand, generally involves a team with capabilities the client is lacking, which is then leading the development of a plan or solution with the client. Typically, the client gets the outcome they need for their situation but remains dependent on the consultant as the process is not designed to enable them to develop the capabilities they are lacking. Enterprise Evolution is not profit-oriented but is trying to enable as many organizations as possible to adapt management practices as quickly as possible and thereby maximizing progress toward shared sustainability outcomes (such as the Sustainable Development Goals).

In combining professional development and management consulting within Enterprise Evolution, leaders get the foundational knowledge and expertise they need to engage with their challenges more adequately and they are then involved in co-developing the needed solutions, providing the applied, experiential learning opportunity that enables them to adapt practices and build new capabilities. With these new and emerging capabilities, leaders are able to continuously adapt their management practices to changing external conditions without depending on external support. This is where the potential for scalability of Enterprise Evolution lies, given that they are teaching leaders to fish rather than providing them with a meal, to use the imagery of an ancient proverb.

The empirical aspect of this case study, to which we will turn next, provides us with a great opportunity to study to what degree this theoretical potential of the Enterprise Evolution program is being realized. To start, we will explore how Kitchener's context was a good match for the Enterprise Evolution approach and what potential their leadership saw in it.

5. What We Learned from the Case Study

Our findings share what we learned about leadership's motivation and readiness when first engaging with REFOCUS, and how introductory workshops were then tailored to their context and interest. Further findings are detailed about the experience in the workshops and the learning process, and how initial outcomes in regard to the theory of change were observable. It is important to note that these are our preliminary insights based on data collected so far, and are focused on relevance to municipal leaders.

5.1 Kitchener's motivation to engage with Enterprise Evolution

Our interviews with City staff and REFOCUS revealed that the municipal leaders recognized a need to better respond to complex challenges with stronger focus on the integration of long-term objectives and outcomes. Some initial efforts had been made in that direction, which created an appreciation among some leaders for what Enterprise Evolution may have to offer. This was facilitated earlier through the implementation of a major reorganization, which was intended in part to *“respond differently and more flexibly to changes that were happening in the city”* [CLT03]. Part of this reorganization included a selection of new corporate leaders who were *“very dynamic, very progressive, very interested in a high level of service”* [CLT03]. It became clear through our interviews that the City's leadership was exceptionally ambitious, forward-thinking, and open to considering change and adaptation in their practice.

We did a session with our staff management team [...] and we asked what the top issues [were that] the city was facing, and at that time, CLT [Corporate Leadership Team] thought staff would be talking about their work responsibilities but they didn't... They wanted to address broad societal issues - homelessness, affordable housing, responding to climate change which had nothing to do with their specific jobs. [CLT03]

This organizational change effort also included a “transformative” strategic plan, considered by staff as a significant advancement over the traditionally updated 4-year cycle plans that were the common practice since the inception of the planning process in 2000. This new strategic plan was intended to be more “focused”, “deliver on the priorities” and “result in meaningful actions and changes in the city”.

The new strategic plan included an objective to localize the Sustainable Development Goals (SDGs). The manager of strategic and business planning saw an opportunity with REFOCUS to work with an outside organization in a co-creative way to bring the City’s strategic plan and management to the “next level of transformation” and support a better integration of the latest science on environmental and social challenges as represented in the SDGs and related frameworks. While seen as critically important, the operationalization of the SDGs within the existing strategic management framework of the City appears to be quite challenging according to municipal leaders.

Scholars studying sustainability transitions have highlighted the fact that there is currently a gap in practical and effective approaches for transitioning the very institutions that are supposed to lead these systems transformations (Loorbach, 2010). Thus, the City’s leadership team found the opportunity to adopt a complex systems orientation while also learning relevant strategic management tools and systems thinking methods to deal with complexity to be both attractive and timely. Particularly, the manager of strategic and business planning saw a great potential in the Enterprise Evolution for the advancement of the city’s strategic planning and for better management and integrating consideration of equity, economic and environmental issues.

For example, Kitchener’s Corporate Sustainability Officer became a champion for Enterprise Evolution (EE) when she saw the potential to lay the groundwork for better integration of sustainability within all programs of the municipality. Integration of multiple intersecting plans and community needs is a key driver for developing a complexity management approach based in systems thinking. She saw that the EE approach could significantly improve leadership’s ability to advance an ambitious climate action plan and integrated sustainability goals. As such, she worked with REFOCUS and other city leaders to tailor the approach to the context and needs of the city. All of these factors contributed to the interest of the Corporate Leadership Team to invest time and financial resources into participating in the Enterprise Evolution introductory workshops while addressing the impacts of the pandemic). The CLT also indicated they were interested in and ready for a fresh approach to organizational development as part of the strategic change that it might facilitate within the municipal organization.



It is important to note that the City engaged in the workshops in the midst of the COVID-19 pandemic, Because of this, some members of CLT initially suggested delaying participation. The fact that CLT decided to move ahead speaks to the real potential they saw in the engagement with REFOCUS and their willingness to invest their time and resources in this. It also shows the significant value they saw in what the EE program had to offer in dealing with the complex challenges the pandemic presented in a more systems-oriented way and their insight that this requires time for reflection and learning, with the support of the REFOCUS team.

5.2 Application of Phase I Enterprise Evolution at City of Kitchener

REFOCUS' engagement with the City of Kitchener started in August of 2020, following the first wave of the pandemic. The scope of the engagement was focused on Phase I of the Enterprise Evolution introductory workshops and three components described below:

5.2.1 Tailoring the workshop experience: August – October, 2020

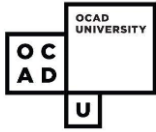
Phase I of the Enterprise Evolution program started with REFOCUS engaged with the City of Kitchener to co-create and facilitate the Introductory Workshops. The City's response to the COVID-19 pandemic and CLT perceptions of the development of the 2019-2022 Strategic Plan provided the initial backdrop for reflection. Prior to the first planned workshop, REFOCUS asked the corporate leadership team to complete anonymous surveys designed to better understand perceptions of the City's COVID-19 response and strategy development process. In addition, City staff shared relevant internal and planning documentation for the REFOCUS team's review. This allowed the REFOCUS facilitators to design exercises and conversations based on an understanding of the City's current practices, plans and unique context.

5.2.2 Executing the Phase I Introductory Workshop Series: October, 2020

The Enterprise Evolution Introductory Workshop Series designed for the City of Kitchener consisted of three sessions that were delivered over the course of two weeks. Prior to each workshop, participants were given an assignment to complete, which was mainly designed to introduce relevant concepts. This approach was very deliberately employed to ensure the limited time available for convening the entire group could be focused on dialogue rather than introducing new knowledge. The following is a profile of the three workshops delivered:

Workshop #1 - The Need for a Transition: During this 3-hour module the REFOCUS team delivered the results and an assessment of the surveys completed by CLT members. According to the REFOCUS team, there was significant degree of consistency among the responses collected, including the shortcomings and opportunities for improvement that individuals identified. For the REFOCUS team, this provided a valuable foundation for facilitating self-reflection and dialogue focused on current practices and related future opportunities for advancing strategic management practices.

The workshop started with a guided self-reflection on the gaps in the current strategic management using concrete and specific examples from the Kitchener context. The facilitators' assumption was that the leaders' insights generated in this self-reflective way is much more powerful than a lecture on the general shortcomings of current strategic management practices from an outside group. Required and optional reading assignments were assigned prior to the workshop. These included readings on



organizational strategy in the context of the COVID-19 pandemic, strong sustainability, and ecological economics (e.g., Raworth's *Doughnut Economics*).

As an outcome, key development priorities were established, which were held in focus and used to further tailor the second and third workshops. Macro-economic sustainability system models, such as Doughnut Economics, were introduced and participants were given the opportunity to explore together what these models may reveal in their current situation and how they might be integrated into strategic management practices.

Workshop #2 - The Innovation Lab: This 5-hour module was designed for the CLT to develop a deeper understanding of Enterprise Evolution and its practical applicability. The intention of this workshop was “to provide a sandbox for lightly testing systems-based management tools and methods,” such as the MultiCapital Scorecard®, Flourishing Enterprise Strategy Design Method (FESDM), and the Future-Fit Business Benchmark (FFBB). This was providing the leadership team with a way to more concretely understand and assess the value that adapting strategic management practices may deliver. Again, some focused readings were assigned prior to the workshop to learn about multi-capitalism, anticipatory governance, and organizational change from a systems leadership perspective.

The leadership team was given the opportunity to explore a Specific, Measurable, Actionable, Realistic and Timely (SMART) action set as part of their 2019 strategic plan. In this case they were introduced to several tools that provided the means for exploring how the goal and its fulfillment may look through the lens of systems theory. The tools seemed to help the CLT to examine how high-level organizational objectives and priorities may need to be reflected within strategic plan goals and actions. Further, the CLT was able, from a systems perspective, to establish a more comprehensive list of stakeholders with whom value may be co-created (or destroyed), in addition to what would need to be measured to assess the value created. This experience appeared to be important in shifting the mental models of the leadership team. We learned that conventional management approaches were providing a limited view of all relevant considerations, which resulted in setting priorities, making decisions and allocating resources, with a fraction of the information that would be ideal for functioning optimally. Further, experimenting with the systems-based tools introduced by the REFOCUS team, demonstrated their potential to address this gap and empower the CLT to lead more effectively.

Workshop #3 - The Journey Ahead: The final 3-hour session served as an opportunity for the CLT to reflect on the new knowledge and experience gained with the internal challenges they are dealing with in mind. The REFOCUS team was also invited to provide their frank assessment of the City's current strategy management practices and capabilities, with development opportunities in mind. REFOCUS provided the team with a roadmap outlining the complete Enterprise Evolution program as well as an opportunity to assess both its fit for the organization and the team's readiness to participate. A survey asked for reflection on the learning outcomes achieved, whether expectations were met, and aspects of the workshop that went well or could have been improved. This workshop was important in solidifying the commitment for a longer-term engagement with REFOCUS and engage in the planning for Phase II, which we will discuss a little bit more in the last part of this section.

5.3 Leadership's experience with the delivery of EE Phase I of the EE Program

In implementing a theory of change, the form of delivery is almost as critical as the change model itself. That is, only if the theory is translated into a practical format that actually realizes the potential of each step in the change process, can the theory of change generate its impact. Thus, before we explore the impact of the theory of change, we will investigate how the participants and the REFOCUS team experienced the delivery of the workshop and the related activities. There were three aspects of the delivery approach that were highlighted by participants as shaping their positive assessment of the experience and facilitating their collective reflection and learning: the customization/tailoring of the approach, the focus of the workshops and the level of communication, and the credibility, safety, and trust established through the engagement. In the discussion, we will reflect on how these specific experiences enabled the theory of change to generate its impact.

Tailored to our needs. Both the REFOCUS facilitators and all of the municipal participants commented on the importance of the tailored and customized approach to the success of the workshops. Two of the municipal participants commented on how they worked closely with REFOCUS prior to the first workshop and throughout to ensure that the workshop experience meets the needs of the leadership team to be grounded in CLT's own experiences and challenges. This, in addition with the two surveys and review of city documents ensured that the key concepts and insights the REFOCUS team was hoping to convey were concrete and related to the lived experience of the leadership team.

One of the REFOCUS team members described the purpose of tailoring the workshops as follows:

The idea was simply that we wanted to understand from their perspective how strategy development is happening, what's strong and enabling about it, what's not. And, that provided really great insight because it was all really clear. [REF01]

Speaking the same language. The REFOCUS team explained that they put a lot of effort into determining the right approach of communicating relatively abstract and complex theoretical considerations in a language and format that is relevant and accessible to the municipal leadership team. This included framing the challenges and approaches the facilitators wanted to convey within specific strategic management areas that the leaders deal with on a regular basis. This approach drew insight into how a systems perspective, including the integration of the latest science on the planetary boundaries, is critical for current and future strategic management. One facilitator described this approach as follows:

So, the purpose of the engagement with Kitchener, was to help them understand the systemic interconnections between the various domains that are all under their mandate and to show them what some of the cutting-edge frameworks, and mindsets, and systemic design tools could be used to help them take a broader perspective on their planning and to integrate their planning for strategic decision-making purposes. [REF03]

This approach resonated well with the workshop participants. In reflecting on this format, one City leader found that the workshops delivered the right combination of theory, application, and feedback, leading to a successful introduction into highly complex concepts and learning models for shifting mental models. Participants felt that this three-pronged approach to program delivery served as a bridge that met their current level of understanding and it created a comfortable and open learning environment. As shared by one participant:

I think overall it was really effective and I recall [Facilitator 1] provided good overview of the context and theory. [Facilitator 3] provided real-world application and how to apply the context, as well as answering questions from a business/operational standpoint. They were a good pair and [Facilitator 2] was very effective in sharing back the survey results and facilitating the technical part of providing input online. That all worked well. People were open to contribute, and felt well-supported and comfortable to do so. [CLT04]

Still, even with this approach some participants still felt that the program included too many words that could be expressed in more straightforward and accessible ways. REFOCUS has since made these improvements in more recent iterations of EE documentation.

A respectful, supportive and safe learning environment. Reflecting on the shortcomings of one's deeply engrained mental models in order to overcome them is a humbling task that requires a comfortable and safe environment in which people can trust each other and be vulnerable. The REFOCUS team deliberated significantly on how to create this type of environment. Several outcomes contributed to "an open and comfortable learning environment" as expressed in the quote above:

- Working with members of the leadership team upfront to build a working relationship and tailor the approach and content to the experience of the municipal leadership team,
- Finding the right language that frames concepts in a way that is relevant to city managers,
- Being respectful of participants' time, and
- Finding a good balance of different approaches.

In the interviews participants indicated that that type of safe learning environment facilitated a process by which the REFOCUS team was able to challenge them and their assumptions as a critical friend, which is discussed next.

5.4. The Theory of Change and its Impact

As mentioned, the focus of this report is on the first step in the EE theory of change: Challenging and shifting mental models. The REFOCUS team believed that they could establish that by co-identifying with the participants the need for transformation through a review and assessment of the leadership's current management practices using several systems-based, macro-level models, such as Doughnut Economics. The insights from this process would then facilitate a deeper understanding and appreciation of the Enterprise Evolution Approach and its practical applicability. This, in turn, would prepare the leadership to assess the fit of this approach for their team and organization.



Given that the city was already considerably competent and forward-thinking in regard to strategic planning and management, and had taken some steps towards systems thinking approaches, the key for the facilitators was to build on prior knowledge and convey more transformative steps that they could take. They did this by introducing macro-level models and through experimentation with applying several systems-based management innovations at an introductory and relatable level. Through this application the facilitators were able to demonstrate to the leadership team the kind of relevant and material trade-offs they are making in the way they currently set priorities and allocate resources as described by one facilitator:

They've gone above and beyond, they are innovating, they're doing more than what cities typically do. But I think they're also appreciative of the fact that they haven't "cracked the nut" so to speak. They haven't done what they need to do in order to produce the outcome that they're after. So as much as they might be leading and exemplary, they also appreciate that with the outcome in mind, they have not done what's necessary and that there is much heavier lifting to do. This is really moving from the incremental to the really transformative approaches. [REF01]

One workshop participant, for example, noted that the foresight methodology introduced in the workshop contributed to a shift in their mindset and led to critical reflections on their current planning practices.

One of the great things that stood out for me was the foresight methodology and I actually have undertaken some additional learning on this topic since these workshops. That was really intriguing to me to look at what trends are impacting the organization, develop a plan to respond, and make choices about how to either address the trend or capitalize on it. That's something that's been missing for us in our previous corporate planning processes. [CLT04]

Another participant commented on a similar experience in applying backcasting.

"A process (using the REFOCUS methodology) to ensure we aren't missing opportunities to achieve deep sustainability by looking at our strategic planning and strategic initiatives and using backcasting to identify measurable steps to get to the final outcome. Creating a consistent understanding across the organization may help ensure we are all working together to achieve Council's ambitious sustainability targets."

Another area that this need for transformation and system-based approaches being discussed were the city's challenges in meaningfully integrating the Sustainable Development Goals (SDGs) into the City's performance management. The participants described a challenge with operationalizing the SDGs at a strategic management level within corporate aspects of the local government. This is a common challenge that many municipalities across the world are struggling with. It was evident that many participants felt as though the EE process was a means to catalyze and act upon pre-existing notions of moving towards a “better, more sustainable world.” The City leadership team also felt comfortable sharing other areas where they (and many other municipal leaders) see current shortcomings that could benefit from a systemic approach, including the current strategy for citizen engagement. Often general citizen consultations and engagement efforts in Canadian municipalities result in the participation of primarily older middle-class white men. Thus, the question becomes how to better engage the diverse representation of the city residents as expressed in this quote.

They [the citizens] do have an invitation to participate; but the people who participate proactively, are the 50+ year old white males that earn above \$100k per year on average. That's the voice you get. So how do you engage? [...] So, how do you make sure that you really hear the voice of the citizens? So, there will be and have to be new ways of engaging the citizens that reach those that don't participate in the traditional way [...]. That, I'm sure will need to include also re-establishing the belief that you have a voice and that it will be heard and that you matter. That you can actually make change happen. So that'll be a big challenge. [REF02]

One participant described engaging with Enterprise Evolution as being a critical consultant who is asking pertinent questions about the existing municipal processes that may otherwise go unquestioned. Another member of the leadership team described the experience as “like having an extra mind, that was thinking differently, and was questioning how we did things, in a respectful way” [CLT03]. The same participant noted that the EE process created space for meaningful dialogue and the possibility of exploring the development of municipal capacity in the gap between “what management knows how to do” and “what management could do”. This sense of possibility permeated much of the participant feedback; it was evident that despite this early stage of analysis from the perspective of the study, many participants felt as though the EE process was a means to catalyze and act upon pre-existing notions of moving towards a “better, more sustainable world.”

Overall, the participants asserted that the workshops contributed to their development of mindsets for appreciating complexity. Participants considered how these new systems-oriented perspectives and new mental models could be applied to strategic planning, housing, transportation, and waste, among other complex challenges.

In regard to assessing fit with the Enterprise Evolution program and committing to it, it is worth noting that several members of the leadership were initially very hesitant to participate in the EE workshop series, especially in the midst of the pandemic. In addition, people felt the weight of the complexity and the difficulty of adequately dealing with it. The insights from the workshops further contributed to some



of this. But, in the end, the team left the last workshop with an enthusiasm to embrace the challenge and begin a long-term co-learning engagement with REFOCUS. This was illustratively reflected in this participant's statement:

"I think we basically got a taste of something that's going to be really delicious, so we want to [go] back and have the full meal." [CLT03]

The most significant evidence that the first step in the theory of change was successfully taken is the recent commitment of the leadership team to engage REFOCUS to support an organizational transitioning toward systemic management methods and tools and building the capabilities needed to leverage them effectively on their own. As a first major step, this is to be facilitated through the coproduction of the City's next four-year strategic plan, which will serve as a constrained process and period through which the City gets to experience these innovations in practice, learn by doing and explore the broader potential for more fully operationalizing the innovations beyond the scope of the strategic plan process.

6. Conclusion

Municipalities are faced with the almost impossible task of responding to an increasing number of urgent, impactful and complex challenges, such as the COVID-19 pandemic, while simultaneously having to reconsider and significantly transform both management and social practices to better lead their organizations through these challenges. This is becoming increasingly urgent because traditional planning and management practices were not designed to deal with the level of complexity that are characteristic of today's emerging challenges. Failure to respond in adequate ways to these challenges, however, has dire consequences, as municipalities and their supporting organizations increasingly realize. Lessons from social innovation are showing that a complex systems orientation, known as systems leadership, promises a powerful approach to managing organizational change and social complexity (Senge, 1990; Senge, 2015).

What we have learned from our case study, is that Enterprise Evolution, as introduced to the City of Kitchener by REFOCUS, has great potential to guide the transition of municipal leadership teams toward such complex systems orientation in their management approaches. Systems thinking in management is at the core of the Enterprise Evolution approach and leaders are capacitated to apply this type of management through a promising combination of professional development and management consulting, working with the leadership in a co-creative process. The engagement with municipal leaders follows a well-defined theory of change whose ultimate outcome is an organizational transformation promising to align the municipality organization with the complexity of the challenges they are facing.

While this transformation certainly seems indicated and urgent, it is certainly no small task. What we have shared in this report is some promising evidence that REFOCUS and the City of Kitchener leadership together were able to set a strong foundation for a major transition in their strategic management approaches. This foundation is a shift of mindsets that opens the door for much more fundamental changes than the incremental changes that are all too common and we can no longer afford without severe consequences. Enabled was the foundational shift by the specific delivery approach that the REFOCUS team took with the leadership team of the city. This included co-creatively tailoring the engagement, finding a common language, experimenting with possible new methods and tools to



understand their value for Kitchener-specific needs, and a respectful, supportive, and safe learning environment. The appealing characteristics of the Enterprise Evolution approach in combination with this positive delivery approach of REFOCUS resulted in an interest by the City of Kitchener to consider a future longer-term process of co-learning and change, a level of engagement that is rare within the municipal sector.

While these initial findings are very promising, further research is needed to determine whether the complete EE Program theory of change will play out similarly successfully.

The EE approach translates into other municipal contexts. For that reason, an extended research partnership, led by the Viessmann Centre for Engagement and Research in Sustainability (VERiS) is currently developing a research program that will include multiple municipal case studies within Canada and internationally.

7. References

- Beer, A. S. (1979). *The Heart of Enterprise*. New York: John Wiley.
- Ciasullo, M. V., Palumbo, R., & Orlando, T. (2017). Reading public service co-production through the lenses of requisite variety. *International Journal of Business and Management*, 12(2), 1-13.
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New public management is dead—long live digital-era governance. *Journal of Public Administration Research and Theory*, 16(3), 467-494.
- Espejo, R. (2008). Observing organisations: The use of identity and structural archetypes. *International Journal of Applied Systemic Studies*, 2(1-2), 6-24.
- Jones, P. (2014). [Systemic design principles for complex social systems](#). In G. Metcalf (ed.), *Social Systems and Design*, Volume 1 of the Translational Systems Science Series, pp 91-128. Springer Japan.
- Loorbach, D. (2010). Transition management for sustainable development: A prescriptive, complexity-based governance framework. *Governance*, 23(1), 161-183.
- Meadows, D. (1997). Places to intervene in a system. *Whole Earth*, 91(1), 78.
- Murphy, R. J., & Jones, P. (2020). Leverage analysis: A method for locating points of influence in systemic design decisions. *FormAkademisk*, 13(2), 1-25.
- Raworth, K. (2017). *Doughnut economics: Seven ways to think like a 21st-century economist*. Chelsea Green.
- Riemer, M., & Bickman, L. (2011). Using program theory to link social psychology and program evaluation. In M.M. Mark, S.I. Donaldson & B. Campbell (Eds.), *Program theory, social psychology and evaluation* (pp.104-138). New York: Guilford.
- Senge, P. M. (1990). *The Fifth Discipline: The art and practice of the learning organization*. New York; Currency.
- Senge, P., Hamilton, H., & Kania, J. (2015). The dawn of system leadership. *Stanford Social Innovation Review*, 13(1), 27-33.
- Voros, J. (2005). A generalised “layered methodology” framework. *Foresight*.
- Warfield, J. N. (2001). *Measuring complexity*. Integrative Sciences.