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Toward the Integration of Student Advising at a Canadian Higher Education Institution

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TOWARD THE INTEGRATION OF STUDENT ADVISING

Abstract

This Organizational Improvement Plan (OIP) addresses a problem of practice concerning the fragmented state of student advising at a large, urban higher education institution (HEI). Aligned with the sample university's overarching organizational goal to advance a more student-centred approach, the OIP aims to foster intersections across a specialized model of student advising service provision to better meet the needs of a diverse, 21st century student population. In addition, the OIP responds to environmental realities in which increasing accountabilities, compounded by the rapid pace and growing pervasiveness of reactive change, require building internal capacity for ongoing, continuous adaptation (Lichtenstein et al., 2006). The OIP's overarching leadership lens is informed by complexity theory (CT), and the complexity leadership (CL) model (Uhl-Bien & Arena, 2017, 2018) is used as the framework to lead the change and to shift perspectives on leadership to more distributed forms.

Acknowledging that there is no single correct way to structure student advising in HEIs, the OIP proposes that a traditional service-provider model of student advising may be enhanced by forging interconnections through a combination of technology and adaptive space within which social capital among agents may be fostered across the system of service provision. Specifically, the OIP describes how a planned change to deploy a software solution to support student referrals across the system may be leveraged as a starting point to enable conditions for continuous adaptation. The planned change is used as an opportunity to create adaptive space (Uhl-Bien & Arena, 2017; Uhl-Bien & Marion, 2009) for agents working across the system to connect and work through the change together, thereby shifting traditional, top-down perspectives on leadership and change toward a more bottom-up approach. In this way, the OIP balances leading change for performance with creating conditions for ongoing system adaptation

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(Uhl-Bien & Arena, 2017). While this OIP presents a context-specific approach to change, the concepts it employs from CL—including creating and maintaining adaptive space, adaptive leadership, and practices—may inform approaches to change in similar contexts at other HEIs.

Keywords: adaptation, adaptive space, complexity theory, model of complexity leadership, higher education institutions, student advising

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Executive Summary

This Organizational Improvement Plan (OIP) addresses a problem of practice (PoP) concerning the fragmented state of student advising at a large, publicly funded higher education institution (HEI) in Ontario, Canada.

Chapter 1 begins by providing a brief history of the sample university (Sample U.), including its mission, values, and overarching goal to entrench a student-centred approach.¹ The chapter describes the political, economic, and social and cultural contexts within which Sample U. operates and explores the complicated characteristics that shape daily life in the organization. Further, the chapter reviews a series of recent internal initiatives undertaken at Sample U. aimed at increasing accountabilities and encouraging collaboration to provide a more nuanced, organization-specific context for the OIP.

Chapter 1 also outlines my leadership position. I am long-service employee at Sample U. and a mid-level leader charged with leading a strategic priority to improve practice in the specialization of academic advising. Academic advising at Sample U. is a component part of a larger, loosely coupled service-provider “system” of student advising. The chapter describes how a trio of student advising specializations comprise this system, with few if any opportunities for agents working within it to connect or collaborate.

Collectively, these circumstances influence the leadership approach to change presented by this OIP. My leadership lens is informed by complexity theory (CT), while my approach to leadership incorporates adaptive leadership (Heifetz, 1994) and practices that are subsumed as components of complexity leadership (CL) theory (Uhl-Bien & Arena, 2017, 2018). The chapter

¹ All references in this OIP pertaining to the sample university are cited as Sample U. in order to maintain confidentiality. Here, the reference corresponds to Sample U.’s (2015) *University Plan*.

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concludes with a broadly cast leadership-focused vision for change that imagines a more integrated, interconnected future state for the system of student advising at Sample U.

Chapter 2 outlines the tension between Sample U.'s tradition of strategic planning and the types of reactive change that face the organization in its current state. It describes how different kinds of changes overlap and redirect lean and fixed human resources away from attending to planned priorities. Influenced by a series of recent leadership initiatives in the organization to foster collaboration and coordination, I contend that staying on track with organizational priorities requires distributing leadership and accountabilities across the system to improve performance. Further, keeping ahead of changes and better serving a diverse and changing student population requires developing organizational capacity for continuous adaptation and fostering conditions for innovation.

As such, this chapter introduces the CL model as the framework for leading the change (Uhl-Bien & Arena, 2017, 2018). A CL approach builds on the distributed leadership and collaborative approach that is ongoing in the specialization of academic advising at Sample U. and challenges traditional top-down approaches, by driving the location for change down into the organization. This approach to change prompts an exploration of ethical considerations at multiple levels that I contend are foundational to effecting successful change.

The chapter concludes with a discussion of three possible solutions to address the PoP. All three solutions align with my CL approach and correspond with my leadership position by building on the interactive change already underway in the specialization of academic advising. The solution chosen to address the PoP complements the activity of deploying a software solution to support agent note-taking and underpin student referrals between service-providers by creating space for agents from across the system to come together.

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Chapter 3 begins with a focused discussion outlining the tactical components of the implementation plan to deploy a new software solution across the system of student advising at Sample U. Using Rogers's (2003) adopter categories to guide a phased approach, the plan outlines the human and financial resources needed to deploy the solution, specifies timelines, and raises implementation issues and limitations. A context-specific plan to facilitate the transition that is sensitive to the various internal audiences that must be considered (Bergquist & Pawlak, 2008) complements the implementation plan. As the change unfolds, the facilitation plan emphasizes the central role of informal communication at the local service-provider level and provides adaptive space for all agents involved in the change to come together.

Further, the chapter outlines how the planned change will be gauged and tracked as it progresses, and how outcomes and impacts will be assessed at its conclusion. In addition, traditional means of assessment are supplemented by developmental evaluation (Patton, 2011) to inform process and leadership decisions as the change unfolds. While the OIP emphasizes the complex and multifaceted role of communication at multiple levels, it also outlines the important role of more formal communication in change. The chapter concludes with a personal reflection on my leadership practice moving forward and acknowledges the limitations of the OIP as a starting point to enable a more integrated approach in student advising at Sample U.

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Acronyms

CAS	Complex Adaptive System
CACUSS	Canadian Association of College & University Student Services
CL	Complexity Leadership Theory
CT	Complexity Theory
DT	Design Thinking
The framework	Ontario’s Differentiation Policy Framework for Postsecondary Education
HE	Higher Education
HEI	Higher Education Institution
IRO	Institutional Research Office at the sample university
IT	Information Technology Department at the sample university
McKinsey 7-S [7-S]	McKinsey 7-S Model for Change
NSSE	National Survey of Student Engagement
OIP	Organizational Improvement Plan
OMCU	Ontario Ministry of Colleges and Universities [since October 19, 2019]
OMTCU	Ontario Ministry of Training, Colleges and Universities [1999–2016]
OSAP	Ontario Student Assistance Program
PoP	Problem of Practice
PSE	Postsecondary Education
RASCI	Responsibility Charting: Responsible, Accountable, Supporting, Consulted, Informed
RCB	Responsibility-Centred Budgeting
Sample U.	this OIP’s sample university
SCI	Student Choice Initiative
SMA	Strategic Mandate Agreement
SME	Subject Matter Expert

Chapter 1: Introduction and Problem

Chapter 1 of this Organizational Improvement Plan (OIP) introduces the organization and describes the external and internal forces that shape its context and influence change. It presents the leadership problem of practice (PoP) to be addressed, provides relevant theory as an orienting lens, and offers a contextual analysis to further illuminate the PoP. The chapter concludes with a broad leadership-focused vision for change, an assessment of change capacity, and the identification of immediate priorities.

Organizational Context

The focus of this OIP is a large, comprehensive university situated in an urban area in Ontario, Canada. The sample university (Sample U.) is one among 20 publicly funded universities that comprise the university sector in the province's system of postsecondary education (PSE), which also includes publicly funded colleges and private institutions (Ontario Ministry of Colleges and Universities [OMCU], 2019a). Demands for public accountability, responding to the needs of a knowledge economy, and improving access for an increasingly diverse population of learners continue as long-standing issues facing Ontario's university sector (Weingarten & Deller, 2010). These issues are dynamic and appear within the broader political, economic, social, and cultural contexts within which Sample U. operates.

Political context. For nearly a decade, the Ontario provincial government accelerated a differentiation agenda to increase the quality, competitiveness, accountability, and sustainability of the province's publicly funded PSE system (Weingarten & Deller, 2010). Established in 2013, Ontario's *Differentiation Policy Framework for Postsecondary Education* (the framework) is positioned as the primary policy-driver. The framework addresses accountability for publicly funded higher education institutions (HEIs) through a set of system-wide metrics, complemented

by measures recommended independently by individual institutions (Ontario Ministry of Training, Colleges and Universities [OMTCU], 2013). As part of the framework, each publicly funded college and university enters into 3-year Strategic Mandate Agreements (SMAs) with the provincial government. Two rounds of institutional SMAs—in 2014 and 2017—have served to articulate goals, demonstrate institutional alignment with provincial priorities, and specify measurable outcomes.

Economic context. For publicly funded universities, the framework outlines how the provincial government advances priorities through the strategic use of funding mechanisms while leveraging the strengths and respecting the autonomy of individual institutions (OMTCU, 2013). The framework aims to action a more sustainable approach to resource allocation for publicly funded colleges and universities in the province that moves away from an emphasis on growth, in favour of outcomes-based funding linked to performance criteria, including student retention and graduation rates.

Other related changes in the provincial landscape directly impact publicly funded universities. For example, in 2017, the previous Liberal provincial government introduced transformative changes to the Ontario Student Assistance Program (OSAP) to increase access and make PSE more affordable for students from low- and middle-income families. The 2018 provincial auditor general's report, however, revealed that while 24% more university students received financial aid through OSAP in 2017/18, university enrolments grew by only 1% (Office of the Auditor General of Ontario, 2018). In rapid response, the newly elected Progressive Conservative government reduced tuition by 10% for the 2019/20 academic year and froze tuition through to 2020/21 (OMCU, 2019b, 2019c). Essentially, the new provincial government transferred the financial implications of what it perceived as failed changes to OSAP, directly to publicly funded institutions. This is but one example of how quickly changes in the external

environment can directly affect the bottom line. However, despite vastly different approaches to promoting access by successive governments over less than 24 months, affordability is only one factor influencing students' decisions to attend PSE.

Social and cultural contexts. Ontario is a national leader in PSE participation and attainment (Deller, Kaufman, & Tamburri, 2019; Robson, 2018) yet several non-financial variables and systemic barriers play a role in determining who in the province attends PSE. A recent Higher Education Quality Council of Ontario report reaffirms that parental education remains a major determinant; the study indicates that “high school students who come from a family where neither parent completed PSE are 33 percentage points less likely to complete PSE themselves than their peers whose parents have PSE credentials” (Deller et al., 2019, p. 8). Relatedly, the report confirms that family income is strongly correlated with parental education and that students in lower income brackets are also less likely to pursue PSE. At the same time, both first- and second-generation immigrant youths are far more likely to pursue PSE across all levels of family income and all levels of parental education (Rae, 2018) leading to new kinds of learners with different life experiences, circumstances, and socioeconomic backgrounds entering the system.

Increased access for learners in Ontario who may not have traditionally attended PSE is a good first step; however, improved access does not guarantee success (Michalski, Cunningham, & Henry, 2017). While publicly funded colleges and universities may have less direct influence over who has access to PSE, I contend that they retain the social responsibility to provide equitable access to the kinds of programs and services that support learning for every student through to graduation. In alignment with external forces, Sample U.'s mission, values, and goals reflect a strong sense of social responsibility and commitment to accessible education.

Mission, values, and goals. An overarching commitment to diversity, accessible education, social justice, and innovation is found in Sample U.'s (2015, 2019) mission statement.² These values are also evident in the strategic plan that emphasizes a commitment to fostering student success for its diverse student population. In the plan, Sample U. aspires to entrench a student-centred approach, which means viewing everything from a student lens, including the learning environment, campus experience, and student support strategies (Sample U., 2015). The plan highlights the importance of developing and maintaining curricular and co-curricular programming from a student perspective.

Organizational structure. Sample U. has a bicameral system of governance with a Board of Governors and a Senate. The Board is concerned with the management and business affairs of Sample U. while the Senate is concerned with academic matters (Sample U., 2019). Each academic faculty has a system of collegial academic governance, culminating in an academic council established as a subcommittee of the Senate. More hierarchical, bureaucratic, and managerial forms of organizing exist within and alongside academic faculties. These are most apparent in the physical plant, business and ancillary services, and the division of student affairs.

The day-to-day functioning of Sample U. is the responsibility of the provost who oversees deans and the administration of academic faculties, institutional planning, and student affairs. In recent years, there has been a rapid turnover in deans of academic faculties and leaders in other functional areas leading to disjointed, local, and often short-term approaches to solving problems and advancing priorities.

² All references in this OIP pertaining to Sample U. policy are suppressed in order to maintain confidentiality. Publication dates are supplied only to convey currency of such documentation.

Political, economic, social, and cultural contexts all play a role in shaping leadership approaches and practices at Sample U. An uncertain and rapidly changing external environment—including fiscal challenges and new accountabilities—has prompted a series of internal initiatives designed to distribute accountability, advance strategic priorities by aligning resource planning, and to enhance coordination. Two of these initiatives include the implementation of a new budget model and the establishment of integrated resource planning.

Recently, Sample U.'s incremental budget model was replaced by a new responsibility-centred budget (RCB) model that allocates resources to academic faculties based on the revenue they generate (Lasher & Greene, 2001). RCB budgeting accomplishes two things at Sample U.: It ties academic decision-making to financial consequences, and it distributes accountability. In addition to establishing new fiscal accountabilities for local decision-making in academic faculties, the new budget model taxes faculties a formula-driven share of university-wide services such as student affairs. By distributing accountabilities and responsibility for costs, this approach serves to increase and sustain intersections and connections across the organization.

At the same time, an internal integrated resource planning exercise identified initiatives that contribute to advancing institutional priorities, promote financial sustainability, and that could benefit from institutional-level coordination (Sample U., 2019). Locally devised initiatives were collected and assessed. Those that aligned with and supported institutional priorities were ranked for advancement, including strategic resource allocation. In turn, leadership appointments were made that span organizational boundaries to provide coordination and support.

Organizational history. Sample U. was founded in the late 20th century in Ontario, Canada and has grown rapidly since that time to serve more than 40,000 students, pursuing more than 200 majors on multiple campuses. Its student population is diverse with high numbers of

students who work 20 or more hours per week, come from low income families, live in households where English is not the first language, or who are the first in their families to attend university (Sample U., 2017).

Sample U. has a long history of strategic planning. With a focus on becoming more student-centred, one of the key priorities in the current plan is to establish an integrated student advising model that clarifies roles and responsibilities, provides comprehensive student advising processes, and online resources to ensure that students have the confidence to navigate degree requirements; have access to academic, career, library, and financial support, and receive timely and accurate responses to requests (Sample U., 2015). In the strategic plan, the desired future state for student advising at Sample U. is defined by a clearly articulated set of intended outcomes. Having now introduced the organization and its context, the following section outlines my leadership position, lens, and approach to leadership practice.

Leadership Position and Theoretical Lens Statement

As a mid-level leader, I report to the division of student affairs and am responsible for advancing practice in the specialization of academic advising which reports to academic faculties. This distributed leadership circumstance requires a different kind of leadership approach.

Leadership position. In response to the integrated resource planning exercise and strategic prioritization described earlier in this chapter, 2 years ago I was appointed to lead a strategic priority focused on improving academic advising at Sample U. While I am accountable for the academic advising improvement agenda, service-providers in the specialization do not report to me. Instead, as Figure 1 illustrates, I lead collaboratively with the non-academic managers and staff from academic advising service-providers that are differently modelled,

structured, resourced, and located on multiple campuses. Each of these academic advising service-providers report independently to one of 10 academic faculties at Sample U.

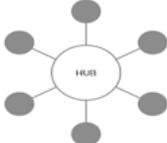
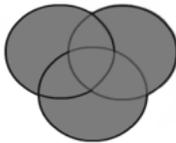
Consolidated models	Distributed models	Collective models	Shared practice development
			
Academic advising in professional faculties	Academic advising in graduate studies and liberal arts	Academic advising in health and pure sciences	Academic advising leadership position

Figure 1. Various models of academic advising working together to develop a shared practice. Adapted from Sample U. (2013).

As seen in Figure 1, underpinned by a set of simple principles including collaboration, learning, and innovation, the goal of the coordinated effort in academic advising is to devise a consistent approach and to entrench a shared, institutional academic advising practice without impacting local authority, reporting lines, or service delivery models (Sample U., 2013). Gronn (2002) describes this kind of situation as an institutionalized form of distributed leadership which formalizes a leadership team “of equals with a primus” (p. 430) to pool capacity.

Over a long career in Sample U. administration, I have held leadership roles ranging from overseeing academic governance administration in faculties to directing academic advising service-provider units in faculties. My long-standing personal leadership philosophy focuses on enabling colleagues to do their best work by creating respectful, trust-building relationships and space for staff teams to share multiple perspectives and engage in collaborative problem-solving. While my personal leadership philosophy has not changed, my current position requires leading without the kind of positional and decision-making authority to which I have become accustomed. This experience has served to shift my perspective away from viewing leadership as

an independent variable ascribed to individuals with formally appointed roles, toward more relational and distributed forms (Liu, 2017).

Theoretical lens. While comprising multiple interpretations, complexity theory (CT) has become a way to understand change, leadership, and strategy in organizations that offers leaders alternatives to linear ways of thinking and acting (Morrison, 2010). This approach helps to address problems by taking a system perspective, which not only provides an understanding of the parts that contribute to the whole, but how each part interacts with all the other parts, providing for a more comprehensive and complete appreciation of the whole (Turner & Baker, 2019). As such, CT is focused on the interactions occurring within systems where properties and behaviours emerge, and where new patterns are developed and old ones change (Mason, 2008). In this respect, CT is process-oriented rather than outcome-driven. It offers an evolutionary approach to change that harnesses social capital within organizations.

The term complex adaptive system (CAS) is used to describe the processes and interactions that are the focus of CT. While the literature affords numerous definitions, a CAS is an open, dynamical system comprised of smaller, semi-autonomous units called agents (Olson & Eoyang, 2001) that can self-organize through the exchange of information, energy, and other resources within the environment and transform to new states once they have learned to adapt (Turner & Baker, 2019).

Among the characteristics that define a CAS are adaptability and emergence. Adaptability occurs when agents interacting within a system are “able to resonate around a new approach, alternative way of thinking or adaptive solution that meets the needs of a complex challenge” (Uhl-Bien & Arena, 2017, p. 11). Organizational change requires adaptability—or learning—to embrace opportunities, to establish different ways of operating, or to enact new

services. Emergence refers to a system's ability to learn that comes about as a result of agents interacting (Turner & Baker, 2019) to "produce fundamental change without explicit a priori intentions to do so" (Weick, 2000, as cited in Burnes, 2005, p. 75). Emergence, therefore, is a process whereby complex combinations of agents generate system-level phenomena that are qualitatively different from the sum of the parts (Eoyang, 2011). Both formal and informal leaders may create the conditions for adaptability and emergence in organizations by fostering spaces for creativity, openness, diversity of opinions, and perspectives (Morrison, 2010) rather than by mandating objectives or by enforcing a specific set of behaviours.

Leadership approach. A complexity perspective calls for leadership activities within organizations that provide enough stability to sustain momentum toward meeting stated goals while at the same time enable the contexts and conditions within organizations to prompt innovation and change (Mason, 2007). Morgan (2006) emphasizes that leading in complexity requires rethinking organization, hierarchy, and control with the intention of enabling and facilitating the flow of change rather than trying to predesign or control it. In CT, leadership is concerned with aspects of coordination, fostering conditions, and developing contexts within organizations to encourage collaboration and learning through which it is anticipated that new knowledge and new order will emerge. Further, CT posits that some events in organizations are unknowable until they occur (Schneider & Somers, 2006) and that small changes can prompt big effects (Burnes, 2005; Lowell, 2016; Mason, 2008; Morgan, 2006; Olson & Eoyang, 2001; Schneider & Somers, 2006; Uhl-Bien & Marion, 2009).

CT suggests that leaders might accept a role given to them or consciously initiate their role without relying on formal authority structures, frequently leading without authority, and often in a temporary capacity (Schneider & Somers, 2006). Recognizing that leaders in

organizations act as context setters and designers of learning experiences (Brown & Eisenhardt, 1997; Pascale, 1999; as cited in Schneider & Somers, 2006), my intention as an individual agent is to catalyze the small changes that have occurred within the specialization of academic advising to start to enable adaptation in student advising more broadly at Sample U.

My approach to leadership is informed by adaptive leadership and complexity leadership (CL) theory. Heifetz, Kania, and Kramer (2004) define adaptive leadership as “the activity of mobilizing people to tackle the toughest problems and do the adaptive work necessary to achieve progress” (p. 24). Adaptive leadership focuses on changing attitudes, values, and behaviours (Heifetz, 1994; Heifetz & Linsky, 2002) where the responsibility for collective problem-solving rests with agents working within the system. From this perspective, decision-making calls for participatory approaches, so the task of leadership consists of choreographing and directing learning processes in groups tackling adaptive challenges (Heifetz, 1994). This approach to leadership is concerned with the behaviours of leaders rather than positional authority or set of personal attributes.

Among the defining behavioural aspects of adaptive leadership are “getting on the balcony” to gain perspective, coming to see a group as a “system,” and learning how to distinguish between technical and adaptive problems (Heifetz, 1994). A core concept in adaptive leadership is differentiating between technical problems that are well-defined with known solutions, and adaptive issues where solutions are not yet known because the problem is rooted in the attitudes, priorities, values, or behaviours of agents (Heifetz et al., 2004).

My current leadership position at Sample U. allows for a vantage point outside of academic advising service-provision that is focused on identifying and solving shared technical problems and creating safe and trusting conditions for the difficult work of changing attitudes

and behaviours among the group. Initially, the experience of leading without authority was frustrating to me. As a mid-level leader, I felt pressure to generate immediate, tangible outcomes to demonstrate performance. Creating conditions and safe space for open dialogue took time and engaging multiple perspectives in coming to new understandings took focus. Through this experience, I have learned the critical role of process.

Drawing on CT, CL takes the perspective that leadership is “multilevel, processual, contextual, and interactive” (Uhl-Bien & Marion, 2009, p. 631), shifting attention away from individuals as leaders and toward organizing processes that enable learning and adaptive capacity of complex systems. As such, creating space within which interactions may occur features prominently in both adaptive leadership and CL. In adaptive leadership, safe space for adaptive work is created in holding environments where adequate tension may be applied by the leadership activity of raising questions and maintaining focus on the issues (Heifetz, 1994). In CL, tension may either be applied in these spaces or generated by the interactions between agents to prompt innovation. In both approaches, creating interactive spaces and maintaining appropriate levels of tension are central to raising and solving shared technical problems, addressing adaptive issues, and for prompting innovation. A central focus of my current leadership position at Sample U. has been to create space for these kinds of multi-level interactions to occur across the specialization of academic advising. These spaces engage service-provider leaders and agents in regular meetings, practice-sharing sessions, workshops, and internal conferences.

The preceding discussion provided an overview of my leadership position, identified CT as my overarching theoretical lens, and described how my approach to leadership practice is informed by adaptive leadership and CL theory. Prompted by Sample U.’s goal to become more student-centred and fueled by my recent experience leading change in the specialization of

academic advising, the following section identifies the PoP which concerns student advising at Sample U. more broadly defined.

Leadership Problem of Practice (PoP)

HEIs have been slow to address the advising needs of increasingly diverse students who connect with campuses differently, adding on programs or services as unique needs arise, yet refraining from fundamentally re-thinking student support service structures and culture (Kezar, 2018). At Sample U., the specialization of academic advising is a component part of a much larger, loosely coupled “system” of student advising. Student advising at Sample U. is delivered by specialist service-providers in what may be described as a trio of uncoordinated clusters, dispersed geographically across the campuses. Depicted in Figure 2, these clusters may be conceptualized as *academic*, *complementary*, and *targeted* advising. Students access academic advising according to their program of study and academic faculty affiliation; complementary advising (such as career, financial, and learning skills) is dispensed by service-providers to all students who seek those supports; targeted advising is offered by service-providers focused on “selective student populations” (Wilson, 2014, p. 8) such as Indigenous, international, varsity athletes, students with disabilities, and mature (or adult) learners.

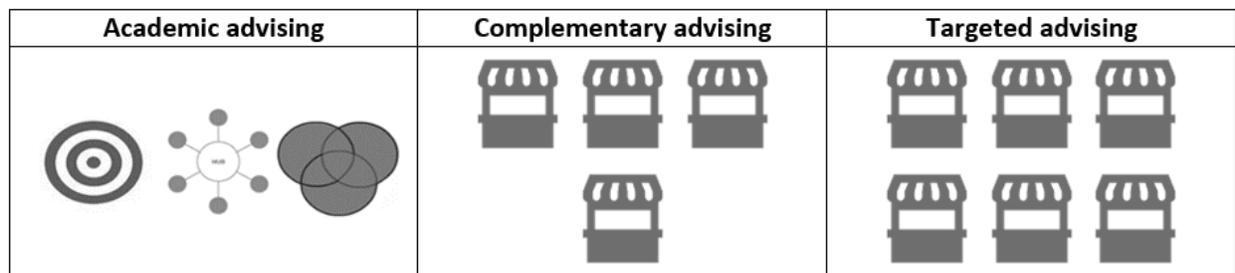


Figure 2. Illustration of the clusters of student advising specializations at Sample U.

As illustrated in Figure 2, at Sample U. operational silos and lack of coordination among specialist academic, complementary, and targeted student advising student-providers thwart the realization of a more integrated approach to student advising. Reinforcingly, Manning, Kinzie, and Shuh (2006) argue that without coordination, student advising practitioners may come to think of their functional areas as separate and distinct, rather than interrelated areas of support for students, and indicate that while “specialization is a major force within bureaucracies, integration of functions is equally important” (p. 60). These authors point out that specialist, service-provider approaches to the organization of student advising lead to fragmentation and a disjointed experience for students.

The PoP that will be addressed by this OIP is the fragmented state of student advising at Sample U. An ongoing challenge for student advising practice in Ontario universities has been how to respond to the complex and changing needs of a diverse 21st century student population (Kezar, 2018). As student advising at Sample U. has evolved over time to meet the needs of increasingly more diverse students, the system of service provision has become more disparate and complex. In this evolutionary process of diversification, student advising practitioners became specialists and service-provider functions became targeted, increasingly isolated, and siloed (Kuk, 2009; Love & Estanek, 2004). In current state at Sample U., the organizational boundaries that define student advising specializations limit change agency and therefore constrain improvement efforts. While student advising support is robust at Sample U., results of the National Survey of Student Engagement (NSSE) reveal that students are dissatisfied with the support they receive (Sample U., 2017). Sample U. scored significantly lower than its comparators on the two NSSE indicators most closely related to measuring student advising: *quality of interactions* (with students, faculty, academic advisors, student services, and

administrative staff) and *supportive environment*, meaning how much an institution emphasizes the services that support student learning and development (Sample U., 2017). What alternative approach(es) might be available to enhance the integration of student advising?

Informed by my overarching CT lens, current leadership position, and having described my approach to leadership practice, I question what alternative approaches might be engaged to create a more desirable state for the system of student advising at Sample U. Now having articulated the PoP to be addressed by this OIP, the following section considers some of the broader forces that shape and influence it.

Framing the Problem of Practice (PoP)

This section presents a brief history of the PoP and provides further understanding by considering the characteristics that define features of organizational life at Sample U. It employs aspects of Bergquist and Pawlak's (2008) analysis of multiple cultures in HEIs to emphasize how two distinct yet interrelated cultures influence the provision of student advising. Finally, a macro-environmental analysis reveals how external political, economic, technological, and social factors impact the PoP. Relevant internal data is incorporated where possible to support the need to change.

Historical overview of the PoP. Hardy Cox and Strange (2010) describe how that 60 years ago, student service in Canadian HEIs was a “loosely connected division of institutional offices whose function on most campuses was to dispense their respective services to those who came in the door” (p. 3). In present day, the traditional service-provider model remains in some Canadian HEIs, including Sample U., and in these models many of the same core student services continue (Hardy Cox & Strange, 2010; Oullette, 2010). Recognizing that there is no single correct way to structure student advising, several authors advocate for a contextualized

rethinking that considers the needs and challenges presented by the student population, aligns with strategic goals, and responds to the environmental, political, and economic realities of the organization (Kuk, 2009; Manning et al., 2006). However, Seifert, Arnold, Burrow, and Brown (2011) identify that much of the literature on student services in the United States and Canada addresses only formal structures of organizing and fails to explore “perceptions of leadership, communication strategies, and collaborative partnerships” (p. 10) that are—or might be—central to student advising work.

Organizational characteristics. Sample U. exhibits characteristics of organized anarchy as well as bureaucratic forms of organizing. While features of organized anarchy may not be central to the provision of student advising at Sample U., facets of it permeate the organization and influence the context within which the system of student advising functions.

Organized anarchy. Drawing on the foundational work of Cohen and March (1972), Birnbaum (1989) asserts that organized anarchies exhibit three characteristics: fluid participation, unclear technology, and problematic goals. Complexity and unpredictability permeate the organization and “no one person, regardless of power or position, fully understands the many realities and perceptions present” (Manning, 2018, p. 135). According to Manning (2018), uncertainty is perpetuated through unclear communication, and perspective-taking. In addition, Kezar (2010) points out that organized anarchies are characterized by multiple goals. In fact, she observes that there may be so many goals that it may be difficult to understand the organizational direction. As a result, she reasons, ambiguity is prevalent and often relates to who holds authority for what kinds of decision-making. That said, in organized anarchies, ambiguity is intensified when priorities are developed at the highest levels in the organization (i.e., through strategic

planning) and predict a desired future-state without the problem being embraced or even well understood. In these cases, it is unclear who will undertake what actions to attend to the priority.

Bureaucracy. Morgan (2006) describes bureaucratic forms of organizing in terms of their orderly interlocking of parts, with each defined specialization playing an important part in the functioning of the whole. Emerging problems, he suggests, may either be ignored because either there are no ready-made responses to address them, or they are approached in a fragmented way to align with existing policies, functions, and patterns of expertise. Correspondingly, Manning et al. (2006) define traditional models of student advising service—including the service-provider model at Sample U.—as bureaucratic, administratively centred, customer-oriented, and specialist. Relatedly, Oullette (2010) observes that continuing to operate in a traditional service-provider mode means dispensing assistance only when students come forward and he questions whether students might achieve greater success if supports were more readily available at critical points.

As outlined earlier in this chapter, the current distribution of student advising work at Sample U. is rationally and logically organized either by practice-based specializations or designed to meet the needs of specific groups of students. In this siloed and hierarchical context, however, service-providers are singularly focused on their unique practice and the help-seeking student populations they serve. Dietsche (2012) identifies this kind of passive, service-based model as an institutional barrier to supporting students because it assumes that students have “enough knowledge, social skills, and motivation to seek out and make use of available services” (p. 85).

To support this perspective at the organizational level, a series of focus groups undertaken at Sample U. in 2011 revealed student concerns regarding the accessibility and availability of student advising. At that time, students questioned whether advice provided was

accurate and raised queries about who was ultimately accountable for that advice. As the most recent NSSE results confirm, the consequences of a still uncoordinated ‘system’ of student advising are student non-confidence and dissatisfaction (Sample U., 2017). While the current bureaucratic organizational structure of student advising service provision at Sample U. may provide coherence and stability for staff, and local control for service-provider leaders, it presents obstacles and a fragmented experience for students.

Building on this discussion of how different ways of organizing and structural considerations comprise the PoP, the section that follows outlines how it is also influenced by organizational cultures.

Intersecting and mutually reinforcing cultures. Bergquist and Pawlak’s (2008) model of cultural archetypes provides a lens through which to understand the political nature of HEIs by describing six distinct, interrelated cultures of the academy: collegial, managerial, developmental, advocacy, virtual, and tangible. Because student advising is a professional staff practice at Sample U., the two most apparent, overlapping, and pervasive cultures are managerial and developmental.

While many student advising leaders and practitioners might be more closely aligned with the developmental culture at Sample U., the managerial culture has had a long presence in student advising and is increasingly pervasive in HEIs (Bergquist & Pawlak, 2008; Love & Estanek, 2004; Stringer, 2009). Bergquist and Pawlak (2008) describe the managerial culture as one that values accountability and fiscal responsibility, motivated by data and achieving outcomes. This culture relies on role-specificity and the clear delegation of responsibilities. Further, leadership in the managerial culture is defined by formal roles and leadership competencies that emphasize functional organization and efficiency.

Those who align with the developmental culture, on the other hand, find meaning in collaboration and the development of programs and activities that focus on personal and professional growth (Bergquist & Pawlak, 2008). Developmental leaders, Bergquist and Pawlak (2008) suggest, often reside outside of formal leadership roles, encourage collective awareness of problems facing the organization, and help to discover alternative solutions to problems. While informed by CT, my personal leadership perspective readily aligns with and is biased toward the developmental culture.

Given the established service-provider model at Sample U., the culture most prevalent and obvious in student advising is managerial. While the managerial culture may be dominant, this is not to suggest that it conflicts with the developmental culture. As Bergquist and Pawlak (2008) suggest, the two cultures coexist and overlap within student advising specializations, and the tension generated between them may be perceived as mutually reinforcing. In fact, new accountabilities and economic pressures in the external and internal environments support the need for a managerial culture concerned with data-driven measures and outcomes in student advising at Sample U. That said, it is “easier to do the programs and services that have always been done, try to do them better and reach more students” (Love & Estanek, 2004, p. 69) rather than paying attention to ideas, challenging assumptions, or trying something new. Given that Sample U. (2015) aspires to enact a student-centred approach, the engagement of more developmental perspectives may serve to balance notions of performance and control with efforts to create the conditions necessary to enhance system adaptability (Uhl-Bien & Arena, 2017).

Recent theory and literature. In addition to historical and organizational considerations, recent student affairs theory and literature reinforce the need to change. These include trends and aspirational “calls to action” from student affairs practice-based scholars. For example, the need for collaboration between student affairs and academic affairs has been a significant theme in

student affairs literature for the past 20 years. While the PoP is limited to integrating student advising at Sample U. as a professional practice occurring outside of the classroom, the barriers impacting collaborative work across organizational boundaries are similar.

Keeling and Dungy (2004) remind student advising practitioners that the social, cultural, and political conditions and assumptions that framed existing structures, methods, and practices in universities have changed and they offer a compelling argument for the entrenchment of more student-centred practices. Similarly, Brown McNair, Albertine, Cooper, McDonald, and Major (2016) challenge the traditional role of student services and describe a student-ready campus as one that strategically and holistically advances student success and is committed to institutional improvement. Their line of thinking flips traditional discourse from preparing students for higher education, to focusing on campus readiness to support 21st century learners. Together, these writers urge leaders and practitioners to critically examine the current state of student advising service provision, to remove barriers for students by developing partnerships, and to collaboratively develop and advance programs and services that foster student success. If students are truly to be at the centre, campus communities need to adapt, by finding ways to rethink current practices and advance a more holistic approach to student support.

Macro-environmental factors. The following analysis sets the PoP in the broader environment and reveals the impact of political, economic, social, and technological pressures.

Political. As outlined earlier in this chapter, increased access to PSE means “greater variation in the backgrounds, preparation levels, and previous life experiences” of today’s students (Seifert & Burrow, 2013, p. 141). To meet the challenges presented by increasing diversity, HEIs must enact a parallel focus on developing and providing equitable and meaningful access to key support services that can adapt to changing student needs (Michalski, et al., 2017). Performance outcomes outlined in SMAs reinforce this imperative by including

measures directly related to student advising such as student retention, graduation rates, and proportion of expenditures on student services (Sample U., 2017). At Sample U., this may mean confronting the range of challenges that face its traditional service-provider model of student advising to adapt to a changing student population. Correspondingly, Sample U.'s (2017) current SMA reinforces its commitment to enhancing student advising based on a deeper understanding of diverse student needs and by developing a strengthened, tailored approach that focuses on the individual and leverages the organization's distinct features (Sample U., 2017).

Economic. External economic considerations impact the PoP in student advising. In a knowledge economy, a highly diverse 21st century student population has come to have expectations of higher education relative to consumers of a public good, motivated by achieving success, degree completion, and ultimately, return on investment (Varghese, 2012). In a report concerning the value of a university education in the province of Ontario, Hicks and Jonker (2015) point out that it is generally accepted that most jobs of the future will require postsecondary credentials and that a university education offers the very best job prospects including transferable skills to adapt to an unknowable future. At the same time, these authors point out that increasing tuition costs coupled with erosion in the perceived financial value of a degree are becoming more real as the earnings advantage for those with a university credential narrows. The provincial government and HEIs also view labour market outcomes as an economic return on public investment (Jonker & Hicks, 2016). While HEIs are important contributors to knowledge-based economies, students in the province are paying a higher proportion of the costs of attending PSE and therefore must weigh return on investment.

Social. Social, academic, and personal factors all play a role in student academic success. In recent years, improvements have been made in HEIs to address structures and support for

some new groups entering PSE, such as women and mature (or adult) learners (Kezar, 2018). However, improving support for new groups of students with differences such as low socio-economic status, first-generation students—including recognizing the degree of family involvement and existing social support concerning information, finances, and language skills—remains a distant goal for most HEIs (Mishra, 2020).

Sample U. is a provincial leader in serving large numbers of post-traditional learners. According to Sample U.'s (2014) SMA, almost 30% of its full-time students were the first generation in their families to attend higher education, and more than 10% of students were permanent residents and newcomers to Canada. Population growth propelled by immigration in the geographical region means that high numbers of post-traditional learners are expected to be sustained (Weingarten & Deller, 2010) at Sample U. That said, supporting a more diverse student population may not simply mean improving student advising services by increasing capacity to serve more students (Love & Estanek, 2004). Rather, at Sample U., it may indicate the need for a collective rethinking of the traditional model of student advising support. At Sample U., providing the best possible environment for a diverse population of students means coming to a deeper understanding of unique learner needs and confronting the internal structural and cultural assumptions that present barriers for students with diverse backgrounds (Michalski et al., 2017).

Technological. Innovations in technology have transformed daily life in the 21st century. Mobile devices and constant connectivity generate expectations for just-in-time service across all kinds of service industries and for support and information that is available online anytime and anyplace. From a student advising perspective, Darling (2015) urges that student advising staff make use of technology to supplement face-to-face interactions for students who have limited time on campus, while Dietsche (2012) posits that shifting components of student advising

online could minimize barriers associated with student lack of time, knowledge about services, challenges with regard to social capital, stigma, and not knowing what to ask.

These macro-environmental factors highlight the complex conditions influencing the PoP. In order to respond to political, economic, and social pressures as well as technological expectations, Sample U. must improve its student advising efforts. I propose that ensuring timely, accessible, and equitable access to the kinds of student advising support meant to scaffold and empower every learner through to graduation will be more important now for Sample U. than ever before. Informed by a CT perspective and by my leadership position, this assertion raises a series of questions aimed at gathering the best possible evidence to increase awareness without being prescriptive (Morrison, 2010).

Guiding Questions Emerging from the Problem of Practice (PoP)

Three guiding questions emerge from the PoP and focus on how learning, adaptability, and innovation might be fostered in the system of student advising at Sample U. to generate improvement. These are:

1. What is known about how service-providers perceive their role(s) in the system of student advising and how students experience service?
2. What does a more integrated approach look like, and how might existing structures and processes be enhanced toward developing it?
3. How might innovation and new ideas be stimulated and enabled while ensuring stability for quality student advising service provision?

Learning. Learning opportunities help form social connections that challenge individual agents to consider what it means to be part of a viable system, and provide occasions to explore the tensions between individuals, cultures, and organizational priorities (Antonacopoulou & Chiva, 2007). Moreover, adaptive challenges are problems that require learning (Heifetz, 1994).

Informed by a CT perspective and from my vantage point as a mid-level leader at Sample U. who is focused on improvements in one part of the system, I contend that the activity of creating safe space to come together in learning will be a precondition for agents to come to view student advising specializations as component parts of a larger system. In addition, making space for discussion will be a critical component for reaching internal consistency in service provision.

According to Kezar (2018), process elements such as new ideas or generating doubt, and organizational conditions, such as space and supportive environments, work together to support learning processes. How might space for learning opportunities be engaged at Sample U. to prompt collective identity formation across the system? What approaches will be used to gather information and data on the student experience?

Adaptability. Enhanced integration across student advising specializations may identify student needs that require the development of new collaborative efforts around specific issues and more coordinated, intrusive interventions. Moreover, it is anticipated that issues raised within an emergent system of student advising will include both technical and adaptive problems (Heifetz, 1994). Where low levels of uncertainty exist, the activity of collectively identifying and solving shared technical problems may serve to solidify more collaborative approaches by finding efficiencies and demonstrating positive outcomes. These kinds of improvements may catalyze buy-in especially by agents and leaders within the system who value performance (Bergquist & Pawlak, 2008). Determining, and coming to resonate around alternative ways of thinking, however, will require learning to generate adaptive capacity (Uhl-Bien & Arena, 2017).

Innovation. Activities that encourage relationship-building and experimental solutions will be required to allow agents within the student advising system to work through issues and to co-create toward achieving innovation. Reinforcing this notion, Siemans, Dawson, and Eshleman (2018) contend that “change and innovation must be developed from the bottom up” (p. 32). To

support their argument, Siemans et al. reason that those closest to the phenomenon are “better able to sense and respond in a way that supports learners” (p. 32). Given my recent experience leading collaboratively in the specialization of academic advising, I have come to realize the value of bringing together diverse agents in a “system” to engage together in addressing the problems that face it (Siemans et al., 2018). That said, from my perspective, capacity for innovation remains unknown in the broader context of the system of student advising at Sample U.

While fostering conditions for learning, adaptability, and innovation may be laudable goals to guide future work, this chapter has explored the challenging contexts for organizational change at Sample U. Given that a set of strategic priorities—including one focused on the specialization of academic advising—have recently been identified and resourced at Sample U., at least two challenges emerge from the main problem. These concern the fragmented state of system of student advising:

1. The hierarchical, and siloed specialist service-provider model; and,
2. The absence of a history of collaboration or interconnectivity across the system.

These two problematic challenges provide a high-level summary of the questions that have been raised throughout this section. Complicated structural and cultural elements underpin and influence the organization of student advising at Sample U. Indeed, these challenges present interesting circumstances for devising alternative approach(es) to address the PoP. Taking both the guiding questions and these challenges into consideration, the following section broadly imagines an improved future state for the system of advising at Sample U.

Leadership-Focused Vision for Change

Vision and strategy are valued from a CT lens because they supply participants with a sense of the anticipated direction, but they are not viewed as useful when they attempt to specify

and prescribe the ultimate goal (Cawsey, Deszca, & Ingols, 2012). Instead, Cawsey et al. (2012) note that from a complexity perspective, leader-generated visions and strategies might be best devised as “beacons for change” (p. 85). Similarly, Lowell (2016) recommends that strategic plans be replaced with simple documents describing the general direction and articulating simple sets of organizing principles. Reinforcing these perspectives, Mason (2007) contends that while successful strategies should include a simple vision intended to generate shared goals, they must at the same time encourage innovation through bottom-up adaptation and emergence. He asserts that this kind of approach requires effecting a balance between the structure of planning change and of *initiating* change by creating necessary space and conditions deep in the organization. In other words, in a rapidly changing, interconnected environment, organizational improvement strategies must be both envisioned top-down and emergent, bottom-up.

The leadership-focused vision for change that I propose broadly imagines a future state at Sample U. where student advising specializations are interrelated, and collaboration is fostered such that agents interacting within a more integrated system problem-solve, build adaptive capacity, and continuously generate innovative ways to meet diverse and changing student needs and expectations. This vision, however, is predicated on finding ways to tap into the potential capacity of the student advising system not only to solve problems, but to ideate and iterate, thereby starting the evolutionary work toward a more integrated, student-centred approach.

Immediate priorities. Immediate priorities include shifting assumptions, communicating early changes, leading through relationships, and creating space for learning.

Shifting assumptions. Shifting assumptions within the system that change can only be initiated at the top or by formally appointed leaders will require promoting a broader recognition at Sample U. that ideas for change and improvement can emerge from anywhere in the

organization. Kauffman suggests that shifting perspectives can best be accomplished by initially focusing on the component parts of a system that are amenable to change and by finding ways to maximize flexibility and adaptability (as cited in Lowell, 2016). As described earlier in this chapter, this kind of capacity-building, collaborative, and adaptive work is already underway in the specialization of academic advising. Moving forward, the challenge for me as a leader will be how to leverage it.

Communicating early changes. Having been resourced as a strategic priority, several small changes (including capacity-building) have emerged from within the specialization of academic advising that may have the potential to prompt improvement within the larger system of student advising at Sample U. The challenge will be how to frame and catalyze the changes in academic advising in ways that positively acknowledge agents for their work, prompt broader curiosity, stimulate ideation, and foster collaboration more broadly.

Leading through relationships. While my formal agency and positional power may be constrained by an improvement agenda that focuses on the specialization of academic advising, as a long-service employee at Sample U., my relationships and networks are significant sources of personal power and influence (Love & Estanek, 2004). Reinforcing this position, Lowell (2016) describes how fostering relationships more broadly can become “a source of power, enabling organizations to evolve and adapt because the people in them care more about their work, their coworkers, and their shared purpose” (p. 159).

Creating space for learning. Evolutionary change requires creating and sustaining opportunities for continual growth by cultivating optimal conditions for change to occur. At Sample U., this will require creating opportunities where shared goals may be identified within the system of student advising and making time within those spaces to collectively work out

ways to achieve them. Moreover, change may be prompted by “creating dissatisfaction with the status quo through education, information, and exposure to superior practices and processes” (Cawsey et al., 2012, p. 130).

This section identified the leadership-focused vision for change and aimed to respond to the questions and challenges that surround it. Given this contextual review, is Sample U. ready to change, and does its system of student advising have the capacity to change? The following section explores these themes.

Organizational Change Readiness

Brechtold suggests that adopting a complexity approach requires carefully considering whether the organization has the capacity to achieve a “balanced distribution of power, strong customer focus, a strategy of continuous learning, and an orientation toward community service” (as cited in Burnes, 2005, p. 83) that can be demonstrated at all levels in the organization. From my perspective as a long-service employee, and mid-level leader at Sample U., the recent changes outlined in this chapter enacted by operational senior leadership to distribute accountability and prompt collaboration have been reasonably well-received. Forms of power (i.e., financial) have been distributed through the new RCB budget model. At the same time, the establishment of integrated resource planning serves as a counterbalance by aligning those resources with institutional priorities. Just how Sample U. will move toward supporting an orientation toward learning and community service are questions that remain. If they are being addressed at Sample U., they are at the earliest stages of operational senior leadership experimentation and development—an example of which will be shared later in this section.

Buono and Kerber (2008) differentiate between *change readiness* which refers to the recognition of the need for change at a specific point in time and *change capacity* referring to the ability of an organization to change—not just once, but as a normal course of events both in

response to and in anticipation of external shifts and pressures. In CL, capacity for change is understood as the state of conditions within which individual agents, systems, and organizations work together toward innovation or adopting new practices (Uhl-Bien & Arena, 2017). Change from this perspective is less about taking a temperature to *assess readiness* for a predetermined future state and more about assessing the internal conditions at multiple levels within the organization to *generate* a future state where change continues to evolve and respond.

While the PoP I have identified supports Sample U.'s strategic priority to improve student advising and become more student-centred, the leadership lens suggests a complementary approach to strategic planning that seeks to harness social capital within the system of student advising to both shape and achieve the organizational priority. That said, the potential for achieving results through CL relies on determining not only whether the student advising system has the capacity to adapt and innovate, but also if operational senior leadership is ready to recognize, receive, and validate adaptive potential and emergence through formalization, providing resources, and assigning work to further develop initiatives (Uhl-Bien & Marion, 2009).

Internal forces shaping change. Glor (2007) contends that organizational capacity to adapt and innovate requires an assessment of the challenges and opportunities at the operational senior leadership level, the social and interpersonal dynamics within the system, as well as the readiness and capacity of individual agents. She asserts that developing a better understanding of organizational processes, interactions among individuals, and social capital—in this case, within the system of student advising—is necessary to assess capacity for change.

From a traditional change-management perspective, it may be perceived that organizational capacity for change may be reduced because of the number and multiplicity of agents and factors involved. However, from a complexity perspective, there must be enough

agents with sufficient variety among them, in contact with one another, connected with trends from outside the organization (Glor, 2007) and sharing ideas emerging from among them to promote adaptability. In complexity, change readiness is not about discovering and *managing* pain-points; it is about discovering them and *fostering* them to fuel adaptation (Arena & Uhl-Bien, 2016).

Informed by the contextual analysis provided in this chapter, Table 1 outlines internal enablers and barriers at multiple levels within the organization that will play a role in shaping change in student advising at Sample U.

Table 1

Enablers and Barriers for Change in the System of Student Advising

Level	Enablers	Barriers
Operational senior leadership	<ul style="list-style-type: none"> – Mission, vision, values – Strategic priority – External accountabilities – Performance-based funding 	<ul style="list-style-type: none"> – Multiple priorities – Unclear decision-making
System of student advising	<ul style="list-style-type: none"> – Agency/involvement – Developmental culture – Origin of change (bottom-up & top down) – Professional practice – Developmental culture – Relationships and social capital – Values 	<ul style="list-style-type: none"> – Absence of a tradition of collaboration – Local service-provider-based sub-cultures – Managerial culture – Multiple hierarchies – Multiple sub-cultures – Unknown adaptive capacity – Values
Individual agents	<ul style="list-style-type: none"> – Agency/involvement – Commitment, motivation – Origin of change (bottom-up & top-down) – Professional practice – Values 	<ul style="list-style-type: none"> – Change aversion – Commitment, motivation – Emotional response – Values

Note. This table is loosely based on Glor's (2007) analysis of organizational capacity for adaptability. Adapted from "Assessing organizational capacity to adapt", by E.D. Glor, 2007, *Emergence: Complexity and Organization*, 1.

Through its articulation of enablers and barriers, Table 1 identifies agents involved in the change at three levels in the organization, raises questions, and presents challenges and opportunities.

Operational senior leadership. At the operational senior leadership level, external pressures for change are readily apparent and articulated earlier in this chapter. In addition to recent initiatives intended to distribute accountability and promote collaboration outlined in this chapter, additional operational senior leadership efforts to foster internal organizational adaptability include experiments with novel ways to prompt innovation, learning, and community service deep in the organization. For example, an annual internal fund was established by the provost to foster partnerships in community service by engaging in the activity of developing new models and structures in teaching, learning, and the student experience for broader application across Sample U. (Sample U., 2019). This example may be taken as an additional indicator of operational senior leadership desire and readiness to embrace alternative approaches that focus on capacity-building and enabling leadership deep in the organization.

System of student advising. At the system level, while developmental approaches to student advising are apparent, the extent of existing relationships between the trio of student advising specializations and the presence of social capital among agents is not known. In student advising at Sample U., there is currently no obvious tradition of teamwork across specialist service-provider boundaries, no evidence of shared responsibility for common problems, and the existence of shared orienting values is unknown (Heifetz, 1994). Challenges to coordination and collaboration, therefore, will be rooted in local histories, sub-cultures, sources of authority, and structural differences (Jones, Lefoe, Harvey, & Ryland, 2012).

Lichtenstein et al. (2006) identify two drivers for adaptation and change at the system level: collective identity formation and tension. As these authors describe it, collective identity

formation occurs in a system through social interactions in spaces such as discussion forums and learning opportunities, where over time, agents come to collectively define “who we are and what we are doing” (Lichtenstein, et al., p. 5) thereby coming to produce a new identity. However, currently at Sample U., there are few if any opportunities for agents across the system to come together.

Individual agents. At the individual level, intrinsic motivators for change may include enhanced agency to have a role in creating change rather than being passive recipients of it. Correspondingly, an effect of working from a CL lens is the emphasis on internal drivers among agents working on the frontlines. Lichtenstein et al. (2006) observe that when agents within a system come together to address complex problems, tensions arise through interactions and raise challenges to personal knowledge bases. Perspectives are challenged among agents, new information is received and in turn, new ideas can emerge.

This review of enablers and barriers for change at multiple levels within the organization relates specifically to the system of student advising. While the OIP is focused on an internal change at the system-level, the following provides a brief snapshot of broader drivers for change.

Change drivers. In the Ontario PSE landscape, drivers for change include the provincial differentiation agenda (the framework). At the time of writing this OIP, anticipated increases in performance-based funding will involve measures in student retention and graduation rates (Government of Ontario, 2019) that are expected to be articulated through future SMAs. Because these expected performance indicators are directly tied to student advising, operational senior leadership expectations at Sample U. will emerge for enhanced contributions and measurable outcomes generated by the system. Internally, and at the highest level, Sample U.’s mission provides the overarching direction for the change and the strategic plan sets in place the priority to enact an integrated model of student advising (Sample U., 2015). Most importantly, however,

from both a developmental and student advising practitioner perspective, meeting student needs and expectations are significant drivers.

The opportunity presented by this articulation of drivers for change in student advising at Sample U. is its focus on collective strengths. Capitalizing on strengths through collaboration may serve to solidify and enhance a new identity for agents working within the system. Could a more intentional, top-down and bottom-up approach to the integration of a robust array of student advising services distinguish Sample U. not only as a leader of access upon admission, but also by better supporting students with diverse needs seamlessly and successfully through to graduation?

Conclusion

Chapter 1 introduced the sample university (Sample U.) and the PoP which is concerned with a fragmented system of student advising that fails to meet the needs of a diverse population of students. Trends and changes in Sample U.'s political, economic, and social environments were explored to provide a greater understanding of the PoP, while internal structures, characteristics, and cultures at Sample U. were described and considered to further frame the problem. Taken together, these various contexts both foster and present impediments to change and improvement. Moreover, this chapter outlined a complementary, alternative perspective to top-down approaches to change, informed by CT and guided by tenets of CL, to fully engage participants in bottom-up adaptive work.

This chapter concluded with a broad leadership-focused vision for change, a set of immediate priorities, and an assessment of change capacity. Informed by this exploration, Chapter 2 will introduce the framework for leading the change and provide an organizational analysis to further understand what changes are needed.

Chapter 2: Planning and Development

Chapter 1 outlined the PoP which concerns the fragmented state of student advising at Sample U. that fails to meet the needs and expectations of a diverse, 21st century student population. It provided a contextual analysis of the PoP including internal organizational structures, political and cultural characteristics, and dynamic, changing, often unpredictable external pressures. The chapter concluded with a leadership-focused vision for change that described a desired future state where collaboration is fostered among academic, complementary, and targeted student advising specializations. The purpose of Chapter 2 is to describe the leadership framework chosen to advance the change, provide an understanding of what changes are needed, and propose a series of possible solutions to address the PoP. It concludes with a discussion of the responsibilities of Sample U. and the ethical considerations that underpin leadership approaches, practices, and interactions between all agents involved in the change.

Leadership Approach to Change

The leadership-focused vision for change anticipates a future state at Sample U. where specializations are more integrated across service-provider boundaries in the system of student advising such that agents are enabled to problem-solve and generate innovative ways to better meet student needs and expectations. This vision builds on the change already underway in the specialization of academic advising at Sample U. and is predicated on creating the internal organizational conditions to enable collaboration and build capacity for continuous adaptation across the broader system.

The ongoing change in academic advising at Sample U. may be likened to what Buller (2015) characterizes as interactive—one that may be needed—but that is not forced. Drawing on the work of Brown and Eisenhardt (1997) and Broadbeck (2002), Burnes (2004) describes this

kind of change as neither small-scale, incremental, nor large-scale radical-transformational, but one that is “concurrent, continuous and based at the group level” (p. 318). When supported by operational senior leaders, the emphasis on continuous change occurring at the group level serves to distribute leadership among many, diminishing the effects of disruption. In current state within the specialization of academic advising at Sample U., interactions are fostered through small and large group gatherings, meetings, learning opportunities, and internal conferences. The groups are multi-level and integrated. Agents engaged in the spaces are leads of academic advising service units and practitioners, who come together to generate ideas, surface adaptive issues, and solve technical problems.

The approach to change in academic advising at Sample U. Now in its second year, the collective improvement effort in the specialization of academic advising has established a climate of mutual respect and trust wherein attention is focused and opposing opinions are valued. Conflict is activated (i.e., by applying pressure) moderated but not managed (i.e., reduced) such that service-providers and agents from across the specialization work together to advance change (Heifetz, 1994; Heifetz et al., 2004). In addition, students are engaged in the process by sharing their experiences and participating in activities. These adaptive approaches and practices are recognized as subsets or elements of CL (Arena & Uhl-Bien, 2016; Northouse, 2016; Uhl-Bien, Marion, & McKelvey, 2007).

As described in Chapter 1, my current leadership position provides a vantage point outside of academic advising service provision that is informed by previous professional experience leading service provision within it. While my experience lends bias toward viewing academic advising as “the hub of the wheel” in student advising (Habley, 1994, as cited in Nutt, 2003), my current leadership position affords a unique perspective akin to getting on the balcony,

allowing me to see the bigger picture (Heifetz, 1994; Heifetz & Laurie, 1997; Northouse, 2016). Conceptualized as a subset of CL, adaptive leadership involves three phases: observation, to see the big picture; interpretation, meaning the ability to distinguish between technical problems and adaptive challenges; and intervention, to advance agreed-upon solutions into the operational system all while supporting the human aspects of change (Bernstein & Linsky, 2016; Heifetz, 1994).

Rather than defining and imposing solutions, the process of adaptive leadership I have engaged in this ongoing change encourages new thinking by asking agents to tackle difficult problems, create solutions, and make choices (Heifetz et al., 2004). It does not, however, provide tools to devise specific interventions or to generate innovations that may be used to demonstrate progress on the path to an imagined future state (Bernstein & Linsky, 2016). Adaptive leadership also does not afford opportunities to incorporate and learn from student (i.e., user) experiences or provide mechanisms for agents to think creatively and experiment by producing ‘solutions’ that respond to those experiences.

Complementing adaptive leadership with adaptive practices. In addition to adaptive leadership, Arena and Uhl-Bien (2016) identify a series of adaptive practices that when conceptualized within the broader context of CL, enable cross-functional and multi-level interactions and exchanges that encourage adaptive responses. Design thinking (DT) is among them. As illustrated in Figure 3, DT encompasses four phases of activity: empathy, definition, ideation, and prototyping. Empathy gathers insights on the needs of users (e.g., in this case, students) and definition reframes those insights as opportunities. In the ideation phase, agents produce as many ideas as possible, and; in prototyping, agents mock-up new processes or

services to gauge how users (students) may respond to the innovation (Bernstein & Linsky, 2016).

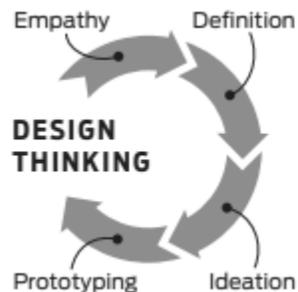


Figure 3. A simplified illustration of design thinking. Reprinted from “Leading change through adaptive design”, by M. Bernstein and M. Linsky, 2016, *Stanford Social Innovation Review*, 14, p. 51. Copyright 2016 by Stanford Social Innovation Review. Reprinted with permission.

A recent literature review found that when used in organizational settings, DT “triggers an experiential learning process that ultimately supports the development of organizational cultures defined by a user-centric focus, collaboration, risk taking and learning” (Elshbach & Stigliani, 2018, p. 2301). Similarly, Deserti and Rizzo (2015) propose that DT connects change with evolving organizational culture by engaging agents in the development of solutions and by introducing the notion that strategies only become dynamic and adaptive through experimentation and assessment. Further, de Guerre, Séguin, Pace, and Burke (2013) posit that when DT is used deep within traditional organizations like Sample U., the abductive logic and reasoning it promotes may serve to increase flexibility and capacity for adaptation. DT is an adaptive leadership practice I engage in my work in the specialization of student advising at Sample U.

Using an adaptive leadership approach in tandem with DT has allowed me to develop a set of leadership tools to address the different kinds of challenges inherent in working across organizational boundaries to effect change in academic advising service provision. Adaptive leadership orchestrates conflict and addresses the difficulties, obstacles, and disequilibrium

inherent in adaptive change (Heifetz, Grashow, & Linsky, 2009) while DT engages participatory and creative activities that focus on users—that is, students (Deserti & Rizzo, 2015).

As outlined in Chapter 1, my current role leading change in the specialization of academic advising at Sample U. has challenged my perspective on leadership as a vertical influence process (Liu, 2017). Leading without traditional positional authority has provided me with an understanding of the subtleties of leadership as a distributed or shared phenomenon (van Ameijde, Nelson, Billsberry, & van Meurs, 2009). It has allowed me to create space for collaboration and to experiment with adaptive leadership and practices described in this chapter. Informed by this experience, the leadership framework I propose to extend to the system of student advising at Sample U. is distributed and “behind the scenes”; involves “sharing credit and working collaboratively, rather than hierarchically”; and relies on adaptive leadership and practices to propel change forward (Uhl-Bien & Arena, 2018, p. 100).

Framework for Leading the Change Process

Not all changes are alike. As Cawsey et al. (2012) point out, organizations undertake different change projects simultaneously that involve multiple layers of systems and authorities. In this context, these authors affirm that under complicated circumstances, control is difficult to achieve. As this section will describe, changes impacting the system of student advising at Sample U. continue to occur simultaneously, and emerge as new priorities, challenges, and opportunities arise. Indeed, the accelerating pace of change at Sample U. has led to uncertainty and confluence, making concurrent changes difficult to manage and new changes nearly impossible to predict. Different types of change priorities (i.e., planned, or continuous) are ongoing, while others (i.e., reactive) arise and overlap. The human, technological, and fiscal resources available at Sample U. to attend to all types of change, however, remain limited and

fixed.

Setting the organizational context for change. As Chapter 1 revealed, in recent years operational senior leadership at Sample U. has focused on internal capacity-building by distributing accountabilities, aligning resources with priorities, as well as experimenting with different ways to prompt innovation and collaboration deep in the organization. Traditional strategic planning, however, prevails as the overarching organizational approach to change. Nevertheless, certain types of change hold the potential for significant disruption, redirecting lean resources away from traditionally planned approaches. This section explores the context for strategic planning at Sample U. and uses this circumstance to support the need for changing perspectives on leadership and as an opportunity to challenge traditional approaches to leading change. As the following section will illustrate, there is a growing tension between traditional strategic planning at Sample U. and environmental factors that compel reactive change, leading to uncertainty and confluence.

Tradition of strategic planning. While Buller (2015) challenges the relevance of strategic planning in HEIs, Sample U. has a long tradition of 5-year strategic planning cycles. Traditional strategic planning at Sample U. seeks to enact order through direction, but in conditions of uncertainty it can lead to misalignment with organizational contexts and prove incompatible with environmental realities (Castillo & Trinh, 2019). In this context, I contend that Sample U. must continue to experiment with alternative and complementary approaches to leadership to shift assumptions away from the notion that devising strategies and leading change from the top is the only way. When it comes to student advising improvement, specifying long-term, intended outcomes from the top may serve to be as problematic as the unplanned and evolutionary diversification of student advising specializations outlined in Chapter 1 that are now

fully entrenched in practice (Kuk, 2009; Love & Estanek, 2004). New kinds of students are continuously entering the system, come from a broad range of socioeconomic backgrounds and life experiences, and balance school with work and family obligations (Gilbert, Crow, & Anderson, 2018; Sample U., 2017). Students stay for a relatively short period of time and then are replaced with new students with their own distinct interests, challenges, and needs (Buller, 2015). These changing circumstances call for changes in the provision of student advising at Sample U. that are more responsive, nimble, and continuously adapting.

The growing pervasiveness of reactive change. Reactive changes are described as ones that are forced, where decisions on whether to change and the timetable for change are out of the organization's control (Buller, 2015). At Sample U., in certain cases of reactive change, external drivers compel the organization to respond within a horizon, allowing for a stepped and phased approach, while in other cases, the turnaround for response is so rapid that it is impossible to plan.

As outlined in Chapter 1, in 2013 the provincial government established a framework as the primary driver for publicly funded PSE (OMTCU, 2013). Since that time, 3-year SMAs have been in place between publicly funded institutions and the government using a phased approach to align policies and processes and implement funding levers (OMTCU, 2013, 2015). At the time of writing, it is anticipated that beginning in 2020, the third generation of SMAs will see the implementation of the full cadre of performance indicators outlined in the framework, including new metrics and accountabilities in student skills and job outcomes, economic, as well as community impact (Government of Ontario, 2019; OMTCU, 2013). In the context of expecting dramatically increased performance-based funding, I contend that the focus of operational senior leadership at Sample U. must necessarily be directed toward strategic improvements according to

the framework rather than on devising independent strategies, including those focused on internal systems, processes, and outcomes.

In addition to the strengthened role of governmental stewardship achieved through the framework and implemented through SMAs, ostensibly “surprise” policy initiatives serve to intensify the immediacy, and aggravate the prevalence of reactive change at Sample U. As described in Chapter 1, a new tuition fee framework for publicly funded universities was announced in January, 2019 and saw a 10% tuition fee reduction take effect for the 2019/20 academic year (OMCU, 2019b, 2019c). The same policy document outlines new ancillary fee guidelines. It provides new definitions for student services by distinguishing between those services which may be deemed essential (ancillary fees for which universities may charge students on a compulsory basis) and student services that are non-essential (fees for which must be optional for students; OMCU, 2019c). Based on this policy directive, in January 2019, the provincial government announced that the Student Choice Initiative (SCI) would be in effect for the 2019/20 academic year to empower students to make decisions on which optional fees they would choose to pay for services such as student governments, newspapers, clubs, or food banks (Friesen, 2019; OMCU, 2019c).

Like other publicly funded universities in the province, Sample U.’s response was compulsory and rapid. Cross-functional project teams comprising colleagues from finance, registrar’s office, information technology (IT), and student advising were struck to examine historical internal funding arrangements and adjust according to the new classification, communicate decisions to student groups that were adversely impacted, devise the SCI opt-out process, and communicate that process to students more broadly. At the same time, student unions in the province applied for a judicial review of the government policy directive and just

10 months after it was announced, and 3 months after it was implemented, the SCI was struck down in a November 2019 divisional court ruling (Friesen, 2019). In response to the court ruling and along with other publicly funded universities, Sample U. suspended the newly devised opting-out processes for the winter 2020 term. The provincial government has since launched an appeal, and at this time, the path forward for the initiative is not clear (Gibson, 2019).

The SCI is just one example of how the growing prevalence of reactive change in current state creates uncertainty and presents significant challenges for traditional strategic planning at Sample U. Correspondingly, as Kezar (2018) contends, this is a new era for change in HE. She reaffirms that contexts for change are changing and that “*the nature of change processes is itself being altered*” (p. 4; emphasis in original). Furthermore, Kezar (2018) stresses the imperative for campuses to engage in change, not merely in response to external pressures, but with intention and guided by the “mission of learning, knowledge creation, and public service” (p. 6). In this context, a better alternative to strategic planning at Sample U., therefore, may be to set a strategic compass based on the organization’s values, strengths, and distinctiveness to serve as a beacon to guide change (Buller, 2015; Cawsey et al., 2012). Moreover, in uncertain times, I reason that continuing to shift organizational focus toward distributing leadership and creating space within which collaboration, adaptability, and innovation may be fostered among many agents will increase organizational capacity for continuous change and provide a valuable complement to leading change for performance (Uhl-Bien & Arena, 2018).

As described in Chapter 1, the theory and model for CL emerged from CT which is the study of the interactions in complex adaptive systems (CAS) embedded in larger systems of organizing, such as bureaucracy (Uhl-Bien & Marion, 2009). Essentially, CL directs focus away from individuals as leaders to reconceptualize leadership as a system phenomenon (Lichtenstein et al., 2006). Moreover, as a contextual framework, CL views leadership as embedded in the

organization, continually shifting and changing as circumstances within the organization and in its broader environment shift and change. As Uhl-Bien and Marion (2009) describe, inasmuch as CL is a framework for leading change it is also a change model for leadership. Given the complicated contexts for change outlined in Chapter 1 that are reinforced in this chapter, I propose CL as the overarching framework to lead the change in the system of student advising.

Model for complexity leadership. Uhl-Bien and Marion (2009) describe CL as a model to help operational senior leaders “understand how to design robust, dynamically adapting organizations” (p. 632) by tapping into more informal dynamics to empower entrepreneurial capability, learning, and adaptive capacity within the larger bureaucracy. As illustrated in Figure 4, the model for CL spans the organization and broadly describes three kinds of leadership activities for adaptability: entrepreneurial leadership as the source of new ideas, learning, and growth; enabling leadership that creates and sustains adaptive space and engages adaptive leadership and practices to reconfigure ideas; and operational senior leadership that scales and integrates the novelty into the operational system as new order, aligned with both the needs of the organization and its environment (Uhl-Bien & Arena, 2017, 2018).

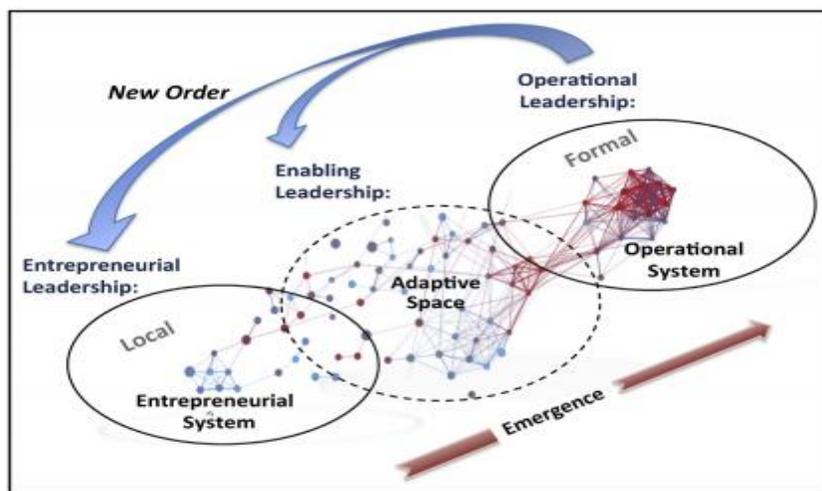


Figure 4. An illustration of the complexity leadership (CL) model. Reprinted from “Complexity

leadership: Enabling people and organizations for adaptability”, by M. Uhl-Bien & M. Arena, 2017, *Organizational Dynamics*, 46, p. 15. Copyright 2017 by Elsevier. Reprinted with permission.

Set within the stabilizing environment of bureaucracy (Uhl-Bien & Marion, 2009) at Sample U., the model for CL depicted in Figure 4 provides a clear and unambiguous pathway for driving responsibility downward into the organization, taking significant pressure away from operational senior leadership, allowing them to attend more directly to strategic challenges (Lichtenstein et al., 2006). In the model, the role of operational senior leadership at Sample U. in part becomes to empower mid-level leaders to devise approaches that would work best in particular contexts to enable adaptability (Uhl-Bien & Arena, 2018). As such, the challenge for me as a mid-level leader at Sample U. becomes to create and enable adaptive spaces (Uhl-Bien & Marion, 2009), foster the interactions that occur within those spaces, and liaise with operational senior leadership to drive solutions into the operational system (Uhl-Bien & Arena, 2017).

Location and specific focus of leadership for the change. While the model for CL operates at the meso or organizational level (Uhl-Bien & Marion, 2009), the focus of this OIP concerns enabling leadership which incorporates the adaptive leadership and practices outlined earlier in this chapter and occurs in the adaptive space illustrated in Figure 4. Uhl-Bien and Arena (2017) describe the concept of adaptive space “as a network structure not previously recognized in the leadership literature” (p.11) and “the key to adaptability” (p. 19) which may allow a complex system—such as student advising at Sample U.—to become a complex *adaptive* system. Arena, Cross, Sims, and Uhl-Bien (2017) indicate that adaptive space need not be a physical location, rather it is a fluid concept and can shift based on need. Adaptive space, they propose, may include networked structures, events that bring together people from different parts of the organization, or emerge through professional relationships and social connections.

This section explored the elements of an alternative approach to leadership and change currently underway at Sample U. in the specialization of academic advising. It outlined the complicated organizational context for change which includes tension arising between its long tradition of strategic planning and the growing prevalence of reactive change. It concluded by proposing the model of CL as the overarching framework to move the system toward a more integrated approach in student advising. The section that follows analyzes the impact of change on a broad range of organizational variables, lending valuable insight into what may need to change and how appropriate solutions may be devised.

Critical Organizational Analysis

As outlined in Chapter 1, a complexity perspective offers little in terms of predicting the outcomes of change and requires leaders to recognize that plans may change, but it does not absolve leaders from operating on the best knowledge and evidence (Morrison, 2010). Given that this OIP adopts the model for CL to inform the leadership approach and act as the framework for leading change, I chose to employ a model for critical analysis that includes a range of both hard (i.e., strategy, structures, systems) and soft (i.e., human) variables to be considered in change. The selected model stresses the complex interconnections among variables but does not imply cause and effect relationships between them or suggest a linear path for action.

Change model and analysis. The McKinsey 7-S model for change (7-S) is an early, seminal change model that provides a broad yet basic approach to analysis by suggesting that organizational culture is shaped and influenced by a range of organizational dimensions (Waterman, Peters, & Phillips, 1980). The model proposes seven variables for examination: strategy, structure (e.g., formal organizational and purposes), systems and processes, skills, style of leadership and management, staff, and shared values (Cawsey et al., 2012; Waterman, 1982;

Waterman et al., 1980). The 7-S emphasizes relationships between variables, yet the model has no implied hierarchy or starting point and any of the seven variables may serve as the driving force for change (Waterman et al., 1980). The underlying premise is that organizational effectiveness is a function of the degree of fit among an organization's variables and its environment (Cawsey et al., 2012; Miterev, Mancini, & Turner, 2017; Van de Ven, Ganco, & Hinings, 2013; Waterman, 1982). Therefore, the model implies that the process of examining variables for misalignment helps leaders to broadly determine courses of action (Cox, Pinfield, & Rutter, 2018).

Here I will use the 7-S model to examine the variables of strategy, structure, systems and processes, skills, style (e.g., of leadership and management), staff, and shared values as they relate to moving toward a more integrated approach in the system of student advising at Sample U.

Strategy. A gap exists at Sample U. between its aspiration to foster a student-centred approach (Sample U., 2015) and the current fragmented state of student advising. As articulated in Chapter 1, the leadership-focused vision for change addresses this gap by imagining a more integrated approach. If the strategy to advance toward a more integrated approach through fostering collaboration is sound, the 7-S model indicates that an analysis of the remaining variables (structure, systems, skills, style, staff, and shared values) at Sample U. will reveal those needing attention toward achieving the goal of becoming more student-centred.

Structure. In its most basic form, structure refers to groupings of functions into departments or divisions (Higgins, 2005). Building on the cultural analysis provided in Chapter 1, Bergquist and Pawlak (2008) posit that new structures, processes, and attitudes are needed in HEIs given fiscal constraints, unpredictability of governmental policies, technological

advancements, changing student needs, and expectations of a knowledge economy. In fact, several authors argue that organizing student advising according to functional areas, identities of professionals, or select student populations isolates and insulates staff through role and task specializations and creates barriers for students (Dietsche, 2012; Kuk, 2009; Manning et al., 2006; Oullette, 2010; Porterfield, Roper, & Whitt, 2011). In order to meet the diverse needs of all students at Sample U., Porterfield et al. (2011) suggest organizing student advising practice according to shared purposes: thinking more holistically and creating different structures that support complexity.

While this OIP does not consider a structural reorganization, an examination of the current structure of student advising provision at Sample U. reveals a highly specialized model, characterized by multiple, semi-autonomous service-provider hierarchies with little coordination, communication, or collaboration among them.

Systems and processes. Systems and processes are fundamentally about how an organization accomplishes work on a day-to-day basis or, in the simplest terms, the ways in which the organization “gets things done” (Higgins, 2005, p.5). As highlighted in Chapter 1, at Sample U. different students require different kinds of student supports: The more complex the student population, the more sophisticated and interconnected the student supports need to be (Fernandez, Fitzgerald, Hambler, & Mason-Innes, 2016). At Sample U., the result of a fragmented system of student advising is student misunderstanding about where to access advising for what kind of support or issue which leads to dissatisfaction (Sample U., 2017). Moreover, and drawing on the guiding questions outlined in Chapter 1, interconnections between student advising service-providers—including information systems—have not been developed

such that agents working within the system may come to *perceive* of and students may *experience* the system of student advising at Sample U. as a coherent whole.

Skills. Waterman (1982) describes the concept of skills as derivative of the organization rather than the capabilities of individuals within it, and Higgins (2005) extends the meaning of this variable to encompass resources such as money, technology, and software. As outlined in Chapter 1, Sample U. students are dissatisfied with the advising support they receive, including how much the organization emphasizes services to support learning and development (Sample U., 2017). In current state, the system of student advising at Sample U. relies on students to self-assess needs and use their own help-seeking efforts and abilities to uncover, navigate, and access myriad advising supports available to them.

As the ongoing change initiative in the specialization of academic advising has progressed, it has raised adaptive challenges as well as a series of technical problems (Heifetz, 1994), some of which have been—or soon will be—assumed into the operational system. For example, until recently at Sample U., there existed no centrally accessible repository of academic advice given to students, no place for academic advising practitioners to share advising notes, and no technological tool to underpin student referrals between service-providers. A software solution has been purchased to remedy this problem in the specialization of academic advising and its deployment is imminent.

Style—leadership and management. The variable of style refers to the way in which leadership and management behaves in relation to other employees and subordinates (Higgins, 2005; Waterman, 1982). Drawing on Bergquist and Pawlak's (2008) model of cultural archetypes, Chapter 1 outlined the presence of both a managerial culture and a developmental culture in the system of student advising. While the managerial culture values role-specificity

(i.e., clear delineation of goals and measures), the developmental culture balances this perspective by encouraging awareness of the potential for growth and alternative solutions to problems (Bergquist & Pawlak, 2008). From a CL perspective, Uhl-Bien et al. (2007) posit that to catalyze potential in organizations, leadership styles must come to recognize the value of interdependencies and interactions across multiple levels. Further, Uhl-Bien et al. (2007) contend that “to meet the needs of requisite complexity, knowledge era leadership requires a change in thinking away from individual, controlling views” (p. 301). However, experimenting with new ways to uncover and respond to problems, foster collaboration, and leverage opportunities may not be consistent with traditional role expectations in some areas of the system of student advising at Sample U. (Yukl & Mahsud, 2010).

Staff. As outlined in Chapter 1, the model of student advising service provision at Sample U. is based on specializations, which suggests that staff within service-provider units possess the requisite skills for effective student advising according to practice-specific, specialized knowledge. While it may be assumed that staff at Sample U. possess individual competencies to perform specialized student advising roles and tasks, in current state the kinds of conditions, leadership approaches, and practices necessary to foster integration, social capital, and adaptive capacity across the system are absent.

Shared values and superordinate goals. Waterman et al. (1980) describe shared values and superordinate goals as a set of concepts that operational senior leadership desires to permeate the organization. In this case, that is Sample U.’s aspiration to adopt a student-centred approach (Sample U., 2015) to better realize its fundamental values of accessible education and student success outlined in its mission statement and strategic plan (Sample U., 2015, 2019) and captured as enablers in Table 1. As Kezar (2018) points out, values congruence helps

organizations move more quickly and deeply into change. In current state at Sample U., however, there are few if any opportunities for agents working within the system of student advising to gather to discuss their views and perceptions, and how they see themselves aligned—or not—with the overarching values of the organization.

Outcomes of the analysis. While a CL approach is not concerned with the alignment of variables as a means to “set up,” prepare for, or predict the outcomes of change, this analysis is helpful as a starting point to understand the range and interconnections among and between both “hard” (e.g., organizational) and “soft” (e.g., human) variables. All these variables will be impacted by the activity of shifting perspectives on leadership, creating adaptive spaces, and using adaptive leadership and practices to enable interactions. In light of the variables identified by the organizational analysis, it is important to note here that a CL perspective necessarily involves and addresses “people, systems, and structures” (Uhl-Bien & Arena, 2018, p. 101) to provide new understandings of organizational adaptability relative to capabilities, networks, innovation, and complexity

Informed by the contextual discussion on the conditions for change at Sample U. and the insights offered by the 7-S analysis, the following section poses options for what Sample U. might choose to do to foster a more integrated approach in its system of student advising.

Possible Solutions to Address the Problem of Practice (PoP)

This section proposes three possible solutions to address the fragmented state of student advising at Sample U. These are:

1. Contain the ongoing change to the specialization of academic advising and implement a software solution to share notes and codify student referrals within it;

2. Implement a software solution to underpin student referrals across the broader system of student advising; or
3. Leverage the implementation of a software solution to underpin student referrals to serve as the starting point for enabling adaptability in the system of student advising.

All three solutions are informed by the guiding questions outlined in Chapter 1 and respond to the results of the critical organizational analysis outlined earlier in this chapter. Each solution considers the degree of learning, including how staff perceive, and how students experience the system of student advising; how existing structures and systems might be augmented, how skills, or resources, may be leveraged; and how innovation may be fostered while ensuring stability to achieve a balance of improved performance with creating conditions for continuous adaptation.

All three solutions are cost-effective in that they propose to continue and/or build on the strategically resourced change initiative already underway in academic advising.

The first recommendation contains the change to the specialization of academic advising which is a component part of the larger system of student advising at Sample U., while both recommendations that follow build on its continuation as a strategic priority. The second recommendation extends the deployment of a newly purchased software to improve student referrals across the full system of student advising. While the third recommendation also incorporates the software solution, it aspires to create the conditions and spaces to prompt collaboration and adaptive capacity more broadly across the system of student advising. Each proposed solution aligns with Sample U.'s aspiration to enhance student-centredness (Sample U., 2015), and either fits within my positional leadership purview and/or within reach of my personal sphere of influence as a mid-level leader and long-service employee. Each solution is described in detail, including advantages and consequences, and considers whether the proposed

solution is achievable at this time. Because the cost of the software itself has been funded as a strategic priority at Sample U., it is excluded from the discussion. Nevertheless, as with any organizational change, the costs associated with each solution involve information, time, and human resources and these are briefly outlined relative to each proposed solution.

Solution 1: Contain the ongoing change. Solution 1 proposes to retain the boundary for change in the specialization of academic advising and to continue the ongoing change effort. The change in academic advising is fully resourced and aligned with Sample U.'s aim to advance a student-centred approach. As described in Chapter 1, the collective improvement effort in academic advising operates laterally across traditional boundaries of service provision and in this contained way, concentrates collaboration, innovation, and learning.

Information and new knowledge are generated within adaptive spaces through collaboration and sharing, as well through learning opportunities which focus on practice-based literature, trends, and techniques in academic advising practice. Developmental and managerial cultures present within the specialization (Bergquist & Pawlak, 2008) intersect and interact through adaptive work, and by collectively solving technical problems and progressing them into the operational system in local academic advising service units (Uhl-Bien & Arena, 2017, 2018).

The activity of bringing together academic advising leads and practitioners at Sample U. has proven to be a viable means of raising the profile of academic advising for students as well as for the university community. Moreover, the initiative has served to amplify the potential for academic advising to hold a significant role in the further development of a more integrated approach in student advising more broadly conceived. Therefore, focused, and sustained improvement in academic advising may represent an important first step toward leveraging the full suite of student advising services to better support the learning needs of a diverse population of students. However, containing the change means that improvement will focus only on a

component part of the larger system of student advising at Sample U. As Richardson (2005) cautions, “optimization of a system’s parts does not (necessarily) lead to an optimal system, and vice versa” (as cited in Turner & Baker, 2019, p. 17).

The degree of change within the specialization of academic advising is both first order because it recognizes and fits within existing organizational structures and second order, because it emphasizes and relies on shared responsibility for decision-making at multiple levels and across functional units (Kezar, 2018). Therefore, at this juncture, this may be the right location to concentrate and intensify a new approach. However, if the ongoing change remains contained to the specialization of academic advising, limited change will be experienced from a student perspective.

Information. Given that the specialization of academic advising is in my designated leadership purview, and service-providers within the specialization have an established, shared history of collaboration, no new information is required.

Time. The time required to deploy the software to service-providers within the specialization within the specialization of academic advising is estimated at 4 months.

Human resources. I will lead the change with the project coordinator who supports the work already underway in the specialization. Representatives from the information technology department (IT) will join us, and we will be assembled as an “implementation team,” to deploy the software. In-kind staff salary costs for the implementation team are estimated at \$29,500.

A select group of academic advisors will serve as software “testers” and “trained trainers” such that they may develop expertise and support the learning of other agents in the specialization as the software rolls out. These in-kind staff costs are nominal and estimated at \$3,500. In addition, support from the Institutional Research Office (IRO) will be required to

support assessment, and communications expertise will be required to support the formal communications that accompany this kind of change at Sample U.

Solution 2: Extending a software solution to the system of student advising. As described earlier in this chapter, the ongoing change initiative in academic advising has identified a technical problem concerning Sample U.'s reliance on students to self-assess advising needs and to use their own help-seeking efforts and ability to navigate and access needed services. In response, the second solution proposes to extend the deployment of software that will address the problem of student referrals between student advising service-providers by making direct connections between specialist functions possible. Because the costs associated with purchasing the software have been absorbed as a strategic priority, it can—with only nominal, short-term costs associated with implementation, assessment, and communication—be implemented more broadly across the full system of student advising. The result of this approach, however, will be that a strategy for correcting a known problem, identified by one part of the system is taken for granted by other parts of the system, and pushed unchallenged into the operational system.

While Solution 2 addresses the fragmented state of student advising at Sample U. by changing agent behaviour—in terms of how to refer students between service-providers—and will improve the student experience, it is a “quick fix” and does not afford opportunities for agents “to clarify their values, develop previously unknown solutions, and implement them” (Heifetz et al., 2004, p. 25). The organizational learning proffered by this solution is concerned primarily with effectiveness, and while the student experience may be improved, this solution maintains the *status quo* for the system of student advising (García-Morales, Verdú-Jover, & Lloréns, 2009). As Patton (2011) describes, making changes to improve immediate outcomes

through “a problem-detection-and-correction process is *single-loop* learning” (p. 11; emphasis in original). While fixing the problem of referrals between service-providers may improve system functionality in the short term, the underlying adaptive challenges will remain. Therefore, Solution 2 leaves at least one significant question unanswered. Will the implementation of a software solution across the system serve to mask underlying adaptive challenges with a technical fix?

Information. Information gathering from each student advising service-provider will be required to understand both the needs and existing processes that will be affected as the software solution is deployed.

Time. The time required to deploy the software across agents working within the specialization of academic advising is estimated at 12 months.

Human resources. As in Solution 1, I will lead an “implementation team” to deploy the software across the system of student advising. In-kind staff salary costs for the implementation team for this larger project are estimated at \$87,500, with additional one-time costs incurred to backfill a position in IT estimated at \$50,000. Once again, a select group of academic advisors will be needed to serve as software “testers” and “trained trainers” and these in-kind staff costs are estimated at \$10,500. In addition, human resources from the IRO will be required to support assessment, and expertise from communications will be required to support the formal communications that accompany this kind of change at Sample U.

Solution 3: Enabling adaptive capacity in the system of student advising. While Solution 3 also proposes to extend the deployment of the software to address the problem of student referrals, it complements this technical fix by proposing not only to “open up” the kinds of adaptive spaces created by the ongoing change in the specialization of academic advising, but

to begin to reconfigure those spaces—including networked structures and events—to comprise agents from across the larger system of student advising (Arena et al., 2017). As such, Solution 3 aspires to bring the fragmented components of the system of student advising together (Sullivan, et al., 2002, as cited in Arena, 2009) by breaking down barriers between functional service-provider silos, and by shifting coordination and control to those closest to the work (Arena, 2009). As a mid-level leader currently involved in this kind of change at Sample U., I argue that this approach will serve as an opportunity to begin to deal with the roots of adaptive challenges embedded in the system of student advising rather than merely addressing their technical symptoms (Heifetz, 1994). Further, through interactions and over time, I contend that this approach will allow agents to start to form a collective identity by coming to define who we are and what we are doing thereby beginning the evolutionary and adaptive processes posited by CL toward the integration of student advising (Lichtenstein et al., 2006).

The information, time, and human resource costs for implementing Solution 3 are estimated to be comparable to those outlined for Solution 2, with one significant caveat relating to human resource dependencies. Ongoing work focused on the specialization of academic advising will need to slow to allow time for me and the project coordinator to focus on the adaptive and developmental aspects of this approach to change that spans the broader system.

Recommended Solution

Solution 3 is ambitious and presents challenges as to whether it is currently achievable, given its broad scope. However, it is the solution I choose to put forward, and I propose it for several reasons. It does not present choices between addressing aspects of adaptive versus technical problem-solving and performance according to Sample U.'s aspiration. Rather, it creates space for both to be raised. It offers an opportunity to demonstrate immediate

responsiveness to student needs by implementing a software solution to address the problem of student referrals. In addition to being a relevant and viable technical solution, the deployment of software is a specific, measurable, and time-based objective (Doran, 1981). While this approach complements the deployment of a software solution with a developmental and process-oriented focus on the human element of change, it does not present prohibitive costs—a breakdown of which will be described further in Chapter 3. Because the anticipated user-base for the software spans the system of student advising, this initiative will offer opportunities for leaders and agents working within the system to meet on a matter of shared concern, allowing for conversation and awareness raising. Further, it will serve as a starting point toward achieving the more integrated approach described by the leadership-focused vision for change outlined in Chapter 1.

By design, the proposed solution engages the system of student advising in the activity of adopting a new software solution and by presenting opportunities for participants to delve into the more adaptive work of change. It therefore raises ethical considerations at multiple levels. These considerations are explored in the following section.

Leadership Ethics and Organizational Change

The ethical considerations raised by this OIP are multifaceted. First, moving toward a more integrated system of student advising is about changing to meet the needs and better serve a diverse and changing student population. At this level, ethical considerations involve institutional responsibility and the ethical reflections that responsive and effective student advising practice requires. Secondly, given that the leadership framework and approach to change push responsibility downward into the organization (Lichtenstein et al., 2006), ethical considerations move beyond the traits and behaviours of formal leaders and extend to all agents involved in the change.

Organizational responsibilities. Sample U.'s (2015) strategic plan commits to the provision of the strongest possible encouragement, opportunities, and support for student self-actualization and recognizes that coming to better understand the needs and expectations of students is an institutional responsibility. Keeling (2014) reinforces the notion of responsibility and urges the enactment of institutional commitment not only through the establishment of policies, programs, and services to support student success, but by coming to a broad understanding and acceptance of this obligation at all levels. Correspondingly, Brown McNair et al. (2016) assert that effecting a broad understanding for responsibility requires creating intentionally supportive environments. They suggest that such environments may be achieved through embracing principles of distributed and developmental leadership to advance learning, and by empowering all members of campus communities to serve as leaders.

Ethical leadership. Among the fundamental qualities that characterize ethical leadership are honesty, integrity, fairness, and consistency between espoused values and behaviours (Yukl, Mahsud, Hassan, & Prussia, 2013). Further, as Yukl and Mahsud (2010) contend, formal leaders must demonstrate self-awareness by concentrating efforts on developing these kinds of qualities before they are needed, apply them consistently in conjunction with responsibility and accountability in their day-to-day interactions. As a mid-level leader, I am reminded that these are the traits and behaviours that I value in operational senior leadership and am therefore mindful to adopt them in my personal practice.

Brown, Treviño, and Harrison (2005) define ethical leadership as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making” (p. 120). That said, ethical leadership theories tend to assume that leaders

rationally and hierarchically enact ethical behaviours, “enforcing them through reward and discipline, willfully shaping the ethical behaviour of all organizational members via a linear causal relationship” (Liu, 2017, p. 346).

Other post-heroic theories, however, position leadership as a non-hierarchical, collective social practice, distributed throughout the organization (Cunliffe & Eriksen, 2011). Relational leadership, for example, has been described as a “social influence process through which emergent coordination (i.e., evolving social order) and change (e.g., new values, attitudes, approaches, behaviours, and ideologies) are constructed and produced” (Uhl-Bien, 2006, p. 655). As Nicholson and Kurucz (2019) observe, this perspective on leadership emphasizes co-creation within the contexts and complexity of multiple perspectives and viewpoints. Similarly, in CL, leadership is viewed as “embedded in a complex interplay of numerous interacting forces, rather than influential acts of individuals” (Uhl-Bien et al., 2007, p. 302). While leadership ethics are not a specific focus of CL, positive human relations such as trust and respect are recognized as important preconditions for effective interactive processes (Uhl-Bien & Marion, 2009).

If a relational view recognizes leadership as a phenomenon generated through interactions rather than traits or behaviours of individual leaders (Fairhurst & Uhl-Bien, 2012), ethical leadership at the group level, therefore, also becomes a relational construct that may serve to enhance interactions in the group and between members. Stated simply, if group members share the view that leaders and counterparts are ethical, they will come to the collective perception that they may participate in change and decision-making, free of the fear that their views or contributions may harm their status (Yidong & Xinxin, 2013).

Ethical considerations in times of change. Kezar (2018) identifies a series of processes that help to create an ethical approach to change. Among these processes are participation and

input, information-sharing, co-creation through dialogue, trust, and acknowledgement of different values and interests. The model for CL is predicated on creating the spaces and contexts to accomplish these kinds of processes. In fact, from a CL perspective, Lichtenstein et al. (2006) contend that making interactions and relationships primary allows for a new way to improve ethical behaviours in organizations by emphasizing interactions in groups rather than by relying on one-to-many leadership exchanges.

In organizational environments where change creates uncertainty, traditional authority-based notions of leadership “such as deciding what has to be done, developing strategy and vision, or having the final say, no longer make sense” (Collier & Esteban, 2000, p. 207). I recently came to learn this first-hand leading collaboratively in the specialization of academic advising at Sample U. Through this experience, I learned humility. As a mid-level leader in this collaborative context, I do not need to know all the answers or to predict the ultimate solutions. Rather, my role must be concerned with setting the conditions within which solutions can emerge. I learned the value of open communication and that trust is integral and reciprocal in true collaborations. Conversely, I also learned that this kind of behind the scenes leadership exchange can often “go unrecognized in systems that focus on strong hierarchical forms” (Uhl-Bien & Arena, 2018, p. 100).

Because change and uncertainty are difficult and stressful, mid-level leaders need to be empowered by operational senior leaders, feel safe taking risks, making mistakes, and “to do what is necessary and ethical” (Yukl & Mahsud, 2010, p. 91). Relatedly, the kind of adaptive work that the model of CL intends to foster involves tension, and as such, agents working within the adaptive space need to feel safe engaging in conflict (Uhl-Bien & Arena, 2018). These are

the kinds of circumstances and conditions wherein ethical leadership qualities and behaviours at all levels and in all interactions matter most.

Conclusion

Chapter 2 outlined the model for CL (Uhl-Bien & Arena, 2017) that serves as both the leadership approach to change as well as the framework for leading change. It outlined the concurrent and continuous aspects of fostering adaptability that provides a complement to planned, reactive, or change for performance. This chapter located the activity of change in adaptive space wherein adaptive leadership and practices may be engaged and, according to the model, described the approach for leadership as enabling. Working within adaptive space, the chapter conceptualized leadership as a dynamic process used to collectively solve problems by encouraging learning and adaptability (Northouse, 2016), and DT as an adaptive practice that may be used to encourage creativity, prompt innovation, and to ensure that responding to student experiences is central to the process.

Following a critical organizational analysis and an exploration of potential solutions to address the PoP, the chosen solution provides a tangible, time-bound, technological response to establish interconnections across the system of student advising. Further, the solution seeks to leverage this opportunity as a starting point to enable longer term, continuous adaptability in the system more broadly. The chapter concludes with a discussion of the responsibilities of Sample U. and the ethical considerations that underpin leadership interactions between all agents involved in the change.

The proposed solution selected in this chapter briefly described the content of the change. Chapter 3 will outline the implementation plan, describe in detail how the proposed solution will

be facilitated, and explain how the change process, outcomes, and impact will be evaluated and communicated.

Chapter 3: Implementation, Evaluation, and Communication

Chapter 1 began by introducing the PoP as the fragmented state of student advising at Sample U. and concluded with a leadership-focused vision for change that described a desired future state where collaboration is fostered across the system. Responding to the contextual analysis and vision for change, Chapter 2 identified the model for CL as a change approach for leadership as well as the framework to lead the change. It provided a discussion of leadership ethics including the roles of building trust and open communication that are fundamental to my personal leadership practice, and important preconditions for successful organizational change. After exploring a series of solutions to address the PoP, in Chapter 2, I proposed to leverage the implementation of a software solution as an opportunity to create adaptive space to serve as the starting point for enabling adaptability across the system of student advising. As such, the solution to address the fragmented state of student advising at Sample U. combines a planned top-down (bureaucratic) approach to change with a bottom-up (distributed, adaptive, and emergent) perspective.

Chapter 3 describes how the planned aspect of the change will unfold in phases, proposes measures to assess the change, explores the essential and multifaceted role of communication, and concludes with a series of next steps and future considerations. While Chapter 3 largely focuses on describing how I will lead the deployment of a software solution, it is equally concerned with how adaptive space (Uhl-Bien & Arena, 2017) will be used concurrently to support the planned change, and to create conditions for continuous adaptation and ongoing evolutionary change (Lichtenstein et al., 2006) toward the integration of student advising at Sample U.

Change Implementation

This section outlines the strategy for change, summarizes the goals and objectives of the change, and outlines the plan to facilitate the transition.

Strategy for change. The solution to address the fragmented state of student advising at Sample U. involves implementing a software solution to provide a central (shared) location to record student advising notes, codify student referral processes, and to use this planned change as an opportunity to enable adaptability in the system of student advising. The solution is described in brief as follows:

1. Implement (scale) a software solution to act as a single-source repository/record of advising notes and student referrals across the system of student advising; and,
2. Create adaptive space for agents across the system of student advising to engage collaboratively in the planned change, and to maintain that space for interactions beyond software implementation.

The two components blend leadership for planned change with enabling leadership which comprises adaptive leadership and practices (Uhl-Bien & Arena, 2017) and balance the need for bureaucratic performance with complexity dynamics (Uhl-Bien et al., 2007). The first part of the solution concerns deploying a technical solution to support student referrals and underpin connections between various student advising service-providers while the second part is intended to foster positive interdependence across the system by enabling “innovation, learning, adaptability, and new organizational forms” (Uhl-Bien & Marion, 2009, p. 633).

Strategic alignment and organizational “fit.” As outlined in Chapter 1, one of the key priorities outlined in Sample U.’s (2015) current strategic plan is to establish an integrated student advising model to clarify roles and responsibilities, and provide comprehensive student advising processes to ensure that students receive timely and accurate responses to requests. In Chapter 2, I outlined the changing and sometimes unpredictable provincial landscape for PSE and the related growing prevalence of reactive change at Sample U. In this context, I questioned the future viability of top-down, prescriptive, strategic planning at Sample U. However, by using

the current plan's overarching theme of becoming more student-centred as a strategic compass to guide the work (Buller, 2015), I propose that one way to clarify student advising roles and processes is for service-providers to employ a single-source technology to share notes and underpin student referrals.

Improving experiences. For Sample U. students, the implementation of a software solution will mean that their interactions at each point of contact with advising service-providers will be recorded in one place to demonstrate system accountability, enhance service consistency, and improve access to different kinds of advising specializations. For agents, the software solution will help forge interconnections between service-providers and build a collective awareness of the breadth of student advising services available at Sample U. As a result, agents will be better positioned to make effective referrals to ensure that students have a clear path to access the various kinds of supports they need, thereby enhancing perceptions of quality of work. In addition, the incorporation of adaptive space will allow agents in all specializations to come together to interact, develop and/or strengthen relationships, and feel more connected across the system.

Complementary structures—adaptive space. As outlined in Chapter 2, the proposed strategy does not impose a structural re-organization. It does, however, propose to complement existing service-provider structures with adaptive space at first to support the planned change, but with the intention of sustaining this space beyond software implementation. The provision of adaptive space wherein changing behaviour may be generated will lend potential for longer-term, incremental adaptation across the system (Ströh, 2007).

The remainder of this section, at first isolates the planned, top-down component of the change as a specific, measurable, and time-based objective (Doran, 1981). The section concludes with a discussion of the plan to facilitate the transition which outlines how both parts of the

solution work together as coherent whole—top-down and bottom-up—offering a context-specific approach to supporting change in the system of student advising at Sample U.

Scaling the implementation of a software solution. Technology and process solutions have long been perceived by organizations as key drivers for executing new strategies (Eisenberg, Johnson, & Pieterse, 2015). Consistent with this approach, the implementation plan outlined in Table 2 summarizes a phased approach to deploying the software solution, highlights a series of key milestones along the way, and reveals anticipated implementation issues.

A phased approach to implementation. The implementation plan outlined in Table 2 uses Rogers's (2003) typology of "adopter categories" (p. 282) to guide the direction of implementation team effort over the course of 1 year, in five phases across the system of student advising. Specifically, Phase 1 of the plan (i.e., months 1 to 4) uses the foundation of adaptive and distributed leadership work described in Chapter 1, that is already underway in the specialization of academic advising as "a point of leverage" (Morgan, 2006, p. 261). The plan proposes to pilot the software solution within the specialization of academic advising. Thereafter, the plan engages academic advising agents as subject matter experts (SMEs) and "trained trainers" in the participatory activity of scaling the implementation from one student advising specialization to many. Equipped with a recent shared history of collaboration outlined in Chapter 1, agents working in the specialization of academic advising have developed capacity as innovators (Rogers, 2003), and their participation will aid in the diffusion of the technical solution across the system.

Table 2

Plan for Implementation

Goals/priorities	Implementation process	Implementation issues/limitations	Supports/resources ^a	Agents/ Personnel	Timeline & milestones
Implement (pilot) a software solution to underpin student referrals in the specialization of academic advising	<p>PHASE 1 (PILOT):</p> <p>Innovators:</p> <p>Academic Advisor Subject Matter Experts (SMEs) test BETA version of software (sandbox)</p> <p>Engage software provider to train Advisor SMEs as “trained trainers”</p> <p>Training day with software provider; integrate keynote speaker on the topic of change; integrate kick-off celebration</p> <p>Developmental evaluation</p>	<p>Technical/data integration issues</p> <p>Software customization limitations and ‘shared practice’ issues</p> <p>Internal (existing) academic advising service-provider process integration issues</p> <p>Adverse responses to change/change resistance</p> <p>Willingness/capacity to adapt to new technology</p> <p>Competing priorities</p>	<p>Implementation Team</p> <p>Software provider (technical)</p> <p>Sample U. Information Technology (IT)</p> <p>Software provider (training and “train-the-trainer”)</p> <p>Academic Advisor SMEs as “testers” and “trained trainers”</p> <p>Institutional Research Office (IRO)</p> <p>Communications</p>	<p>Academic Advisors</p> <p>Leads of academic advising units</p>	<p>4 months</p> <p>Milestone 1: Pilot kick-off celebration</p> <p>Milestone 2: Solution (pilot) fully implemented in specialization</p>
Implement (scale) a software solution to underpin student referrals across the system of student advising	<p>PHASE 2:</p> <p>Early adopters: ^b</p> <p>Expand software implementation with select student advising service-providers</p> <ul style="list-style-type: none"> • training <p>Developmental evaluation</p>	<p>Adverse responses to change/change resistance</p> <p>Willingness/capacity to adapt to new technology</p> <p>Internal (existing) service-provider process integration issues</p> <p>Competing priorities</p>	<p>Implementation Team</p> <p>Software provider (technical)</p> <p>Sample U. Information Technology (IT)</p> <p>Academic Advising SMEs as “trained trainers”</p> <p>Institutional Research Office (IRO)</p> <p>Communications</p>	<p>Leads of select Student Advising Service- Providers</p> <p>Student Advisors in select specializations</p>	<p>2 months</p>

	<p>PHASES 3–5: Early majority, late majority, laggards ^a Expand software implementation with student advising service-providers</p> <ul style="list-style-type: none"> • training <p>Developmental evaluation</p>	<p>Adverse responses to change/change resistance Willingness/capacity to adapt to new technology Internal (existing) service-provider process integration issues Competing priorities</p>	<p>Implementation Team Software provider (technical) Sample U. Information Technology (IT) Academic Advising SMEs as “trained trainers” Institutional Research Office (IRO) Communications</p>	<p>Leads of Student Advising Service-Providers Student advising agents in specializations</p>	<p>6 months Milestone 3: Solution implementation reaches critical mass Milestone 4: Full implementation achieved (confirm success, celebrate)</p>
<p>A technical issues sustainment plan is developed, appropriately resourced, and in place</p>	<p>PHASE 6: Establish requirements and processes including trouble-shooting, software-provider liaison, etc.</p>	<p>Competing priorities Establishing and maintaining new, internal interdependencies Maintaining communication between internal functional units (system of student advising, IT)</p>	<p>Implementation Team Software provider (technical) Sample U. Information Technology</p>	<p>Leads of Student Advising Service-Providers Student advising agents across the system</p>	<p>Milestone 5: Technical sustainment achieved</p>

^a The costs associated with the supports and resources listed in this table are outlined in Table 3; ^b Rogers (2003, pp. 282-285)

According to Rogers's typology (2003), and outlined in Table 2, in Phase 2 (i.e., months 4 and 5) it is anticipated that early adopters will look to innovators for advice and expertise and in turn, serve as role-models for others, decreasing uncertainty across the system of student advising by adopting the new technology. Phases 3–5 (i.e., months 6 to 12) of the implementation plan iterate the process with early and late majority adopters as well as laggard—or traditionalist—service-providers. Rogers (2003) describes early majority adopters as deliberate, but seldom holding positions as opinion-leaders within a system; late majority adopters as skeptical and cautious, often motivated by the weight of the system majority; and, laggards as traditionalists and last to adopt an innovation. With Rogers's (2003) ideal adopter typology in mind, as the implementation team lead, I will ensure that the team adapts its approach in each new phase (and service-provider context) to expect and afford for different kinds of responses to change, value and integrate different cultural perspectives, and appreciate different ways of organizing.

Phase 6 of the implementation plan (i.e., culminating in month 12) is technical sustainment. Requirements must be gathered as the change unfolds; processes developed and communicated to agents in the system of student advising for technical troubleshooting, and protocols established for continued liaison between IT and the software provider. Finally, a review must be undertaken by IT to decide which (if any) current software solutions in the Sample U. information technology service catalogue may be de commissioned because of the change. Achieving organizational conditions for technical sustainment is an important component of this change process and as such, it is included as a milestone.

Milestones. The five key milestones described in Table 2 will be used as progression indicators for agents involved in the change, including the implementation team, service-

provider leaders, IT, and operational senior leadership. From this perspective, milestones will contribute to sustaining momentum and, in some cases, milestones will be used as opportunities for celebration. Further, the milestones will serve as communication points for other organizational actors more broadly. The role of milestones as communication markers will be described later in this chapter.

Supports and resources. As outlined in Chapter 2, at Sample U. the costs associated with purchasing the software solution, including the contributions of the software provider toward implementation and training, have been funded as a strategic priority and are excluded from this analysis. This high-level discussion identifies in-kind resources and one-time costs associated with implementing the software solution across all phases identified in the implementation plan. The major institutional costs are staff salaries and development costs associated with the change. I estimate the total cost of implementation at \$155,500 (e.g., \$95,500 in existing salaries and \$60,000 in one-time costs). A breakdown of the costs is outlined in Table 3.

Implementation team. The implementation team is comprised of a project lead and project coordinator from the division of student affairs, and representatives from the student systems unit in the information technology department (IT). Working together, the role of the implementation team is to support the system to take the innovation to scale. Colleagues from IT will coordinate data integration in the lead up to implementation. As the implementation progresses, they will continue to liaise with the software service-provider and facilitate technical troubleshooting with agents involved in the change. The redirection of student systems technical expertise from IT to the implementation team will require backfilling and augmenting that expertise in IT for the duration of the implementation.

Table 3

Summary of Costs Associated with the Implementation of the Software Solution

Category	Purpose	Cost
Staff salaries		
Implementation team	Project lead and coordinator	\$55,000
	IT representatives	\$32,500
Academic Advising Subject Matter Experts	Software testers and “trained trainers”	\$10,500
Institutional Research Office	Evaluation support	\$5,000
Communications	Formal presentation development and communication	\$3,000
Backfill salary to IT ^a	Replace student systems expertise in the IT department for the duration of the software implementation	\$50,000
Development		
Materials ^a	Supplies to support training, meetings, and change-related celebration events	\$10,000

^a Indicates one-time costs related to implementation.

Academic advisor subject matter experts. Academic advisors will serve as subject matter experts (SMEs), participating as software “testers” in Phase 1 and “trained trainers” in successive phases of the software implementation. Building on the established model of collaboration across the specialization of academic advising, approval for their participation will be secured from the leaders of relevant service-providers.

Evaluation support. Following partnership practice in assessment at Sample U., the Institutional Research Office (IRO) will support evaluation design and assist in interpreting data. Given resource constraints, the task of conducting the evaluation must fit within the capabilities of the implementation team.

Formal communications support. Because the change is internal and focusses on agents working within the system, the anticipated need for communication support as a formal, professional function is minor. Internal communication costs will include support for communicating and celebrating progress, developing presentations, and drafting communications and reports for operational senior leadership and other organizational actors.

Development. One time costs associated with development include supplies and materials to support training days, meetings, celebration points, and general administration.

Implementation issues. Because the change directly aligns with Sample U.'s (2015) aspiration to become more student-centred, its content is less problematic than its complicated context for change (Kezar, 2018). Given multiple, hierarchical service-provider structures, Table 2 outlines the types of issues that may arise related to processes and people. Recognizing that the change will generate uncertainty (Christensen, 2014; Collier & Esteban, 2000; Rogers, 2003), the plan to facilitate the transition must be attuned to both technical and social complications (Patton, 2011) such as impact on existing processes and systems, inconvenience, and threats to interpersonal relationships (Christensen, 2014).

With the understanding that customized strategies tend to work better in HEIs (Kezar, 2018), I have devised a context-specific facilitation plan that responds to the critical organizational analysis outlined in Chapter 2 and incorporates the four main themes that Armenakis and Bedeian (1999) identify as common to all organizational change: content,

organizational context, process, and criteria (see the Appendix). Further, through the incorporation of adaptive space, the facilitation plan aims to activate and enable social capital in the system of student advising at Sample U.

Plan to facilitate the transition. In addition to describing the current state of student advising at Sample U., Chapter 1 explored the presence and influence of both managerial and developmental cultures (Bergquist & Pawlak, 2008) operating within the system. Relatedly, in their study on engaging the cultures of the academy, Bergquist and Pawlak (2008) observe that “often, those who advocate rational planning draw very few distinctions between the various audiences that must be considered in presenting an idea or new product” (p. 84). It follows that a key to successful implementation of the software in the system of student advising at Sample U., will not only be to work with multiple service-providers, but for the implementation team to learn how to identify, appreciate, and use the strengths of the two distinct, yet interrelated cultures present across the system.

Building on the implementation plan, the plan to facilitate the transition (see Figure 5) illustrates how Rogers’s (2003) adopter categories will be used as the foundation to guide the direction of effort to diffuse the innovation in phases. In addition, it draws on the work of McPhee and Zaug (2009), using activity coordination communication cycles to articulate the change in ways that are accessible and resonate with multiple service-providers, and incorporates the work of Uhl-Bien and Arena (2017) to create adaptive space for agents in the system to come together.

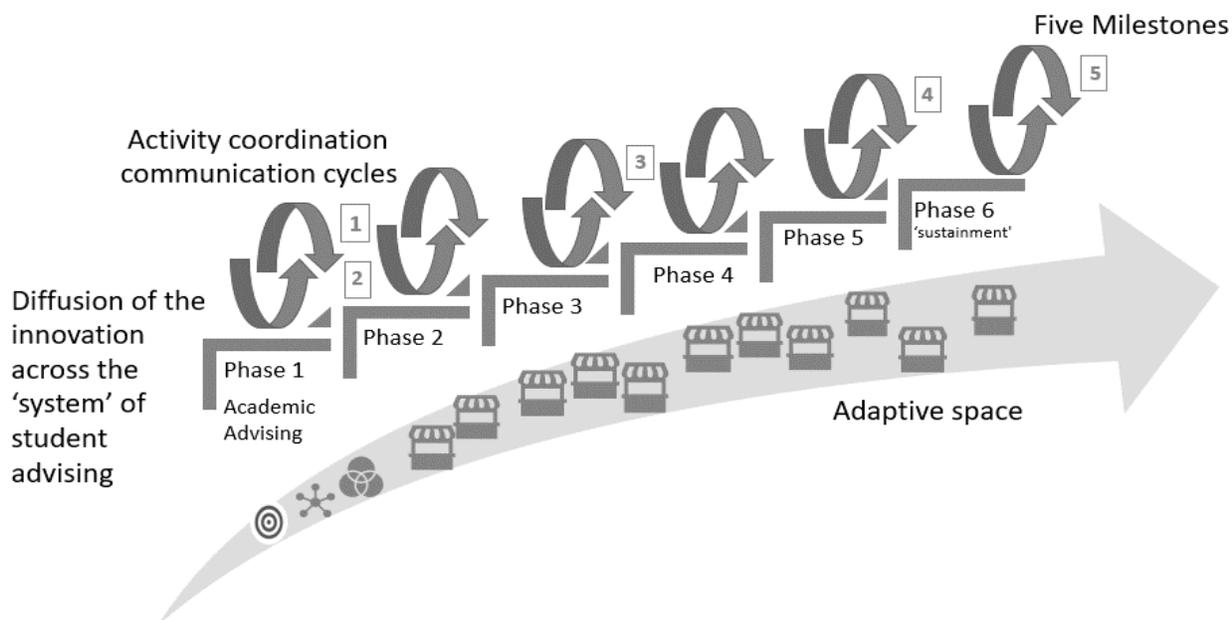


Figure 5. An illustration of the plan to facilitate the transition. Terminology for innovation diffusion adapted from *Diffusion of innovations* (5th ed.), by E. Rogers, 2003, New York, NY: Simon and Schuster. Copyright 2003 by Simon and Schuster. Terminology for activity coordination communication cycles adapted from “The communicative constitution of organizations: A framework for explanation”, by R. D. McPhee and P. Zaug, 2009. In L.L. Putnam and A.M. Nicotera (Eds.) *Building theories of organization: The constitutive role of communication* (pp. 21-47) New York, NY: Routledge. (Reprinted from “The communicative constitution of organizations: A framework for explanation”, 2000, *Electronic Journal of Communication*, 10(1)). Copyright 2009 Taylor and Francis. Terminology for adaptive space adapted from “Complexity leadership: Enabling people and organizations for adaptability,” by M. Uhl-Bien and M. Arena, 2017, *Organizational Dynamics*, 46. Copyright 2017 by Elsevier.

Activity coordination communication cycles. The activity coordination communication cycles (McPhee & Zaug, 2009) associated with each phase of the change are intended to support service-providers to take the solution to scale by serving as points of learning and information gathering for agents involved in the change, including the implementation team. These cycles are opportunities to build trust, solve practical problems, adjust local work processes (McPhee & Zaug, 2009), and assess how the change is progressing locally to give it direction without losing overall alignment (Uhl-Bien et al., 2007).

It is expected that each activity coordination communication cycle will reveal different perspectives and attitudes (McPhee & Zaug, 2009) toward the change, given multiple hierarchies

and the presence of both managerial and developmental cultures (Bergquist & Pawlak, 2008) among student advising service-providers. Therefore, maintaining momentum for the software deployment as it iterates across the system will involve devising and communicating local change “visions” to explain what the change means for each semi-autonomous service-provider and adjusting how the software will be used to reflect the particularities of each (Rafferty, Jimmieson, & Armenakis, 2013). As such, ongoing small revisions to the plan are expected as the change unfolds.

It is understood, however, that these planned, local opportunities for communication will “only resolve part of the problems usually experienced during change” (Ströh, 2007, p. 135). Creating adaptive space along the change path, where relationships, connections, interactions, and conflict may be activated among agents across the system of student advising “could ensure a more ethical and socially responsible transformation process” (Ströh, 2007, p. 135).

Adaptive space. As described in Chapter 2, adaptive space is an organizational context that allows agents to connect and for information to flow (Arena et al., 2017). According to these authors, this space can be any environment that allows agents to interact, share opinions, and ideas. Given the siloed organization of service-providers, the adaptive space I envision is a discussion forum to engage agents at all levels from across the system of student advising.

The implementation team will host weekly, 1-hour, discussion forums to learn what agents are thinking, feeling, and experiencing related to the change. From a CL perspective, these kinds of bottom-up—and lateral—information flows are concerned with abandoning old routines and making commitments to new courses of action (Uhl-Bien & Arena, 2018). Forum membership will begin with the core group of academic advisor SMEs—software “testers” and “trained trainers”—identified in the implementation plan (see Table 2). The space and number of

agents involved will grow in phases in tandem with the software implementation to include participants from additional service-providers as the software is adopted across the system (see Figure 5).

The creation of this space may at first be conceived of as a system-wide software user-group, thereby contributing to order as the planned aspect of the change unfolds. Viewed through a CL lens, however, making space for interaction responds to the need that agents will have for discussion; to share knowledge and express uncertainty, conflicts, and challenges related to locally arising misunderstandings as the software deployment progresses (Ströh, 2007). Correspondingly, the enabling leadership approach I will employ in this space will engage adaptive practices (Arena & Uhl-Bien, 2016; Northouse, 2016; Uhl-Bien et al., 2007) such as applying pressure and moderating conflict to “enable, rather than suppress or align, informal network dynamics” (Uhl-Bien et. al., 2007, p. 302). Aimed at enabling social capital to meet the current challenge and build capacity to address future problems successfully, this aspect of the facilitation plan views informal dynamics as a valuable force for enabling effective change (Uhl-Bien & Marion, 2009). Moreover, the interactions I anticipate occurring in this space are intended to activate the two internal change drivers from a CL perspective identified in Chapter 2: Tension and collective identity formation (Lichtenstein et al., 2006).

Implications for formal leadership. Described in Chapter 2 as a change model for leadership (Uhl-Bien & Marion, 2009), the CL approach I will employ to complement the planned aspect of the change has implications for both operational senior leadership and leaders of local student advising service-providers.

Driven by a tangible, measurable change to improve student and agent experiences through implementing a software solution, the approach to facilitating the change calls for formal

leaders to recognize system adaptability as an equally important organizational outcome (Uhl-Bien & Arena, 2018). However, increasing interdependence across the system of student advising through discussion forums, may contribute to perceptions of loss of control and power (Morgan, 2006) for some service-provider leaders, adding to complexity, rather than reducing it. As outlined in Chapter 2, this raises the challenge of shifting leadership perspectives at Sample U. away from more bureaucratic, top-down approaches. While the primary focus of Chapter 3 is implementing, monitoring, evaluating, and communicating the change as it relates to agents involved across the system of student advising, implications for leadership will be addressed in next steps and future considerations at the close of this chapter.

Limitations: Scope, challenges, and methods. As a mid-level leader who will lead and facilitate the change, I acknowledge that the timeline is ambitious, the scope is large, and the resources allocated to support it are lean. In addition, owing to the absence of a consistent tradition of assessment in student advising at Sample U., there exists no current baseline data to quantitatively demonstrate improvement. These circumstances present risk and uncertainty for both agents and the implementation team. However, they reflect the conditions at Sample U. moving into a new era for change with increased accountabilities in a constrained fiscal context with fixed human resources (Kezar, 2018). Emulating recent approaches to change at Sample U. demonstrated by operational senior leadership outlined in Chapter 1, both the implementation plan and plan to facilitate the change distribute accountabilities and aim to build capacity for ongoing change. It is important to note that while the plan establishes the space and conditions wherein future emergence and innovation may reasonably be expected to occur, it does not aim to demonstrate them. Instead, this chapter focuses on implementing, evaluating, and communicating the planned aspect of the change.

The following section outlines how accountabilities for the planned change will be distributed, how the process will be monitored as it unfolds, and evaluated when it concludes. Equally importantly, given my CL approach, this section describes how process and decision-making will be informed by ongoing feedback.

Change Process Monitoring and Evaluation

As noted in Chapter 2, not all changes are alike and correspondingly, neither are approaches to evaluation. Evaluation for the planned aspect of the change to implement a software solution uses a traditional approach (tracking and gauging progress, assessing outcomes, and impact). At the same time, the deliberate activity of bringing agents together in adaptive space around a shared, top-down change experience is intended to connect and leverage social capital from the bottom-up not only to support the planned change, but to generate capacity for future, ongoing adaptability. This circumstance requires evaluation to facilitate the change and to inform next steps. As such, developmental evaluation will be engaged from the outset to assess whether my CL approach to change is working, and if so, for whom (Patton, 2011). As Patton (2011) explains, developmental evaluation is concerned with process, values, and principles. From this perspective, he notes that the way in which things get done is as at least as important as what might be achieved. Therefore, the incorporation of developmental evaluation will provide for an ongoing, evolving understanding of the change to inform decision-making for the implementation team and for all involved as the change progresses (Patton, 2011; Walton, 2014).

Tracking, gauging, and assessing outcomes and impact. Scaling a software solution across the system of student advising at Sample U. is technically, culturally, and socially complicated (Patton, 2011). It is technically complicated because of the number of semi-autonomous student advising service-providers involved, culturally complicated because of the

multiplicity of different perspectives, and socially complicated because of the number of individual agents involved. On one hand, the implementation of new technology presents a solution to a known problem at Sample U., but on the other hand, change presents uncertainty. As such, at the outset it is unknown whether implementation will progress on time as planned or yield the predicted results. Therefore, monitoring and evaluation for the planned change (outlined in Table 4) tracks change through responsibility charting, gauges progress by rate of adoption, using relative advantage as an indicator, and incorporates student and agent satisfaction surveys to assess outcomes and impact of the change.

Table 4

Tracking and Gauging Progress and Assessing Outcomes

Activity	Purpose	Engagement & methods	Use(s)	Timeline
Tracking change: Software solution is deployed in local service-provider areas	Maintain implementation timelines Orient agents to the change across the system	RASCI ^a Activity coordination communication cycles ^b	Ensure agent actions and accountabilities for local service-providers Reporting to leadership	Ongoing for duration of implementation in five phases, see implementation plan illustrated in Table 2 and facilitation plan illustrated in Figure 5
Gauging change: Rate of adoption is measured quantitatively and qualitatively by perceptions of relative advantage ^c	Improve experience for agents Improve agent perceptions of quality of work	Quantitative: Usage reports from the software solution Qualitative: Survey software users/agents	Raise awareness across the system Motivate agents, reduce uncertainty Reporting to leadership	Ongoing for duration of implementation in five phases, see implementation plan illustrated in Table 2
Assessing outcomes and impact:	Improve experience for students and agents	Qualitative: Student survey(s)	Demonstrate improvement Reporting to leadership	Month 12 and ongoing

Timeliness/accessibility,
accuracy,
accountability, care

Agent
survey(s)

^a Beckhard (1987, as cited in Cawsey et al., 2012, p. 310); ^b McPhee and Zaug (2009, p. 38); ^c Rogers (2003, p. 232).

Tracking change by responsibility charting. Given the current fragmented state of student advising, Table 4 highlights how charting and communicating responsibilities (using an adapted model) will serve to clarify roles and expectations both for the implementation team and for each semi-autonomous service-provider (Beckhard, 1987, as cited in Cawsey et al., 2012).

Responsibility charting (RASCI) identifies:

- Responsible agents as active participants;
- Accountable agents as those deemed ultimately accountable for results;
- Support activities to identify agents who will play administrative roles;
- Consulted agents as those in local areas who will be consulted before action is taken;
- Informed agents as those who may be affected but are not necessarily involved and who will be kept will be informed at every stage.

Given difficulties with achieving effective communication across multiple hierarchies and the presence of both developmental and managerial cultures in student advising at Sample U., I have intentionally adapted responsibility charting to include those who will be consulted. The notion of consultation is contextual and adopted from the collegial culture at Sample U. (Bergquist & Pawlak, 2008). In this organization-specific context, consultation does not suggest securing agreement on whether the technological solution will be implemented. Rather, consultation means that local processes and concerns will be explored and addressed, mitigated, and/or incorporated, and that the implementation plan will be refined as the change progresses.

Because the implementation plan for the software solution is participatory and moves across traditional service-provider structural boundaries, responsibility charting at each phase with each student advising service-provider, will help ensure accountabilities are met and that the project is kept on track. Preceding each phase, the implementation team will adjust the RASCI to indicate where local service-provider responsibilities will be incurred. Sharing the responsibility chart with agents involved in the change will set expectations and allow agents to understand their specific, local, task-related roles in the change. Equally importantly, broadly sharing the RASCI as the change unfolds will provide a collective lens and an orientation to what has occurred/is occurring across the system.

Gauging progress by relative advantage. Rogers (2003) describes relative advantage as the perception agents develop in a social system that an innovation is better than the idea(s) or process(es) it supersedes. Therefore, relative advantage reduces uncertainty and is “one of the strongest predictors of an innovation’s rate of adoption” (Rogers, 2003, p. 232). As specified in Table 4, the rate of adoption for the technology solution will be measured quantitatively over time by the number of service-providers actively using the software as the implementation progresses.

To complement quantitative analysis, software user surveys will be used to gauge agent perceptions of improved quality of work by employing a common rating scale, and allowing space for qualitative comments (Patton, 2011). Anticipating that perceptions of relative advantage will be high, especially in the first two phases which engage innovators and early adopters (see Table 2), feedback will be shared locally as part of activity coordination communication cycles (McPhee & Zaugg, 2009) at each phase of implementation, and as part of communicating milestones.

Assessing outcomes and impact. As outlined in Chapter 1, student advising support is robust at Sample U. yet NSSE results reveal that students are dissatisfied with the support they receive (Sample U., 2017). While it is ultimately intended that supporting connections among student advising service-providers will contribute to more positive outcomes on broad-based student surveys such as NSSE, it will be difficult to demonstrate causality at that high level because the number of variables involved make prediction and control precarious (Patton, 2011). Therefore, a closer, more context-specific approach to assessing outcomes and impact is required.

Chapter 1 outlined the results of a series of 2011 student focus groups which revealed that Sample U. students expect timeliness/accessibility, accuracy, accountability, and care from the system of student advising at Sample U. While the available data is limited because it is historical, Table 4 illustrates how student expectations will be used to guide the summative evaluation of the current change.

Following the implementation of the software, system performance will be measured by student and staff satisfaction surveys. Outcome and impact assessment will gauge student perceptions of services received and agent perceptions of services delivered. Are advising services better connected in ways that are easy for students to access? Do students know their next step(s) in the advising process? Do agents demonstrate accountability by taking notes and using the software solution to accurately refer students to other service-providers in the system? Student and agent surveys will be devised and administered based on these themes.

The preceding paragraphs outline an outcomes-driven approach to tracking, gauging, and evaluating change. In contrast to setting objectives or enforcing a set of specific behaviours, a CL approach to change is process-oriented and concerned rather with creating conditions for

current and ongoing adaptation. Therefore, this section will conclude with a discussion of how developmental evaluation will be engaged to inform process and decision-making.

Developmental evaluation to foster adaptation. The integration of adaptive space in the facilitation plan (see Figure 5) is intended to enable social capital through connections to help agents in the system work through the planned change together and in turn become more adaptive (Arena & Uhl-Bien, 2016). Patton (2011) describes developmental evaluation as situational, niche and occurring in tandem with program development and implementation; it is “designed to be congruent with and to nurture emergent, innovative, and transformative processes” (p. 7), to support “learning to inform action that makes a difference” (p. 11), and “attuned to the deep and enduring social complications in attempting to engage collaboratively” (p. 89). Focused on activity coordination communication cycles and interactions taking place in the adaptive space, Table 5 outlines the types of actions, engagements, and methods that will provide ongoing feedback for all agents and leaders involved in the change at Sample U.

Table 5

Developing an Evolving Understanding of the Change

Purpose	Questions & actions	Engagement & methods	Feedback use(s)	Timeline
Supporting the system to take an innovation to scale	How are local service-providers adapting the technology solution to fit local circumstances? What are the consequences? What is being learned?	Engagement: Activity coordination communication cycles ^a Interactions in adaptive space Method: Observation and interviews	Feedback for: Implementation team Agents interacting in adaptive space Leaders of service-providers Operational senior leadership	Ongoing for duration of implementation in five phases, see implementation plan illustrated in Table 3 and facilitation plan illustrated in Figure 5 and beyond

Determining the degree and nature of collaboration	Document different degrees of engagement and behavioural interactions from low-level (networking, cooperating) to high-level (collaborating, partnering)	Engagement: Interactions in adaptive space Method: Observation and interviews
Creating conditions for ongoing adaptation	What changes in the environment do agents perceive as indicating a need for further adaptation?	Engagement: Interactions in adaptive space Method: Interviews

Note. Adapted from *Developmental evaluation: Applying complexity concepts to enhance innovation and use*, by M. Q. Patton, 2011, New York, NY: The Guilford Press. Copyright 2011 by The Guilford Press.

^a McPhee and Zaug (2009, p. 38)

As outlined in Table 5, asking questions in activity coordination communication cycles as the change progresses will help the implementation team to reflect on what is working or not working and to incorporate that learning to inform future interactions as the change progresses. Employing adaptive leadership practices such as observation and interpretation (Bernstein & Linsky, 2016; Heifetz, 1994; Heifetz et al., 2009) will help discern small changes in the degree of collaboration among agents in the system occurring in the adaptive space.

Similarly, as reflected in Table 5, the ongoing process of gathering and disseminating agents' perceptions of small changes occurring within the system may help to propel the planned change forward, demonstrate future potential for adaptability, and support the possibility for changing perceptions of leadership at Sample U. Conversely, the process of developmental evaluation may provide "a reality testing" (Patton, 2011, p. 245) for me as a leader should the

adaptive work not begin to yield the kind of small patterns of learning and collaboration that I anticipate from a CL perspective. In either event, the learning afforded by developmental evaluation will be used to inform, gauge, and adjust my actions as implementation team lead throughout the change process.

While tracking the change to ensure accountabilities, monitoring it to drive progress, and evaluating it to inform decision-making and demonstrate outcomes are critical to realizing the change, communicating the change in more formal ways that are congruent with organizational practice and expectations at Sample U. is an equally important consideration.

Communicating the Need to Change and the Change Process

As outlined in this chapter, informal, contextual communication plays an integral role in the plan to implement a software solution across the system of student advising. Cycles of communication support the change as it progresses by clarifying and reassuring local service-providers in each phase, and information is expected to flow laterally across the system and between agents involved in the change through participation in adaptive space. In addition to the more hands-on activity of communicating and facilitating change for agents directly involved in it, formal communication plays a significant, tactical role in the change process. The approach and processes for pre-change approval, communicating the need to change, confirming changes along the way to mark progress, and celebrating change (Cawsey et al., 2012) are outlined in the following section.

Pre-change approval. As outlined in Chapter 1, operational senior leadership at Sample U. established the change initiative that is ongoing in the specialization of academic advising and resourced it as an organizational priority. As the lead of this initiative which focuses on improvements in one component of the larger system, I will propose to operational senior leadership that the deployment of the priority-funded software solution be extended beyond the

boundaries of the specialization of academic advising to connect all forms of student advising at Sample U. In my proposal, I will present the value proposition, rationale, approach, and costing. Once the proposal is approved, announcements will be made by formal leaders at divisional and departmental meetings. At this point in the approval process, my role as a mid-level leader will become two-fold. I will continue as the lead for the specialization of academic advising and simultaneously lead the implementation team in its work to deploy the software across the broader system of student advising.

Pre-change approval begins the process of creating the need to change through formal organizational messaging. Communication from operational senior leadership will align the change with the overarching organizational goal of becoming more student-centred, the strategic plan (Sample U., 2015), and present it as an opportunity to respond to Sample U.'s (2017) performance on the recent NSSE survey.

Reinforcing the need for change. On their own, formal announcements at divisional and departmental meetings are insufficient to communicate the need for change at Sample U. As outlined in Chapter 1, the system of student advising is organized by various hierarchical and siloed service-providers. Agents are isolated in their work and responsibilities across multiple campuses, between divisions and among semi-autonomous service-providers, making communication difficult (Kezar, 2010). In addition, as detailed in Chapter 2, concurrent change initiatives at Sample U.—whether planned or not—lead to confluence and misunderstanding. As implementation team lead, I have been mindful in my planning to prepare for accusations “of inadequate and incomplete communication” (Manning, 2018, p. 138) by integrating a series of activity coordination communication cycles (see Figure 5) at each phase in the plan to facilitate the transition.

Engaged in the activity of supporting the system to take the innovation to scale, members of the implementation team will “translate, inform, make sense, support and give feedback” (Heide, von Platen, Simonsson, & Falkheimer, 2018, p. 461) for service-providers and agents in each phase. These interactions are intended to clarify and reinforce the need for change (student dissatisfaction) and to coordinate actions toward achieving the goal of becoming more student-centred.

Confirming change and celebrating to mark progress. The activities of confirming and celebrating change are critical points in the change process at Sample U. These activities are important to mark progress and to acknowledge achievement for organizational actors at many levels: For agents who are directly involved in the change, for operational senior leaders who have invested in the change, and for the broader organizational community more generally.

Confirming change. As outlined earlier in this chapter, the five key milestones (see Table 2 and Figure 5) will serve to confirm progress at key points for various audiences including agents involved in the change, student advising service-providers, operational senior leadership, and other organizational actors more broadly. Single messages outlining progress according to each milestone will be devised to address more than one audience to ensure transparency, provide reassurance, and keep organizational actors apprised of progress. For agents involved in the change, the intent of formal communication is to keep the momentum going. For formal leaders at various levels, the intent will be to share information, demonstrate accountability, and provide reassurance on progress. As implementation team lead, I will communicate these updates through various channels. These channels include presentations at key meetings engaging operational senior leadership, meetings and gatherings across student advising service-providers, and articles in Sample U.’s newsletter for less detailed updates that will be of interest to the broader community.

Milestone 5 signals full implementation across the system of student advising and therefore indicates the conclusion of the planned aspect of the change. Confirming the change at this point will require more robust reporting. Reporting will ensure that all formative and summative data is reported comprehensively, in ways that are accessible, and that may be repurposed by other organizational actors for additional reporting needs, such as annual reports. While reporting will focus on performance outcomes and impact, it will also align with my CL perspective. As implementation team lead, I will ensure that reports are balanced with commentary on process and system development.

Celebrating change. Three of the five milestones outlined in the implementation plan (Table 2) and illustrated in the facilitation plan (Figure 5) indicate points for celebration. These are:

- Milestone 1: pilot kick-off in the specialization of academic advising (which marks the beginning of the change).
- Milestone 2: full implementation in the specialization of academic advising (which marks the end of Phase 1).
- Milestone 5: full implementation across the system of student advising and technical sustainment (which marks the end of Phase 6).

The first two of the three celebration points focus on the specialization of academic advising. I chose to identify these early milestones as points of celebration, because as outlined in Chapter 1, academic advising at Sample U. is the largest practice-based specialization and most organizationally complicated. In addition, the implementation plan relies on the participation of academic advisor SMEs not only as “trained-trainers” but as innovators (Rogers, 2003), informal communicators, and influencers as the technology is diffused across the system.

The pilot kick-off celebration in the specialization of academic advising will take place at the conclusion of the software training day (see Table 2). It will feature an operational senior

leader keynote address on the topic of embracing and celebrating change and preserve time for agents to socialize over refreshments. Similar celebrations will be organized to acknowledge agents' contributions when implementation is achieved within the specialization of academic advising, and once again when full implementation (including technical sustainment) is achieved across the system.

From a complexity perspective, communication is much more than a one-way, top-down tool aimed at institutionalizing routines and behaviours (Uhl-Bien & Arena, 2018). Indeed, the significant role of communication reflected in this plan is complicated and multifaceted. Communication is embedded the facilitation plan, appearing as activity coordination communication cycles (McPhee & Zaug, 2009) in each phase, and conceptualized as interactions and information flows in adaptive space (Uhl-Bien & Arena, 2018). While this section focused primarily on the role of formal communication, the plan takes an emergent perspective by valuing the more informal communication of agents at all levels involved in the change and considers how these complex and dynamic interactions may be engaged to give shape to the strategy (Heide et al., 2018). Overall, the plan reinforces the centrality of communication as it begins to reconceptualize leadership as a function of interactions (Uhl-Bien et al., 2007), shifting focus away from formal roles and positional authority.

The section that follows outlines practical next steps for me as the software implementation team lead, proposes considerations for operational senior leadership at Sample U., and concludes with a personal reflection on how my experience leading without positional authority, coupled with the process of researching and writing this OIP, will inform my personal leadership practice moving forward.

Next Steps and Future Considerations

Following the full implementation of the software solution across the system of student advising, my practical next steps as the lead of the implementation team will be to confirm that the use of the tool is fully integrated into student advising practice. This is to ensure that the change is sustained, not just from an IT perspective as outlined in the implementation plan, but from a student advising practice perspective. I anticipate that ongoing central coordination and support will be needed to sustain and refine a consistent, system-wide practice as it relates to using the technology. Therefore, the discussion forums (i.e., adaptive space) posited by this plan will continue beyond software implementation, and I will continue to host and lead them.

This OIP experiments with applying CL concepts in a specific organizational context where student advising service-provider siloes present obstacles to more networked approaches. As described throughout this OIP, the environmental and organizational conditions for change are complicated. The system of student advising at Sample U.—which has diversified over time—is not structured to accommodate change easily. However, the plan takes advantage of a change to deploy a technical solution that increases tactical interconnectivity between service-providers, to bring agents together from across the fragmented system of student advising.

The incorporation of adaptive space proposed by the plan serves as a starting point to leverage social capital toward a more integrated approach. Extending the space beyond the duration of the planned change may provide opportunities for me to observe, interpret, and devise interventions for adaptive challenges that arise through interactions between agents from across the system (Heifetz, 1994; Heifetz & Linsky, 2002). Further, as outlined in Chapter 2, and congruent with the model of CL (see Figure 4), maintaining adaptive space beyond the deployment of software where adaptive practices such as DT can be utilized (Arena & Uhl-Bien,

2016) may serve to distribute responsibility for problem-solving and ideation from operational senior leaders at the top, to agents across the system, at the bottom.

Should this CL approach be recognized at Sample U. as a viable means to move the organization forward, organizational learning will be required to develop the kind of skills, attitudes, and perspectives to lead for adaptability. Uhl-Bien and Arena (2018) observe that leaders in adaptive spaces use different skills, such as working collaboratively, sharing credit, connecting, facilitating, and energizing, rather than those skills traditionally associated with strong leadership. In fact, the skills and abilities required to work and lead in adaptive organizations require organizational development at both the system and individual levels. Clarke (2013) identifies network conditions, shared (distributed) leadership, and organizational learning as three key areas for development at the system level. Development for individual leaders involves honing skills focused on shaping context, structures, communication, and culture. Learning how to foster the positive value of tension; building networks, nurturing the development of social capital, and identifying barriers to information flows, feature prominently.

The CL approach to this OIP was encouraged by the exercise of identifying the PoP from my perspective as a mid-level leader at Sample U. and the corresponding activities of recognizing and refining my lens and expressing my leadership vision for change in context. My recent experience leading without positional authority in the specialization of academic advising at Sample U., coupled with the process of writing this OIP, have given me pause to think about my longstanding perceptions of leadership and change. Reflecting on my own leadership experience, I have come to understand the positive value of tension in effecting change, rather than perceiving it as an obstacle and trying to alleviate or manage it. Similarly, I have come to embrace the power of social capital, and the advantages afforded by working collaboratively and

collectively from the bottom-up. Looking forward, I will continue to integrate concepts from CL in my personal practice, using enabling leadership and the adaptive practices it incorporates to support agents to express conflict, ideate, learn, and demonstrate different kinds of leadership at different levels in the system toward the integration of student advising.

Conclusion

In conclusion, this OIP provides an example of how aspects of CL, including the adaptive leadership and adaptive practices it encompasses, may be applied to address a PoP concerning the fragmented state of student advising at one HEI. Mindful of the limitations of my leadership position and the need to demonstrate performance, the CL approach I desire to enact in the system of student advising at Sample U. is tied to and therefore constrained by the time-bound deliverables prescribed by the activity of implementing a software solution.

Inspired by the understanding that operational senior leadership at Sample U. has been experimenting with alternative approaches to change (outlined in Chapter 1), the type of change I propose in this OIP is focused on capacity-building and predicated on leveraging social capital within a fragmented system of student advising. This kind of evolutionary change takes time and learning. Continuing with this alternative approach to change at Sample U. will require formal leaders at various levels to recognize that fostering conditions for organizational adaptability is as important as planning change for performance (Uhl-Bien & Arena, 2017). Indeed, from a complexity perspective, small changes can yield big effects (Burnes, 2005; Lowell, 2016; Marion & Uhl-Bien, 2009; Mason, 2008; Morgan, 2006; Olson & Eoyang, 2001; Schneider & Somers, 2006) and how things get done is at least as important as what might be achieved (Patton, 2011). In this context, I submit that the approach to leadership and change offered by

this OIP will serve as an important first step toward integrating the full suite of student advising services at one HEI to better support the needs of a diverse, 21st century student population.

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Appendix

Integration of Four Common Themes in the Plan to Implement the Change

Theme	Implementation Plan
Content	Largely transactional (technical, structural, and process-based)
Context	Multiple service-providers Multiple hierarchies and authority structures Presence of both managerial and developmental cultures Multiple competing priorities Unclear decision-making
Process	Responsibility charting at each phase Activity coordination communication cycles Participation Rate of adoption Adaptive leadership and practices in adaptive space Collaboration
Criteria	Improved student ability to navigate between and among the various advising supports available to them at Sample U. Advisors in all specializations are more aware of the full range of student advising services at Sample U. Advisors in all specializations enabled to make more effective student referrals Advisors in all specializations are more connected across the system of student advising Improved Sample U. performance on student satisfaction surveys (i.e., National Survey on Student Engagement (NSSE))

Note. This table is based on Armenakis and Bedeian's (1999) review of organizational change, theory, and research. Adapted from "Organizational change: A review of theory and research in the 1990s", by A. A. Armenakis and G. Bedeian, 1999, *Journal of Management*, 25(3). Copyright 1999 Sage Publications.