University of Alberta

An Administrative Leader's Perspective on Balancing Change Leadership and Change
Management in Higher Education
by

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Abstract

This capstone paper explores the case of a schedule modernization initiative at the University of Alberta. The initiative is preparing to enter design and implementation with the intention of deploying new technology, along with possible changes to policy, process, and work allocation. Given the importance of the class schedule to the operations of the University, a change of this nature will require significant change leadership and change management. The case will be explored through Bolman and Deal's *Reframing Organizations: Artistry, Choice, and Leadership* (2021) and Kotter's eight step change management model (Bolman & Deal, 2021, pp. 405-407; Kotter, 2012, 2017; Galli, 2018, pp. 126-127) with the intention on assessing the potential of interfacing the two frameworks to surface to organizational considerations that may require focused change leadership and change management. In doing so, I hope to hone my efforts as an administrative leader within the organization as I prepare to help lead the change.

Keywords: change leadership, change management, organization, transformation, class scheduling, timetabling, higher education

Contents

Introduction

Higher education institutions, and in particular universities, tend to be large organizations with rich histories and an array of internal and external constituents. Leading organizational change in this type of environment can be complex. The University of Alberta (U of A) is in the midst of a class scheduling modernization initiative with the intent to implement new class scheduling software with a six month design and implementation phase in order to have the new system in place for the next scheduling cycle. While the implementation of new technology is a key component of the initiative, there will likely be changes in policy, process, and work allocation which shifts the change toward a business transformation rather than a purely technical implementation. Given the importance of the class schedule to the operations of the University, a change of this nature will require significant change leadership and change management.

In Bolman and Deal's *Reframing Organizations: Artistry, Choice, and Leadership* (2021, pp. 393-407), the authors interfaced their four frames for viewing an organization with Kotter's eight step change management model. As an administrative leader in higher education who will be involved with the U of A's schedule modernization initiative, I am curious how interfacing the two conceptual frameworks would work in practice and prepare me for the change leadership efforts coming my way. This paper will present the schedule modernization initiative as a case. The case is bound within the U of A as the organization, the schedule modernization initiative as an organizational change, and will hone in on my efforts as an administrative leader preparing to help lead the organization through change. The following research questions will serve to focus the paper:

1. How can a higher education administration leader apply conceptual frameworks in practical and intentional ways in order to plan for and lead organizational change?

2. What opportunities and challenges exist for a higher education administration leader attempting to apply conceptual frameworks in preparation for leading change?

3. How does change leadership and change management apply to this case?

4. How do organizational contexts influence change leadership and/or change management?

Positionality

As the author of this paper, it should be noted that I am the Manager, Enrolment Systems and Planning within the Enrolment Systems and Service Innovation (ESSI) unit at the U of A. Our unit will lead the business transformation and system implementation efforts, working closely with key partners across the organization to facilitate successful outcomes. I also held a leadership role within the Office of the Registrar's Examinations and Timetabling (ETT) unit earlier in my career. This has provided me with strong understanding and technical insight into class scheduling. Within my current role, I will provide leadership and be a key contributor to the schedule modernization initiative and will draw from my class scheduling experience to help guide the schedule modernization initiative. The review of the case reflects my experience in attempting to apply the conceptual frameworks being utilized from within my organizational role and my career experience.

Method

The case will be explored through two well-known frameworks. Bolman and Deal's four frames as outlined in *Reframing Organizations: Artistry, Choice, and Leadership* (2021) will be used to examine the organization through political, structural, human resource, and cultural lenses in an attempt to identify key considerations that could impact change efforts and require

change leadership. As part of *Reframing Organizations*, Bolman and Deal integrated their four frames with Kotter's eight step change management model (pp. 393-407). This paper will take a similar approach and integrate identified organizational considerations related to the case with Kotter's eight steps to identify opportunities and tactics that could be used to facilitate successful change.

The paper will begin with an overview of higher education class scheduling and a framing of the case, followed by a literature review of change leadership and change management to help situate the use of the selected frameworks. The case will then be analyzed through the lens of the two frameworks and conclude with reflections and discussion of the research questions.

<div style="text-align:center">Background to the Case: Class Scheduling</div>

Modernizing class scheduling at the U of A will be a significant change. While the implementation of new technology is at the centre of the change, the schedule modernization initiative may lead to changes in policy, process, and work allocation too. To begin, it is important to get a better understanding of the implications of making changes to class scheduling and to consider the pathway to effectively modernizing the class schedule.

Faucett (2022) defines a higher education class schedule "as the list of classes at a university, often built into the Student Information System. This is the official record of what courses are available in a given term" (p. 57). Class scheduling literature mostly explores class scheduling as a complex challenge that needs to balance an array of inputs and priorities or the influence of class schedule in relation to enrolment management and the student experience (Faucett, 2023). Given this complexity, the challenge of generating algorithm based schedules has been the topic of significant computing science literature.

While computing science literature is not the focus here, this computing challenge and the importance of the class schedule in higher education has led software companies to develop function specific class scheduling software that "allow institutions to be more strategic about building their schedule of classes, purportedly taking the bulk of the data entry out of the equation" and "improve processes, policies, and procedures all within the software" (Faucett, 2023, p. 41). Class scheduling software typically include features such as visual calendars, optimization tools which can complete certain tasks (e.g., room assignment) or make recommendations to users based on defined system rules and conditions, in system process workflows and collaboration tools, program pathway monitoring to assist with tracking student progress to completion and projected demand for courses, and access to an array of reports and user dashboards to provide schedulers data that can help inform scheduling and decision making. The application of system rules and conditions are an important note because the scheduling software not only becomes a tool to make scheduling more efficient for schedulers, but it also supports the development of a cleaner and more standardized schedule built "around rules, error checks, and course scheduling policies at that institution" (Faucett, 2023, p. 42).

While the class schedule's primary purpose is to serve as the vehicle for processing student registration, the schedule and the corresponding registration underpin and inform a wide variety of activities on campus. From a processing perspective, the class schedule and student registration also support connecting students to the Learning Management System, applying tuition and fees, generating final exam schedules, processing final grades and updating the student record, determining student academic load and program progression, and supporting student accommodations. More broadly though, the class schedule and student registration also informs student academic advising, instructor teaching loads, the University's physical plant and

classroom technology needs, the scheduling of classroom maintenance and upkeep, and even informs services such as dining and recreation facility hours. As such, the class schedule's influence on university operations and constituents throughout the organization highlight the breadth and depth that potential changes to class scheduling could have on the organization.

What begins to surface is the strategic value of class scheduling. The development of the class schedule and the data resulting from class scheduling and registration serves as key elements to universities addressing challenges related to enrolment management (e.g., increasing/decreasing enrolment, improving student retention, etc.), updating academic programs, (e.g., to meet the needs of students, community, and industry), and operational budgeting and resource allocation (Faucett, 2023; Hanover Research, 2018).

The Schedule Modernization Initiative

The schedule modernization initiative began in the summer of 2024 and is intended to support a number of strategic priorities at the U of A. For instance, *Shape: A strategic plan of impact* (University of Alberta [U of A], 2023b, pp. 19-29) outlines the U of A's intention to grow enrolment and integrate hybrid and online delivery options into program and class offerings. Building on this, the *Integrated Enrolment Growth Plan* (U of A, 2024b) emphasizes the importance of optimizing the use of classroom and teaching space and notes the need to "facilitate scheduling an [*sic*] increased number of classes outside of prime hours and ensure that seat utilization within classrooms are optimized" and recommends the implementation of "new scheduling software to help optimize space utilization" (p. 40). Furthermore, the *Igniting purpose: Student experience action plan* (U of A, 2023a, pp. 29-36) outlines the importance of academic agency and flexibility to the student experience and a student's ability to pursue their academic goals and *Forward together: the University of Alberta people strategy* (U of A, 2024a)

includes a goal to "empower people to succeed in their roles by improving supports, systems, and processes" (p. 22).

Upon the launch of the initiative, a steering committee was struck that included leaders from ESSI, the Office of the Registrar, and Information Services and Technology (IST), as well as representation from colleges and faculties. The project started with a discovery phase led by a small project team from ESSI. The team engaged ETT and class schedulers from colleges and faculties in order to better understand current state processes and define requirements. This led to a request for proposals to procure class scheduling software. The evaluation team mirrored the steering committee representation, but leveraged more mid-level managers closer to class scheduling. Schedulers and subject matter experts directly involved in the class scheduling process were also invited to vendor demonstrations so they could provide feedback to evaluators. The initiative is currently preparing to enter the design and implementation phase and is targeting the fall of 2025 to implement the new software so that it is available for scheduling the 2026/2027 academic year.

Challenges with Change in Higher Education

Facilitating change in higher education is notoriously difficult. Buchanan (2022) identified five common hindrances to effective change in higher education organizations. First, there tends to be an underestimation of the impact of change on the organization's people, culture systems, processes, and resources. Second, there are often multiple initiatives occurring at the same time which extends the organizations resources and limits effectiveness. Third, higher education organizations have an array of governance and decision making authorities and processes. This combined, with the integrated processes, can lead to inconsistencies and confusion as to who is responsible and accountable. Fourth, ineffective stakeholder engagement

and confusion leads to distrust and resistance, as well as an underutilization of resources (e.g., people) to affect change. Finally, Buchanan notes that significant change is often viewed as a threat to organizational culture and thus, fosters resistance. Change initiatives and leaders often underestimate the level of courage and support necessary to navigate resistance coming from deeply entrenched organizational culture.

Touching on similar themes, Grabill et al. (2022, citing Todnem, 2005) argues that higher education organizations experience resistance and failed attempts to change because change is constant, leaders and managers generally lack the competency and understanding of how change happens at individual, team, and organizational levels to effectively lead organizational change, and change management frameworks that are utilized tend to be top-down, linear, and prescriptive in nature. Brown (2014) identified that system changes (technical and process) are rarely isolated and tend to extend into unexpected parts of the organization because of interconnected systems and workarounds developed by staff throughout the organization to meet local needs. Brown argues that change in higher education needs to be approached through "not only new policies and procedures and new technical systems, but a change in the culture of the organization as well" (p. 212) and that "cultural change is best achieved through participation and on a campus-wide scale rather than in isolated pockets" (p. 213). Brown further notes the value in embracing fluidity and adaptability and encouraging affected constituencies to take ownership of the change.

These challenges to change in higher education highlight that change leaders must have a good understanding of the organization and an ability to navigate organizational complexities. It also highlights the need to centre people in the change process and ensure there is space for productive discourse. Navigating organizational complexities and centring people within the

change takes time though. There is also a need to implement change, effectively utilize the organization's resources to facilitate change, and demonstrate progress and improvement toward the organization's objectives in order to build trust and buy in. Change in higher education appears to need both change leadership and change management.

Change Leadership and Change Management

Kotter (2011) notes the importance of making a clear distinction between change leadership and change management. For Kotter, change leadership serves as an engine and "concerns the driving forces, visions and processes that fuel large-scale transformation." Change leadership is more focused on transformational and large-scale change, is less structured and more open to innovation and risk, and it looks to empower and leverage people within the organization in pursuit of a shared vision. In contrast, Kotter notes that change management "refers to a set of basic tools or structures intended to keep any change effort under control." Change management is typically better suited for smaller changes and keeping a change on track (i.e., within scope, on time, on budget, etc.).

Given the schedule modernization initiative is important in underpinning the U of A's strategy for enrolment growth, effective change leadership will be needed to provide direction and alignment toward broader organizational goals and objectives. At the same time, the schedule modernization initiative is a project intended to implement new technology and processes in support of the larger organizational strategy and transformation. As a project, there are fixed timelines, funding, and resources and thus, keeping the project under control is also very important. With this in mind, it is important to consider both change leadership and change management as mechanisms to facilitate the changes associated with this case.

Change Leadership

Strategically, a direction has already been set. The U of A is seeking to significantly grow enrolment in the coming years. At the same time, it also has goals to improve the student experience and empower staff. Marshall (2010) notes that new technology is often utilized to drive organizational change in universities, but that existing organizational culture and structures often limit innovation and change. Marshall argues that it is important to understand the factors driving the change and the "need for clearly articulated goals for change supported by, rather than led or in response to technology" (p. 189). Technology can help facilitate and support organizational change, but change leadership is needed to guide the use of the new technology toward the intended outcomes and benefits in pursuit of transformational change.

Transformational leadership often relies upon a clear vision and consideration of organization members to align and inspire the organization around a common purpose. Transformational leadership "is concerned with emotions, values, ethics, standards, and long-term goals" (Northouse, 2021, p. 185). According to Bennis and Nanus (2007, as cited in Northouse, 2021) transformational leaders provide clear vision, shape a common direction, develop trust, and leverage their own strengths to lead transformation, noting that "although leaders play a large role in articulating the vision, the emergence of the vision originates from both the leaders and the followers" (p. 198). This echoes Kotter's (2011) view of change leadership being about empowering and leveraging people in pursuit of a shared vision and others have a similar view as well.

Marshall (2010) notes that combining top down and bottom up leadership can help move change forward with upper leadership creating an environment for change and allocating sufficient resources to support change and bottom-up leadership guiding how the change occurs

by leveraging the experience and expertise of organizational members and early adopters. Grabill et al. (2022) encourage "a move from a top-down leadership approach to a distributed view of design leadership" that acknowledges "the value of inclusion while leveraging the contributions and involvement of others through stakeholder engagement" (p. 85). By approaching change as a design challenge, Grabill et al. are advocating for a sustainable process of emergent and incremental change that centres the perspectives of the people experiencing the change.

Engaging affected parties will also be critical to helping organizational members adapt to the change. Northouse (2021) notes that "adaptive leadership is concerned with how people change and adjust to new circumstances" (p. 285). Adaptive leadership distinguishes between technical and adaptive challenges. Technical challenges "are clearly defined, with known solutions that can be implemented through existing organizational procedures" and typically "people look to the leader for a solution, and they accept the leader's authority to resolve the problem" (p. 288). For technical challenges, a leader is able to make a decision in alignment to existing systems and rules. In contrast, adaptive challenges are not clearly defined and do not have straightforward solutions. Adaptive challenges are "not easy to tackle and often resisted…because they usually require changes in people's priorities, beliefs, roles, and values" (p. 289). The responsibility of addressing adaptive challenges "is shared between the leader and the people. The leader may act as a resource for others and provide support, but the people need to do the work - they need to learn to change and adapt" (p. 289). In order to identify the technical and adaptive challenges that could occur as part of the schedule modernization initiative it is important to understand the organizational dynamics that could influence how the initiative unfolds and the organizational members who need to be engaged and empowered to enact the change.

Given the strategic and operational value of the class schedule, any significant changes to class scheduling should be assessed through the lens of the organization and consider the change leadership necessary to support the strategic goals of the organization. Bolman and Deal (2021) view organizations through political, structural, human resource, and cultural frames. These frames will be used to help analyze organizational implications of this change and the leadership strategies available to help address potential challenges. For instance, Bolman and Deal emphasize that:

> Changing an organization is a complex, systemic undertaking. It rarely works to retrain people without revising roles or to revamp roles without retraining. Planning without broad based participation that gives voice to the opposition almost guarantees stiff resistance later on. Change alters power relationships and undermines existing agreements and pacts. Even more profoundly, it intrudes on deeply rooted symbolic forms, traditional ways, icons, and rituals. Below the surface, an organization's cultural tapestry begins to unravel, threatening time-honored traditions, prevailing cultural values and ways, and shared meaning. (p. 393)

From a change leadership perspective, the literature highlights the importance of having a thorough understanding of the organization the change is taking place in and the potential effects of that change on the organization and its members. It also emphasizes the importance of setting a direction, building trust, and engaging the organizational members affected by the change and empowering them to inform how the change occurs.

Change Management

As noted earlier, change management focuses more on enacting change and keeping a change on track. A comparative analysis of five well known change management models by

Galli (2018) identified that different models have different strengths and weaknesses. For instance, Galli notes that Kurt Lewin's three step process serves as the foundation for change management scholarship and is conceptually simple, but lacks real consideration to the human element of change. Kotter's eight steps is prescriptive and considers organizational and human elements of the change process, but tends to be a more top-down approach that can also lead to wasted time and effort if approached out of sequence. The ADKAR model shifts attention toward centring the human side of change, but is less suitable for organizational change and change involving complex processes. The McKinsey 7-S Model's strength is thorough analysis and highlighting where change needs to take place from an organizational perspective, but its complexity means it can be time-consuming and tedious. The GE Change Acceleration Process is flexible and can be applied in a non-linear fashion based on the change and impacts to constituents, but the model requires strong leadership to align constituents and commitment for change. These are just a few examples of change management models, and obviously each of these models can be explored in much more detail, but what begins to surface is the importance of identifying an appropriate model. Factors such as the type of change occurring, time available to enact the change, organizational environment, leadership and strategic direction, the skills and competency of leaders and managers to oversee the change, available budget and resources to support the change, and how people within the organization will be affected by the change may inform selection of an appropriate change management approach.

Returning back to Kotter's eight steps (Bolman & Deal, 2021, pp. 405-407; Kotter, 2012, 2017; Galli, 2018), the steps are intended to be performed sequentially, providing a detailed sequence to progress from current state through to initiating a change, implementing the change, and sustaining the change. While the model assumes a hierarchical organization and a top down

approach, it does consider the impact of the change on members of the organization and relies on organizational members to participate in making the change occur and stick.

One of the limitations of Kotter's model is the time it takes to work through the steps. The model is better suited for change that is more episodic or operational in nature and may not be appropriate for rapid change or addressing change in fast-changing environments. In an attempt to address this limitation, Kotter developed eight accelerators better suited for strategic, ongoing, and emergent change (Kotter, 2012). The approach mimics the traditional eight steps with some adjustments, including removing the necessity for the steps to be performed sequentially. Essentially, the accelerators become a toolkit intended to leverage a change network of willing and dedicated participants (also known as the volunteer army) that works in conjunction with the traditional organizational hierarchy. In doing so, the network "can drive problem solving, collaboration, and creativity; and the people doing this work…will be focused, committed, and passionate" (p. 49). Kotter's re-envisioning of the model demonstrates a shift toward elements of change leadership and the potential for the model to be adapted to better align to a more collaborative and distributive approach.

The rationale for utilizing Kotter's eight steps as part of the analysis is that it is well suited for a hierarchical organization such as the U of A, the change is being initiated and sponsored by senior leaders within the organization in alignment to organizational strategies, and the efforts and initial phases of the initiative align to the early steps of Kotter's traditional model. Although there is caution in using Kotter's model for rapid and fast paced change, the design and implementation could benefit from Kotter's (2012) re-envisioned accelerator model. Essentially, there has already been progression through the early steps of Kotter's model and the latter steps

can be adapted to leverage available accelerators focused on collaboration and participation from a network of organization members to help move the change forward.

Analysis

Bolman and Deal's Four Frames

Bolman and Deal's four frames (2021) can serve to view the organizational implications of making changes to the U of A's class scheduling process through cultural, structural, political, and human resource frames and highlight potential considerations that will need change leadership or change management.

Cultural

"Culture is both a product and a process. As a product, it embodies wisdom accumulated from experience. As a process, it is renewed and re-•created as newcomers learn the old ways and eventually become teachers themselves" (Bolman & Deal, 2021, p. 272). Organizational symbols and culture ultimately ground and unite the organization members around common meaning, purpose, and practices which get generated and reinforced through organizational myths, vision, and values. Organizational culture is transmitted in a variety of ways, including storytelling and rituals. Storytelling can help members make meaning of complex situations, transmit information (e.g., purpose, values, knowledge, etc.), and inspire action and mobilization. Rituals are the day to day activities and habits that provide structure and meaning to the day, reinforcing the organization's existing culture and practices. Rituals become a common foundation for existing members and a means to socialize and integrate new members into the organization.

In relation to the Class schedule modernization initiative, the U of A's aforementioned strategic planning documents serve as a form of storytelling that define the organization's

purpose and are intended to mobilize action. For instance, the U of A's *Igniting purpose: Student experience action plan* (2023a) centres the student experience, noting that "creating a positive student experience calls for awareness and action across all areas of the institution" (p. 6). In the context of class scheduling, this means scheduling classes with students at the forefront. This includes scheduling the classes students need to complete their degree while limiting potentially program conflicts and bottlenecks (Faucett, 2023; Hanover Research, 2018), ensuring students have available time to explore research and experiential learning opportunities, and generally ensuring students can pursue their academic goals in alignment to their personal contexts (U of A, 2023a).

While this appears straightforward, the student context is just one element of class scheduling. Classes require instructors who are balancing teaching, research, and service expectations and their own personal schedules. Historically, instructor availability and teaching preferences have been a key consideration for schedulers in determining what classes can be offered, when they can be offered, and where they should be offered. While there has always been a need to balance the needs of students and instructors as part of scheduling, the U of A's strategic emphasis on the student experience and the need to "to organize and direct our energies to be as responsive to student-led priorities as possible" (U of A, 2023a, p. 6) could lead to shifts in how schedulers balance the needs of students and instructors. Furthermore, class scheduling is grounded in historical practice and the yearly class scheduling cycle is a form of organizational ritual. The insertion of new scheduling software and ways of performing scheduling tasks has the potential to disrupt existing scheduling priorities, timelines, activities, and habits and thus, has the potential to disrupt an integrated component of the U of A's organizational culture.

From a leadership perspective, potential shifts in historical practice could challenge existing elements of the U of A's culture. This is amplified because the U of A has also undergone significant organizational change and transformation in recent years, including centralization of services and the establishment of a college structure. As a result, pockets of the organization are likely still adapting to and reconciling prior changes and could view the introduction of further change negatively based on past experiences. At the same time, continuing to maintain the current culture and approach to scheduling, but within a new software could limit the initiative's impact and benefits in support of organizational priorities. Bolman and Deal (2021, pp. 394 & 401-405) emphasize the importance of transitioning people from the past and into the future through symbolism and rituals.

Structural

According to Bolman and Deal (2021) the structural lens assumes that an organization's structure should align to its circumstances and purpose and that the response to structural flaws is problem solving and restructuring (p. 50). Establishing an organizational structure centres on defining the division of labor (allocation of tasks within an organization) and coordinating effort toward achieving organizational goals and objectives. Effort is typically coordinated vertically and/or laterally. Vertical coordination is typically top down, relying on "authority, rules and policies, and planning and control systems" (p. 58). In contrast, lateral coordination is more informal and flexible, taking the form of "meetings, task forces, coordinating roles, matrix structures, and networks" (p. 61) which often serve to fill gaps in vertical coordination. As circumstances change, an organization may need to revisit its structure in order to ensure a structure "that works for, rather than against, both people and collective purposes" (p.73).

Class scheduling generally adheres to a centralized or decentralized approach based on who is collecting scheduling details and inputting it into the Student Information System (Faucett, 2022, 2023). A centralized approach would see a central unit such as the Office of the Registrar as the primary scheduler while a decentralized approach would typically see academic units responsible for their own scheduling. The U of A adheres to a predominantly decentralized approach as it is typically college and faculty schedulers who gather the scheduling details from academic faculties and departments and generate the schedule, with ETT providing oversight and quality control toward. However, Faucett (2023) notes that the introduction of function specific class scheduling software shifts scheduling structures by decreasing the amount of manual data entry and allowing for more centralized control systems and rules to be built directly in the system. As an example, Faucett (2023) notes that:

> While some institutions have Standard Meeting Pattern policies for when their courses should meet on campus, many are not enforced. A scheduling tool helps institutions impose these policies from a centralized tactic while building the schedule for any given term using a decentralized process. (pp. 41-42)

With the implementation of new class scheduling software the existing vertical coordination could become further reinforced within the structure via the system. However, more modernized tools such as system automations, rule based controls, and workflows could require changes to coordination and structure. Horizontal coordination could also shift with improved scheduling insights and in system communication tools. For instance, schedulers may be better positioned to coordinate their activities and collaborate more effectively through the system.

Bolman and Deal (2021, pp. 394, 397-398) note that structural changes can lead organizational members to experience a loss of direction or lead to organizational chaos and

emphasize the importance of structural realignment through communication and renegotiating policies, processes, and relationships. From a leadership perspective, it is important to understand how the introduction of scheduling software will affect the existing structures and engage affected parties in realigning class scheduling to the University's strategic goals and the intended benefits of the initiative.

Political

The political frame focuses on power dynamics. The organization is seen as a coalition made up of individuals and groups that have their own perspectives and interests. Within the organization there are limited resources and conflict and competition arises in pursuit of resource allocation toward differing individual and group interests. Power becomes the key asset in pursuing one's interests and desired outcomes. Forms or sources of power can include position power, control of rewards, coercive power, information and expertise, reputation, alliances and networks, access and control of agendas, framing, and personal power (Bolman & Deal, 2021, pp. 199-201). Structuralists have a more authoritative, top down perspective on power that sees authorities exert control over partisans. A more human resources view of power sees partisans seeking to influence authorities toward their desired outcomes. This creates a mutually reliant relationship between authorities and partisans that needs to be maintained in order to limit conflict, instability, and potential power struggles (pp. 198-199).

Within the schedule modernization initiative it will be important to monitor for scarcity and conflicting agendas. One example that immediately comes to mind is classroom assignment. The U of A has approximately 300 classrooms that are centrally scheduled by ETT. The rooms range in size and characteristics. There are also faculty controlled classrooms that are usually smaller and/or more function specific. During peak class times, it can become difficult to ensure all classes are assigned appropriate teaching space and there are instances where a class is

assigned a room outside of an instructor's preferences, the class enrolment capacity needs to be reduced to fit within an available room, schedulers need to work together to coordinate room swaps, and/or classes may need to be rescheduled to days and times with more room availability. Changing enrolment capacity or needing to replace one class with a high enrolment capacity with multiple smaller classes can have ripple effects on the learning environment, instructor loads, and faculty budgets though (Usher, 2019). As ETT has authority over central classrooms, academic and administrative leaders, schedulers, and instructors within the colleges and faculties may seek to influence ETT to ensure their interests are met. With the introduction of technology that could allow for system generated room assignments based on system controls and preferences (e.g., room characteristics to align to pedagogy), there will be a need for open dialogue and decision mechanisms to avoid possible instability or power struggles.

Bolman and Deal (2021) suggest that "successful change requires an ability to frame issues politically, confronting conflict, building coalitions, and establishing arenas for negotiating differences into workable pacts" (p. 401). From a leadership perspective it will be important to create an avenue for this discourse and ensure the focus remains on optimizing classroom space to support enrolment growth rather than folks trying to reinforce the current state power dynamics or shift the focus to alternate agendas.

Human Resource

The human resource frame focuses on aligning the needs of individuals and the organization. Alignment results in a fit between the employee and employer based on the ability of both parties to support each other in meeting their needs and objectives. Two key assumptions of the human resources frame are that a good fit between the employee and the employer benefits both as individuals find meaningful and satisfying work, while organizations get the talent and

energy they need to succeed. However, if there is misalignment, one or both could suffer (Bolman & Deal, 2021, pp. 121-122).

With the implementation of new technology, it will be critical to help users adapt to the new systems and processes and mitigate technostress. Technostress is a phenomenon that describes technology induced stress caused by an imbalance between technical demands within an environment and one's capabilities to meet those demands. According to Ragu-Nathan et al. (2008, p. 422), examples of technostress inhibitors include effective training, accessible technical support, opportunities to engage in workshops and acclimatize to the new system, and reducing staff workload while they learn to use the new system. During software implementations they recommend "inviting end users to participate in discussions on how new applications could be used and soliciting and incorporating their requirements into system design and configuration" (pp. 422-423) to build familiarity with the new software before it becomes operational.

From a leadership perspective, there are some schedulers and ETT staff who recognize the existing limitations within the current system and processes will see new software and processes as a welcome change. However, there will be some folks who will want to remain aligned to their current state and ways of working within the organization. Referring back to the prior three frames, the further the initiative moves away from and challenges existing historical practices, structures, and power dynamics the more adaptive challenges are likely to surface. It will be important to assist people as they adjust to organizational changes, new technical demands that challenge their capabilities, and shifts in their work environment.

Kotter's 8 Step Change Management Model

While the four frames model can assist in assessing the organizational implications of modernizing the class schedule, there is still need to effectively prepare for and implement the

corresponding changes. What follows is a view of each of Kotter's eight steps (Bolman & Deal, 2021, pp. 405-407; Kotter, 2012, 2017; Galli, 2018, pp. 126-127) in relation to the case and with consideration to some of the challenges surfacing from the assessment of Bolman and Deal's four frames. The steps reflect a combination of Kotter's original eight steps and his revised accelerators.

Establish a Sense of Urgency

The next scheduling cycle begins in the fall of 2025. The project team will have approximately six months to design the new processes and implement the new software in order for schedulers to be able utilize the software for the next cycle. Such et al. (2017) also highlight the value of using time as a catalyst to encourage engagement and action throughout the implementation process. Given the interconnected nature of class scheduling it will be important to convey this urgency to affected parties early in the implementation process. It will also be important to queue up support resources like IST to ensure teams are aligned and coordinated within the tight timelines.

Form and Maintain a Guiding Coalition

As noted earlier a steering committee that included leaders from ESSI, the Office of the Registrar, IST, and colleges and faculties was established during the earlier phases of the project. As the initiative transitions to design and implementation, it will be important for the steering committee to maintain the project's focus on the key strategic objectives guiding the schedule modernization initiative and work together to ensure the project team has the resources and support necessary to move the project forward.

Similarly, the early phases of the initiative leveraged a small project team. As the schedule modernization initiative transitions into design and implementation phases, the project

team will likely need to expand to include the expertise of ETT, schedulers, and technical staff. The project may also benefit from dedicated change management and communications professionals. It may be difficult to incorporate these folks into project activities full time as they likely have other operational responsibilities, so it will be important to keep project team members informed and aligned and ensure the project team can leverage their expertise at critical milestones requiring more direct engagement

Create a Vision / Develop Change Initiatives Designed to Capitalize on Opportunity

The primary driver for the schedule modernization initiative is ultimately preparing the U of A for enrolment growth. There are also objectives that align back to improving the student experience and empowering staff with the tools they need. While these objectives are already set, there may be a need to refine the vision to ensure the project team has "a picture of success and enough information and direction to make consequential decisions on the fly, without having to seek permission at every turn" (Kotter, 2012, p. 52). Returning back to transformational leadership and more distributive leadership approaches, a clear vision will help the project team navigate the organization and empower them to move the schedule modernization initiative forward, avoiding potential delays that may occur from needing to defer to the steering committee for direction and decisions.

Communicate the Vision / Grow the Coalition

To date, the schedule modernization initiative has had a low profile and focused on engaging groups directly involved with class scheduling. Brown (2014) notes that projects may respond to resistance from various parts of the organization by taking on a lower profile in order to move the project forward and maintain timelines and focus or projects could take a higher profile approach that leans into organizational interconnectedness to expand scope, garner wider

support, and broaden transformation efforts, allowing for a more inclusive and adaptive approach. A higher profile could raise concerns about managing project resources and timelines though. The schedule modernization initiative will need to raise its profile and tap into pockets of the organization needing to be engaged as the project progresses, but should do so with intent to avoid unnecessarily expanding the scope and timelines. Having a clear vision and compelling narrative can help the schedule modernization initiative identify groups to engage, introduce the project more broadly, and help address technical and adaptive challenges as they arise by empowering affected parties to be part of the change.

While Kotter's original steps are sequential, communication is something that needs to be ongoing. Beyond effectively communicating the vision, Such et al. (2017) highlight effective communication about the project's progress, training opportunities, and expected actions from organization members as being important. They also note the importance of clearly defining communication responsibilities, especially if communications will be delegated beyond the project team to potentially leverage the organization's hierarchy or networks.

Empower Others to Act on the Vision / Remove Barriers

Given the urgency of this project and the number of parties involved, the project will need mechanisms to make decisions and solve problems quickly. The expansion of the project team will create space for a collaborative approach to designing the new processes and addressing structural and human resource challenges such as determining how best to configure the scheduling software to make scheduling more efficient and ensure that schedulers have improved tools and the training necessary to utilize the new tools. However, the project team may not be best positioned to address some of the cultural and political challenges that may be embedded in the U of A's historical practices and authorities. While the steering committee may

be able to assist on this front, they may be too far removed from operations to fully understand the impacts of some decisions. As noted earlier, Bolman and Deal (2021, p. 401) emphasize the importance of establishing an arena to address conflict and negotiate differences in pursuit of agreeable solutions.

The initiative's coalition could be further expanded to include a working group of mid-level managers and leaders more attuned to operations. Whereas the steering committee is charged with strategic guidance and removing barriers to success and the project team is charged with doing the actual work and coming up with solutions to problems, the working group could serve as a bridge between the two. For instance, referring back to the potential for political discourse around room assignment, the steering committee's focus is on ensuring there is clear direction on space optimization being a key priority to support enrolment growth and the project team's focus is on identifying possible solutions to act on this objective. There could be multiple ways that this could be accomplished though and the project team does not have the time to get delayed. As operational decision makers, the working group could serve as the mechanism for critical discussion among key parties with the intent on making decisions that drive toward the vision and intended outcomes while taking into account different organizational perspectives. Given the urgency, it will be important for items coming to the working group to be well framed and the group should meet regularly so that decisions can be made and enacted as quickly as possible. The added benefit of including a working group into the coalition is that it also broadens the initiative's representation and allows for greater opportunities to network the change through the organization.

Planning For and Celebrating Short-term Wins

Given the time available, the project team will need to quickly determine the scope of work necessary to have a viable implementation within the given timeline. This could be accomplished by taking a minimum viable product (MVP) approach. While an MVP approach can take multiple forms (Lortie et al., 2025), in this case the focus would be on preparing the scheduling software for deployment through an iterative process of addressing base feature sets and collecting feedback from users to ensure key pain points are addressed. With this type of approach the project team breaks the work down into smaller, focused phases that address critical components necessary for implementation. This allows for focused attention, short-term wins, and ultimately building the processes and software up piece by piece. It also embeds feedback and user engagement into the process to address potential user issues in an iterative way rather than simply deploying a complete product without consultation. If done well, this approach creates key milestones for the project team to progress toward and allows users to take part in informing how the product is designed and deployed.

This step can also focus on identifying quick win opportunities to demonstrate the benefits of the change. For instance, returning back to the desire to increase the number of classes outside of prime hours and optimize seat utilization within classrooms in support of enrolment growth (U of A, 2024b, p. 40), the project team could look at recent terms to determine baseline measurements for class time disbursements and seat utilization to compare the new schedule against. If this data could also be extended to demonstrate the removal of registration barriers for students or opportunities for increasing enrolment, the data would become even more impactful.

As the project team progresses through milestones and can demonstrate benefits, successes should be celebrated. Kotter (2012) emphasizes that the "best short-term wins should be obvious, unambiguous, and clearly related to the vision. Celebrating those wins will buoy the volunteer army and prompt more employees to buy in. Success breeds success" (pp. 54-55).

Consolidate Improvements and Produce Still More Change / Never Let Up

Within the MVP approach, the focus is ensuring the basic requirements are in place. Once those are in place, the project team can look for opportunities for further enhancements prior to and/or post implementation. This may mean that ETT and schedulers assign classrooms manually as in current state, but they may be able to benefit from helpful tools embedded within the software that assist with completing that task. Once that requirement and all the critical components necessary for go-live implementation are in place, the project team could pursue implementing a more automated approach to classroom assignment as a possible enhancement. This also becomes a space to address and solve some of the downstream challenges brought forth as part of broader engagements.

Kotter (2012) stresses that it is important to maintain urgency at this step because "when an organization takes its foot of the gas, cultural and political resistance arise" and the coalition enacting the change will also lose focus and "start focusing on their work in the hierarchy, and the hierarchy will dominate once more" (p. 55). The intention here is to maintain the commitment to the change by continuing to enact further change in pursuit of the initiative's vision. To this end, Guerra-López and Dallal (2021) also emphasize a need to transition people through the implementation and into operations by providing multifaceted training plans and opportunities and a robust support team that can transition support services from implementation

into operations. They also recommend ensuring there is continued monitoring and a continuous improvement plan post-implementation.

Institutionalize the New Approaches / Changes in the Culture

While the project will be able to implement new software and redesign processes, there will be a need to entrench the new practices and the benefits gained. By targeting the start of the next class scheduling cycle for deployment of the new scheduling software and processes, it provides an opportunity to put the changes into practice while the changes are still fresh. Building on the prior step, there may be benefits to maintaining the initiative's coalition for a period of time after implementation to reinforce the changes and continue to support further change and unresolved challenges.

Post implementation, ETT may also look to establish new policies and procedures that further institutionalize changes to scheduling. This could look like establishing an official policy to specify classroom seat utilization thresholds or formalizing renegotiated procedures and timelines with college and faculty schedulers to make the best use of the new software.

Findings and Conclusions

As an administrative leader in higher education and someone directly involved with the schedule modernization initiative I wanted to better assess the applicability of applying Bolman and Deal's four frames with Kotter's eight steps in preparing me to help lead the changes associated with the initiative. The four frames featured the complexity of the case. What may initially appear as a software implementation is actually part of a much larger shift toward growing enrolment at the U of A. Culturally, a change in class scheduling may lead to shifts in historical practice and prioritize the academic needs of students more to ensure they have the agency and flexibility they need to pursue their academic goals. Structurally, new technology has

potential to shift the U of A's approach from a predominantly decentralized approach to one that allows for more centralized influence through control systems and rules built directly in the system that enforce scheduling procedures. Allocation of scarce resources such as classroom space can have pedagogical and budget implications which can lead to conflict that will need to be addressed to limit resistance. And from a human resource perspective, a change in class scheduling will require training and helping individuals adapt to the new approach to class scheduling.

Meanwhile, Kotter's eight steps provide a framework for keeping the schedule modernization initiative on track. A clear vision will be necessary to set the direction for the initiative and align people toward a common purpose. Kotter's (2012) updated eight steps advocate for creating a change system that operates outside of, but in conjunction with the existing hierarchy. Although the steering committee, working group, and project team are likely to mirror levels within the existing hierarchy, the intention really should be on empowering the project team to engage and collaborate with others throughout the organization to address technical challenges while the steering committee and working group support and help address adaptive challenges. As the first of Kotter's eight steps, establishing and maintaining a sense of urgency seemed to underpin all of the steps and drive commitment.

One challenge in utilizing these conceptual frameworks to prepare myself is that my analysis only draws from my own perspective and experience. I am one of many people that will be involved in the initiative and as a result my assessment of the organizational implications present in the case, the change leadership necessary, and the change management tactics available are limited. Furthermore, I undertook my analysis prior to the design and implementation work getting underway and the initiative having a greater profile within the

organization rather than reflecting on outcomes at the conclusion of the case This also limits the ability to assess the outcomes of my preparations.

Despite these limitations, being proactive in attempting to forecast potential challenges and solutions from my own perspective is still likely to be helpful. New and emergent challenges will surface as the project work gets underway and more people become involved. Although it is impossible for me to predict all the challenges that could emerge, the exercise of reviewing the case through conceptual frameworks is preparation in of itself. As new challenges arise, I have expanded my perspective and deepened my understanding of available frameworks and theory which may be relevant and available for me to draw from as I collaborate and network with others to address challenges, lead people through the change, and support the implementation of new scheduling software and processes.

As this is my capstone for my Masters in Education degree, I want to conclude on a final point of emphasis highlighted in this paper and identified in my studies more broadly. Organizational development, change leadership, and change management are all separate constructs with an array of theory and frameworks within each. When exploring these constructs, theories, and frameworks they are typically compartmentalized and bound to apply focus. However, practice is much more emergent and dynamic. For instance, I attempted to make a clear distinction between change leadership and change management, but in practice both are relevant to the case and interconnected in practice. Change leadership is needed to set a clear organizational direction, mobilize people, and help individuals through change. At the same time, there are windows of opportunity, limited budgets and resources, and a need to deliver short-term wins toward larger transformation efforts which are better suited for change management. As such, praxis in complex and dynamic environments cannot be

compartmentalized. As an administrative leader in higher education I am now better equipped to draw from and combine multiple constructs, theories, and frameworks within my leadership practice.

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