ENHANCING AITF'S CHANGE LEADERSHIP CAPABILITY AND

ORGANIZATIONAL ADAPTABILITY TO ENABLE TRANSFORMATIVE CHANGE

by

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ABSTRACT

Alberta Innovates – Technology Solutions (AITF) is an integral player in Alberta's research and innovation system. It provides applied research and commercialization services for new technology solutions to support Alberta's industry sectors. AITF was undertaking a significant transformational journey to change its operating model in response to internal and external drivers which required enhanced change leadership skills to manage the transformation. Through the use of action research, and specifically through a survey and focus groups, this inquiry identified areas for change leadership enhancement. Research sub-questions related to identifying the current state of change leadership and actions AITF could take to improve the management of change. Findings confirmed a desire for staff and manager engagement in the change process; key findings included the importance of impact analysis, transition planning, cultural influences, and leader-follower relationships. Recommendations suggested AITF's leadership take actions to confirm, adopt, and support change leadership as a strategic leadership competency.

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CHAPTER ONE: FOCUS AND FRAMING

"We need to prepare ourselves for the possibility that sometimes big changes follow from small events, and that sometimes these changes can happen quickly" (Gladwell, 2002, p. 11).

In 2010 Alberta Innovates - Technology Futures (AITF) was formed by the Alberta Government through the amalgamation of four former technology-focused organizations (Alberta Government, 2010a) to work with industry to research, develop, and commercialize new technology solutions (AITF, n.d.a). In the 2012-2013 annual report, AITF Board Chairman stated that the focus over the next three years is "to drive organizational alignment and strengthening; position operations for greater customer focus . . . and advance the strategic business model" (AITF, 2013, p. 4). Since its creation, AITF had undergone continual change and anticipated significant change over the next three years. The purpose of the inquiry project was to provide AITF with information that would enhance its capacity to move towards the successful implementation and sustainment of its transformative change agenda.

To achieve its 2012-2015 business plan goals, AITF embraced a market-focused strategy to improve its end-to-end service delivery and commercialization of technology solutions. In 2013, AITF's executive committee defined five strategic objectives to focus its priorities on the delivery of its 2012-2015 business plan goals. It was anticipated that the implementation of these priorities would impact AITF's operations. Also during 2013, the Alberta Government engaged an expert panel to consult and develop a report for the creation of an "Alberta Institute for applied research and commercialization" (Alberta Government, 2013a, p. 1). The expert panel report, released December 2013, indicated some potential impacts on the scope of operations for AITF (Alberta Government, 2013c). Consequently there were two significant drives of change from internal and external forces converging on AITF.

AITF realized it had embarked on a transformational journey impacting its business operations, staff, and external stakeholders. Concurrent to the transformation program, a major portion of AITFs workforce was eligible for retirement in the next three years. Therefore the need to enhance its change leadership capacity and adaptability was critical to AITF's success. In August 2013, I was hired as a strategic change advisor to assist AITF with the implementation of organizational changes to realize the desired outcomes resulting from the strategic priorities.

My interest in this inquiry topic was based on my observations over the past twenty-five years as a senior management consultant and organizational change leader. I noticed that although senior leadership recognized the need to manage the people side of change they either abdicated their responsibility or minimized efforts to address people and culture issues. Their focus was on the short-term tangible problems rather than on addressing the longer term integration of change into business operations. I believe that for organizations to successfully implement sustainable change that change leadership skills are core competencies of leaders and managers.

The Executive Vice-President, Operations agreed that AITF would be the sponsoring agency for the organizational leadership project. The research question for this project was: "How can AITF's leadership team enhance its leadership capabilities to lead and sustain on-going transformational and cultural change?" The sub-questions for the inquiry were: What change leadership skills and experiences exist in AITF? How could any gaps found in effective change leadership skills be addressed? What strategies could AITF put in place to enhance organizational learning and adaptability to lead transformative and cultural change? and What implications might the results from the AITF inquiry have for other organizations endeavoring to undertake transformative change?

Significance of the Inquiry

"Turbulence is increasing in our world today. Mostly it is unpredictable, sudden and devastating to our communities, and to economic, social and ecological life" (Zuber-Skerritt, 2012, p. 5). Research indicates that change is an ongoing condition and building a change capable organization is critical (Amis, Slack & Hinings, 2004; Bruch, Gerber & Maier, 2005; Elrod & Tippett, 2002; King & Wright, 2007; Soparnot, 2011; Zaccaro & Banks, 2004). Since 2004 Alberta's research and innovation system has been streamlined and undergone change through the reduction of provincially funded research and innovation organizations from ten down to five (Alberta Government, n.d.). The Alberta Government released its *Shaping Alberta's Future* (2010b) report which highlighted the opportunity to strengthen and diversify Alberta's economy through investment in technology innovation by forming an Alberta institute of technology innovation (pp. 54-55). During the opening of legislature in March 2014, the throne speech highlighted investment in innovation and a new Bill for "research and world-leading innovation to drive growth and economic diversification for decades to come" (Alberta Government, 2014, para. 64). The government's focus on innovation was directly related to AITF's mandate and organizational priorities to "make strategic and effective use of Alberta Government funding to meet research and innovation priorities of the Government" (AITF, 2013, p. 13).

In response to direction from government and industry, AITF changed its business model impacting its leaders, staff, and working relationships. Another factor driving the urgency to enhance its ability to respond to change was the anticipated change in its workforce through a 15% staff turnover (AITF, 2013, p. 15) and expected retirement of a "large portion of the current workforce" (AITF, 2013, p. 17). How this workforce change impacted the organization's ability

to manage and sustain on-going large-scale business change and maintain stability was not well understood. In my experience, the increased demand on leaders and staff to manage day-to-day business operations simultaneously with large-scale change causes employee disengagement and sub-optimal achievement of desired outcomes. Research suggested that change fatigue can result in lack of employee readiness to accept change and a distrust in the organization's ability to follow through on change (Stensaker & Meyer, 2012, pp. 106-107).

The action research project provided an opportunity for AITF's management team to enhance its leadership capabilities and capacity to manage on-going organizational change in order to delivery on its mandate. Building change leadership competencies are, in my opinion, critical to enhancing stakeholder engagement, organizational effectiveness and adaptability. AITF needed to bring together industry, post-secondary institutions, and government stakeholders to be actively involved in research and innovation programs for the economic and societal benefits of Albertans. Enhancing AITF's change leadership capabilities to manage the people and cultural impacts associated with the business transformation was the premise of this organizational leadership project.

When this action research inquiry was launched, the Alberta Government was undertaking an initiative to recommend changes to the Alberta innovation system (Alberta Government, 2013c, p. 4). Since AITF had started to make internal changes to move towards an industry-sector focused business model, I believed it was an opportune time to develop an approach to build change leadership competency development plans for the organization. This project was intended to provide AITF staff with the opportunity to engage in the enhancement of AITF's change leadership competencies, organizational learning and adaptability. "Leadership

and organizations are best changed by asking those involved to dream and envision what might

be, to dialogue about what can be, and to construct what will be " (Argyris, 2010, p. 107).

If AITF ignored the impact that building change leadership competencies had on the

adoption of change and stakeholder engagement, there was the risk of missing opportunities to

lead the broader changes in the innovation system through the effective engagement of AITF

staff and stakeholders by building trust and strong working relationships. The importance of

managing change as a core competency is underscored when Burnes (2005) summarized "from

the failure rate of change projects the majority of organizations appear to lack this [change

leadership] competence" (p. 85).

Organizational Context

AITF is an integral part of Alberta's innovation system and operates in a complex

environment with multiple stakeholders from industry, post-secondary institutions in Alberta and

internationally, and government ministries at the municipal, provincial and federal level. As one

of the four board-governed Alberta Innovates organizations, AITF focuses on technology-based

sectors development and commercialization (AITF, n.d.a). Governed by the *Alberta Research*

and Innovation Act (2009a) and *Alberta Research and Innovation Regulation* (2009b), AITF

operates at arm's length from the provincial government and is managed by an independent

Board of Directors appointed by the Government of Alberta (AITF, 2010, p. 8). The Minister of

Alberta Innovation and Advanced Education represents the government and is responsible for the

legislative, regulatory, and policy frameworks under which AITF operates (AITF, 2010, p. 3).

AITF is a medium-sized organization with $159.2 million in annual revenue. With its

main base of operations in Edmonton and additional facilities located in Calgary, Devon, and

Vegreville, AITF employs over 500 research and administrative staff and supports over 1,145

companies through grants received from the Alberta Government and AITF's contract research

services (AITF, 2013, p. 4).

Created in 2010 through the amalgamation of four provincially funded technology

research organizations, AITF has a rich history dating back over 90 years to 1921 through one of

its heritage organizations, Alberta Research Council, one of Canada's first provincial research

entities (AITF, n.d.b). These heritage entities make up the three core functional operating

divisions for academic programs, research centers and business services. AITF's new business

model is intended to improve industry focus and customer service delivery integration and

alignment of AITF services and capabilities (AITF, 2013, p. 4). The new service model impacts

the way in which work is organized across the organization, shifts accountabilities through the

implementation of a matrix organizational model, and requires a shift in behavior by executives,

managers and staff.

AITF's mission is to enable globally competitive commerce through the development and

commercialization of new technology solutions (AITF, 2010, p. 2). AITF's focus is to grow new

businesses in Alberta, accelerate the adoption of new technologies by industry, create new jobs

and diversify the Alberta economy (AITF, 2013, p. 7). This focus is driven by the following

guiding principles of teamwork, collaboration, knowledge sharing and leadership that

"encourage a strong science, technology and entrepreneurial culture in Alberta" (AITF, n.d.a).

The stronger market and commercial focus requires an entrepreneurial mind-set, which

can be, at times, incongruent with AITF's existing academic and scientific research orientation.

In researching culture congruence, Cameron and Quinn (2006) identified that "when

discrepancies do exist, they may indicate a lack of focus, that the culture is unclear to

respondents, or that the complexity of the environment requires multiple emphases in different

areas of the organization" (p. 74). In cross-cultural environments, Schein (2009) discussed traps when people "exaggerate the degree of mutual understanding" (p. 206) and "cling to and justify my own way of doing things" (p. 206).

At the time of the inquiry study, reporting directly to the President and CEO were the corporate functions and operating divisions. The corporate functions included: Finance, Corporate and Legal Services, and Communications. These functions provided expertise and oversight for the financial, legal, contract management, policy and compliance, facilities, information technology, human resources, marketing and corporate communications services. The operating divisions were closely aligned with the heritage organizations' mandates. The basic academic research division had two foci: bring together researchers to solve problems, and provide grants to post-secondary institutions for research chair programs to advance innovative research. The applied research division focused on applied research and commercialization services, and was organized to provide contract services to industrial organizations and government departments in agriculture, petroleum, environment and carbon services, industrial services, and health industries. The new operating model being implemented shifts the organization from multiple, isolated divisions to a strategically aligned, cross-functional, project focused organization.

From a corporate governance perspective, the President and CEO reports to the Board of Directors. The executive committee is made up of the positions reporting directly to the President and CEO plus the vice-president positions within the applied research division. The executive committee has the accountability to set and execute on the corporate priorities and goals. The direct reports to the executive committee members constitute the operational leadership team. The executive committee and operational leadership team members form the

senior leadership group of 35 managers with the responsibility to implement strategy and lead

organizational change readiness and transformation.

In June 2013, AITF identified six executive priority projects expected to advance critical

elements of AITF's strategic plan through the 2013-14 fiscal year and set the stage for future

change. The focus of these strategic initiatives was to prepare and position the organization to be

market-focused working closely with industry partners, post-secondary institutions and

government departments to develop and execute sector strategies for innovation. These

initiatives impacted AITF's business operations, staff, external stakeholders and customers.

The looming retirement of one-third of its workforce created a deficit in AITF's highly

qualified skilled professionals, both researchers and leaders. The retirement situation increased

the criticality of changes to the business model and AITF's ability to respond to and lead on-

going change driven from internal and external sources. The organization needed to maintain a

balance between the agility and responsiveness of a private organization, the disciplined rigor of

a research entity, and compliance with legislative requirements of an Alberta government

agency.

Systems Analysis of the Inquiry

> Managers regularly face an unending barrage of puzzles or 'messes'. To act without
> creating more trouble, they must first grasp an accurate picture of what is happening.
> Then they must move quickly to a deeper level, asking, 'What is really going on here?'
> (Bolman & Deal, 2008, p. 38)

There were many internal and external influences that impacted AITF's ability to quickly

and efficiently implement change across the organization. Core to the internal influences was the

shift in, and tension between, corporate cultures. AITF's mandate is to help build an Alberta-

based globally competitive economy through the commercialization of new technologies (AITF,

2010, p. 2). For AITF to achieve this mandate, it needed to embrace an innovative, integrated, collaborative, and entrepreneurial mind-set. However, AITF's origins were deeply rooted in academic and scientific research that were based on disciplined procedures and funded by either government grants or fee-for-service contract research. Essential for AITF's transition to a diverse, high performance culture was its' ability to find balance and manage the paradox between entrepreneurial and academic disciplines.

Governed by the Alberta government, AITF was affected by provincial budget. The budget had two main objectives that required AITF live within established funding and maximize the return on investment by expanding markets through the commercialization of technology (Alberta Government, 2013b, pp. 3-6). Within AITF, these financial priorities created tension with the paradox of operational contraction to stay within budgets and expansion demands to increase market development. These budget constraints impacted the implementation of the new business model as the organization bridged operations from the old to new operating model. This required that AITF leadership assess and take action on the impacts to the transformation agenda and staff.

Since the formation of AITF, there was limited integration and optimization across the former organizations to leverage shared services, processes and information systems. Previous efforts to integrate operations had limited success since the focus of the operating divisions were more closely aligned with their pre-merger mandates. Over time, this lack of integration resulted in organization silos which hampered the shift to the new integrated operating model. Another transition challenge was staff resistance to the change. As Conner (1992) stated "we do not resist the intrusion of something new into our lives as much as we resist the resulting loss of control" (p. 126).

AITF operated in the middle of the Alberta innovation system between government policy-makers and funders, post-secondary institutions, and industry customers, service providers, and special interest groups. The Alberta government through the Ministry of Innovation and Advanced Education, created funding programs that AITF delivered. Other key stakeholders for AITF were the different Alberta Government ministries looking for technology innovations to support their mandates for growth and diversity in the Alberta economy. AITF also worked with post-secondary institutions to fund Chair programs for research into new technologies and for the recruitment and development of highly qualified skilled professionals (HQSP). AITF needed to service industry demands for new solutions and specialized research capabilities by engaging local innovation centers and industry partners to develop or enhance existing technologies for commercialization.

Operating in the middle of the system, AITF was pulled in many directions managing multiple working relationships with customers, post-secondary institutions, service providers, investors, government ministries, and other agencies. As Oshry (2007) observed "middles" need to find the balance between the conflicting demands in a diffused environment by focusing on integration (pp. 162-164).

The forecasted retirement of a significant portion of its highly qualified and skilled research and technical staff had an impact on AITF's ability to deliver on its mandate (AITF, 2013, pp. 16-17). In response AITF identified recruitment, performance management and succession planning as key strategies to address the skills gap. However in addition to qualified researchers, AITF needed to strengthen its leadership to maintain focus on its strategic direction and business model alignment.

Since AITF had not successfully integrated operations across the business units, there was a general perception that the change would not happen and the change would be abandoned. Given its change history, there was a level of skepticism that change would not happen and stick. Since being formed, AITF had successfully delivered on its mandate (AITF, 2013, p. 4) so honoring past successes was important to remember as the organization moved forward to enable it "to see the world anew" (Wheatley, 2006, p. 7).

Chapter Summary

In summary, this project was implemented with the explicit goals of improving the AITF's organizational capacity to lead transformational change as part of its role in the Alberta innovation system in order to realize the desired outcomes of a high performance culture, and the social and economic benefits for Albertans over the long-term. This strategic context provided the catalyst and framework for this project to be of interest to the AITF executive leadership committee. Engaging the organizational leaders responsible for implementing the organizational changes in the inquiry project provided the high quality input for creating the go-forward recommendations.

The following chapter explores the academic literature to gain a more in-depth understanding of the issues and opportunities related to this research inquiry.

CHAPTER TWO: LITERATURE REVIEW

This section provides a review of the literature relevant to the significance of change leadership and organizational adaptability during transformative change. The inquiry question for this research study was: How can AITF's leadership team enhance its leadership capabilities to lead and sustain on-going transformational and cultural change? The sub-questions supporting the main question were (a) what change leadership skills and experiences currently exist in AITF, (b) how can any gaps found in change leadership skills be addressed, (c) what strategies can be put in place to enhance organizational learning and adaptability to lead transformative and cultural change, and (d) what implications might the results from the AITF inquiry have for other organizations endeavoring to undertake transformative change?

This section begins with a review of what leadership competencies and roles are required to lead change. Next the review explores how change leadership competencies are developed. The section concludes with a review of literature pertinent to change readiness and culture change.

Change Leadership as a Strategic Imperative

"In simple terms, the art of leadership is the art of guiding others through change" (Elrod & Tippett, 2002, p. 287). Kouzes and Posner (2007) stated that leadership skills are identifiable and available to everyone (p. 23), however most important is people want to follow leaders who are credible (p. 37). To effectively lead change, leaders need to understand what organizational change management involves and what skills they need to successfully manage change. This section will explore what skills are critical for effective change leadership and why the ability to manage change is a strategic imperative.

Leadership and change. "Understanding the individual, group, and organizational processes that must occur to drive positive change proves critical for leaders" (Gilley et al., 2009, p. 40). The literature reviewed highlighted that leadership skills and abilities strongly influence change success (Ahn, Adamson, & Dornbusch, 2004; Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010; Gilley et al., 2009; Higgs & Rowland, 2005; 2011). Battilana et al. (2010) further emphasized that research on the linkage between leadership and organizational change did not take into consideration the complexity and type of change nor the resulting differences in activities and roles (pp. 422-423). In their research, Higgs and Rowland (2005) reached a similar conclusion stressing different approaches and leadership styles are required depending on the change context (p. 136). Managing change complexity challenges leaders at all levels which requires an understanding of change models to ensure the dependencies, connections, and contradictions are addressed (Gilley et al., 2009, pp. 39-40). In their work on organizational change, Anderson and Ackerman Anderson (2010) stated that different requirements are placed on leaders depending on change complexity, and further emphasized that leaders must understand which type of change they are leading, whether developmental, transitional, or transformation (pp. 51-74) in order to determine the appropriate change process to apply.

Effective change leadership requires leaders to understand the change context and its corresponding effect on the organization. Battilana et al. (2010) highlighted an underlying research assumption that most change agents already possess the knowledge to engage in different change activities (p. 423). However, research conducted by Gilley et al. (2009) reported that 74% of study respondents indicated their leaders were rarely effective in change implementation (p. 42). Furthermore, Higgs and Rowland's (2011) research findings concluded that leaders needed to understand change context in order to apply the appropriate framework to

manage change and provide direction for successful change implementation (pp. 328-329).

Higgs and Rowland (2005) concluded that leadership behaviors focused on the position, power

and role of the leader tended to be unsuccessful at change interventions (p. 143).

Change needs effective management and leadership. "While change must be well

managed - it must be planned, organized, directed and controlled - it also requires effective

leadership to introduce change successfully: it is leadership that makes the difference" (Gill,

2003, p. 307). To be able to lead, the manager needs to understand their leadership orientation

towards task-related and people-related activities. Task-oriented leaders focused on the

management aspects of the change, mobilizing resources and evaluating the activities and

progress, and people-oriented leaders concentrated on communications and visioning (Battilana

et al., 2010, p. 433).

Change is complex, multi-faceted and multi-dimensional with a time element, and often

cannot be solved using a linear approach. Burke (2008) stressed an organizational change

paradox of "we plan as if the process is linear when, in reality, it is anything but linear" (p. 738).

Additionally Higgs and Rowland (2005) emphasized that most managers are adept at solving

complicated problems by applying linear techniques (p. 123). However using linear approaches

and pre-packaged change toolkits and checklists are not robust enablers for successful change

management in complex scenarios (Higgs & Rowland, 2005, p. 143). Gill (2003) stated that both

alignment and adaptability are required for effective change leadership (p. 310). Knowledge of

the change process was highlighted as critical to the leader's ability to effectively design change

initiatives and implement change that requires comprehensive interpersonal skills to

communicate, motivate, build teams, coach and engage people in the change process (Gilley et

al., 2009, p. 44).

For organization change to be successful, change leadership is a key success factor. Understanding the scope, magnitude and dimensions of change requires a broader point of view and analyzing the situation from different viewpoints by involving others (Ahn et al., 2004, p. 121). Change leadership is not a singular activity, it involves working with others.

As stated by Leppitt (2006) leadership and change are intertwined through the implementation of strategy therefore ensuring the organization has the capacity to manage the change is critical to an organizations' ability to adapt to its changing environment (p. 123).

Change leadership capacity. Based on his research, Soparnot (2011) concluded change capacity is the combination of managing the change and developing a learning organization capacity (p. 658). Developing change leadership skills can enhance competitive advantage and organizational sustainability (King & Wright, 2007; Zaccaro & Banks, 2004). Additionally, developing a change leadership capacity can be a significant undertaking for an organization therefore differentiating between change roles is required. Caldwell (2003) concluded change leadership and change management are two different but complimentary roles (p. 291) and both are needed to develop change leadership capacity. Conner (1992) identified four change roles that enhance a change leaders' ability to orchestrate and navigate change (pp. 106-107). These roles include: (a) sponsors to legitimatize the change, (b) agents who are responsible for implementing the change, (c) targets who are the people who must adopt the change, and (d) advocates who support and promote the change (Conner, 1992, pp. 106-107).

Building the change capability requires engaging leaders and managers at all levels in the organization to work together to evolve into an integrated change leadership team as highlighted by Kouzes and Posner (2007) when they stated "leadership is a relationship" (p. 24) and further emphasized by Fullan (2011) through developing relationships first (pp. 62-66). Contrary to

Caldwell's (2003) position that change agency describes multi-dimensional roles (p. 291),

Binbasioglu and Winston (2003) integrated change leader and change manager to define the role

of change agent as a person in the organization who has the capability to initiate and manage

change from a structural, human resource, and business process perspective (p. 517). The

underlying assumption about change agent capabilities is that the person has the skills,

experience, aptitude and desire to be a change agent. In research conducted by Doyle (2002),

managers realized the change agent role can take an individual's involvement beyond the

boundaries of their existing organizational role into territory they are not equipped to deal with

professionally, politically or personally (pp. 474-475). Negative experiences of this nature

resulted in disengagement of leadership staff and avoidable mistakes (Doyle, 2002, p. 466).

In order for the organization to develop the capacity for change, avoid making any

missteps, and realize the change benefits, it needs to develop and nurture its change leadership

competencies.

Developing change competence. In their research on change competence, Higgs and

Rowland (2000) identified eight clusters for change management competency including

indicators for each cluster (pp. 124-125). In summarizing their results on change management

competencies, Higgs and Rowland stated "what is important is that the leadership is built to

diagnose, understand, confront and shape the reality as people see it. Change cannot be

predicted, yet the ability to harness it can be developed" (p. 124). Similarly Leppitt (2006)

conducted a study to compare 18 change frameworks resulting in the identification of 15 key

dimensions shared across the frameworks (p. 130). Leppitt's (2006) study highlighted that a

shared shortcoming across the frameworks was the lack of guidance provided on how the

framework should vary across context (p. 136). From this conclusion, it could be posited that

assessing the context and the appropriate application of the change framework is a change

leadership competency.

Table 1

Comparison of Aligned Competencies and Change Process Key Dimensions

	Higgs and Rowland's (2000) Change Competency Clusters	Leppitt's (2006) Key Dimensions in Change Frameworks
1	Change Initiation – create a case for change and secure sponsorship	Sponsorship Context for change Urgency and need for change Clear vision
2	Change Impact – scope depth, breadth, sustainability and returns for change strategy	Assessing readiness
3	Change Leadership – ability to influence and enthuse others and to access resources to build a solid platform for change	Leadership Building consensus Clear empowerment and team authority Communication
4	Change Execution – formulate and guide the implementation of a credible plan with appropriate goals, resources, metrics and review mechanisms	Plan the change Putting the resources in place Short-term wins Metrics and monitoring Consolidating
5	Change Technology – knowledge, generation and skilful application of change theories, tools and processes	Change management structures/delivery

In comparing and contrasting the findings for competency clusters by Higgs and Rowland

(2000) with the change framework key dimensions by Leppitt (2006), five areas of alignment

were observed as highlighted in Table 1. These areas of similarity included: (1) building the

change vision and case for change, (2) assessing the change impact, (3) leadership presence and

stakeholder engagement, (4) change implementation planning, and (5) change management

discipline.

Interestingly, three change competencies identified by Higgs and Rowland (2000) did not

appear to align with any of Leppitt's (2006) key dimensions. These competencies were: change

facilitation, change learning and change presence. Conversely, in their study on leader competencies and change success Wren and Dulewicz (2005) identified three specific leadership dimensions that had the strongest influence on successful change. These were "managing resources, engaging communication, and empowerment" (pp. 307-308). They also concluded that a pre-defined approach could have a positive influence for change success (p. 308). In his research, Caldwell (2003) highlighted that the attributes of a change leader and change manager were different yet complimentary (p. 291). He concluded that the change leader was more of a visionary and champion of the broader strategic change and the change manager was more of the localized supporter and implementer of change (p. 291) requiring softer interpersonal skills of listening, communicating, team building, facilitating, negotiating, and conflict resolution (p. 285). Similarly Higgs and Rowland (2005) found that change tended to be more successful when leaders were facilitating and enabling the change journey through what they referred to as "framing" behavior (pp. 133-137).

Leading large, complex change initiatives requires more than an understanding of organizational change management processes. It requires an understanding of the change complexity and its impact on stakeholders, business operations, and organizational context (Aitken & Higgs, 2010, pp. 24-25). Managing organizational change requires leaders with strong change leadership competencies as well as the capacity to proactively address change before the change risk becomes imperative (Hamel & Valikangas, 2003, pp. 512-513).

In summary, change leadership competence has the potential to be a strong influencing factor for successful change. Research indicated that change competence can be developed by blending change competencies with change process management. Wren and Dulewicz (2005) concluded "transformation appears to be derived from a combination of leadership competencies

and leader activities" (p. 297). Change competence therefore requires that leaders develop a change approach which fits the context and engage staff in roles they need to play to develop the capacity to lead change. To conclude, developing change competence seems to be dependent on developing change leadership skills which is central to the inquiry question for AITF. The next section will explore different approaches for develop change leadership competencies.

Developing Change Leadership Skills

Research has shown that for change to be successful, it requires competent change leaders. So then, how do they develop this competence? Many leaders and managers learn how to manage change on-the-job when change is happening (Shanley, 2007, p. 963). It has been stated by many researchers that 70% of change initiatives are unsuccessful (Balogun, 2006; Bruch et al., 2005; Gilley et al., 2009; Higgs & Rowland, 2005; Hughes, 2011; Smith, 2002). So if leaders are learning how to lead change on-the-job and the majority of change initiatives fail, is there a correlation between change leadership development and the success of change? This literature review topic will explore change management as leadership accountability and approaches for developing change leadership competencies.

Leading change is a day-to-day responsibility. With the pace and frequency of change increasing, researchers have observed that change agency is becoming part of the day-to-day responsibilities for leaders (Doyle, 2002; Slater, 2008; Wren & Dulewicz, 2005). Maximizing the outcomes of a change leadership capacity requires effort and pre-planning, and should not be an ad hoc approach (Slater, 2008, p. 67). Bruch et al. (2005) concluded pre-implementation decisions about how to lead strategic change are critical to "making the right change, at the right time" (p. 105). Doyle (2002) observed that organizations seemed to "lack awareness that

managing change might represent a substantively and qualitatively different experience from that contained in an existing operational management or technical/professional role" (p. 480).

Zaccaro and Bank's (2004) research highlighted that change management skills were not considered as important as "other skills for effective management" (p. 377). When capacity development was left to on-the-job training, or a reliance on fad-driven thinking, it left change agents unprepared and vulnerable to political issues and cultural impacts not previously encountered (Doyle, 2002; Shanley, 2007; Zaccaro & Banks, 2004).

Balogun's (2006) research indicated that middle managers played a pivotal role in managing change as well as working with senior leaders, subordinates, and cross-functionally with their peers to implement the change agenda (p. 43). This shift in the middle manager role required additional effort along with senior management acknowledgement that this focus was a priority (p. 46). According to Shanley (2007) there is an organizational blindness to the impact that managing change has on the manager's role (p. 968) including the daily effort required to address the change impacts (p. 963). Soparnot (2011) posited that change needed to be engrained in the fabric of the organization (p. 643).

Research indicated that managing change on a day-to-day basis needed to be a part of the middle manager's role yet the recognition that change management was a managerial responsibility appeared to be lacking. Caldwell (2003) observed a shift in the manager's role to change facilitator as the significance of change leadership increased and organizations flattened (p. 285). Bryant and Stensaker's (2011) conclusions supported earlier research that middle managers fulfil multiple roles during change requiring them to negotiate between conflicting demands at various levels in the organization (p. 369). Additionally, Caldwell (2003) identified

the lack of clarity in change roles while not appreciating the organizational power held by middle

managers to resist change (p. 285).

If on a day-to-day basis change leadership is a key manager accountability requiring

more time and priority attention, how can managers develop the required competencies to

effectively and confidently lead change?

Learning and development. Adult learning theory is about change and how individuals

learn to alter their behavior (Knowles, Holton, & Swanson, 2012, pp. 11-16). Brookfield (1986)

highlighted that adults use their experience as a barometer to gauge the value of learning (p. 30).

Learning is most effective when adult learners believe they need to learn and have accountability

for their learning process (Brookfield, 1986; Cross, 1981; Knowles et al., 2012). Adult learners

prefer a non-threatening environment where learning activities are focused on a problem with

learning outcomes that can be immediately applied (Brookfield, 1986, p. 31). Kolb's (1976)

experiential learning model highlighted that individuals learn when their experiences can be used

to guide choices made in future situations (p. 21). Zaccaro and Banks (2004) called this

"discovery learning" (p. 372) which allows participants to actively explore new ideas. Outcome

focused learning tends to motivate adults to learn (Knowles et al., 2012, p. 197). Additionally,

Choi's and Ruona's (2011) research emphasized that "organizations with a strong emphasis on a

learning culture tend to be more apt to learn and change" (p. 62).

Though the development of change management competency is deemed critical to the

organization's success, Zaccaro and Banks (2004) highlighted that most organization training

programs focus on the immediate and short term needs (p. 372). Doyle (2002) highlighted that

structured training and development may be able to provide the key concepts and tools to leaders

however they may be limited in their ability to develop change leaders (pp. 470-471). Other

research indicated that change management skills were developed primarily through direct job experience based on trial and error (Doyle, 2002; Shanley, 2007).

For a shift to take place in behaviors, individuals and organizations need to alter their habitual, routine work habits. The unlearning and letting go of current practices is critical for individuals to learn a new way of thinking (Knowles et al., 2012, p. 192). Argyris (1995) referred to this process as double-loop learning (p. 20). The learning process of unlearning and relearning is similar to Lewin's (1947) change model of "unfreezing, moving, freezing" (p. 34) and Bridges (2009) transition model of "letting go, neutral zone, new beginning" (pp. 4-5). Werther (2003) highlighted when core beliefs and assumptions are challenged, this could cause staff to question other beliefs creating a ripple effect resulting in potential trauma and resistance to change (p. 34) impacting the transition process.

Adult learning dovetails into a more comprehensive development framework that includes formal training, work experience and coaching (Zaccaro & Banks, 2004, pp. 372-376). Coaching and mentoring can help the learning process by providing guidance and safe reinforcement for change novices to develop their change leadership skills (Doyle, 2002, pp. 475-477). Career development planning can facilitate on-going development through "stretch assignments" (Zaccaro & Banks, 2004, p. 374) to challenge leaders in a way that they can address the areas where they need to develop new skills.

To develop new competencies, time and the leader's stage in the personal growth journey must be taken into consideration. As pointed out by Aitken and Higgs (2010), time is essential in the development of change leaders, however equally as important is the leader's ability to make changes within themselves (pp. 119-120). For step-wise growth to occur, the leader needs to focus on complex, out-of-the-ordinary problems to stretch and challenge their thinking thereby

enable learning through action (Aitken & Higgs, 2010; Argyris, 1993). Nevertheless, developing

initiatives for change competency development must take into consider conflicting demands on

leader's time to keep day-to-day operations running (Meyer & Stensaker, 2006, p. 218).

Furthermore, Meyer and Stensaker challenged existing change literature that treated change as a

singular event rather than part of the dynamic nature of organizations that needs to be balanced

and prioritized (p. 219). Change is a continuous process (Anderson & Ackerman Anderson,

2010, pp. 211-214) therefore balancing priorities between developing change competencies and

maintaining operations is a continual requirement, especially for middle managers (Bryant &

Stensaker, 2011, p. 354).

In summary, the ongoing development of change leadership skills needs to be continually

nurtured and planned. Change is constant in organizations which puts pressure on the middle

management ranks to find equilibrium between leading change and managing day-to-day

operations. Therefore to build a sustainable change leadership practice, developing change

leadership skills is achieved through learning supported by various feedback and support

mechanisms. By establishing a change leadership competency, the organization is better

positioned to adapt and adjust to ongoing change. In the next section, I will explore change

readiness and organization adaptability in more detail.

Organizational Culture and Change Readiness

> Transformative change implies that the person or group that is the target of change must
> *unlearn* something as well as learn something new. Most of the difficulties of such
> change have to do with the unlearning because of what we have learned has become
> embedded in various routines and may have become part of our personal and group
> identity. (Schein, 2010, p. 301)

Change leadership requires leaders who possess the necessary skills, experience and

knowledge as well as the ability to deal with the human and cultural aspects of change. This

competence is essential for the change leader to confirm the readiness of the organization to navigate the change. As highlighted by Armenakis, Brown, and Mehta (2011), followers need a credible leader who not only articulates but also lives the beliefs and values of the organization on a day-to-day basis and is a major contributor to "orchestrating the artefacts that will describe the culture" (p. 322). In this section culture change and its impact on change readiness and transition are explored in more detail. The section concludes with a review of the middle manager role in change.

Organizational culture and its impact on change. Culture is a strong, and unseen influencing factor within an organization. Schein (2010) defined it as the "patterns of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration" (p. 18) and further emphasized that culture is fundamentally about "striving towards patterning and integration" (p. 18). These patterns are the invisible and often powerful forces at work in the organization which Senge (2006) described as the mental models people use not only to "make sense of the world, but how we take action" (p. 164). Argyris (2010) referred to these patterns as "theory-in-use: defensive reasoning" (p. 63) used by people to defend and reinforce the actions they take. Appreciating and understanding these hidden cultural forces and patterns is critical to successful organizational change.

Argyris (2010) concluded that to successfully navigate culture and organizational change, change leaders need to address the "theory-in-use defensive reasoning" (p. 63) patterns used at group and, more importantly, at an individual level to create organizational traps (pp. 118-119). Organizational traps are when people "are trapped by their own behavior" (Argyris, 2010, pp. 1-2) in their efforts to maintain the status quo and protect themselves from change that could disrupt their status, self-esteem, and sense of predictability and stability (Werther, 2003, p. 33).

Cameron's and Quinn's (2006) research reinforced the importance of focusing on the individual

behavior patterns since change requires the individuals' willingness to be vulnerable to adopt

new behaviors and letting go of the old behaviors (p. 117). This willingness to change implies

risk because the individual must unlearn the old behavior in order to let it go and learn something

new thereby impacting the individuals' self-efficacy and potentially membership to any groups

to which they belong (Schein, 2010, pp. 301-303).

Another aspect of culture that change leaders must take into consideration is the

corporate memory for the deep underlying assumptions, rules, and beliefs shared amongst the

long-service employees in the organization (Schein, 2010, p. 19) that drives "how things are

done round here" (Cameron & Quinn, 2006, p. 16). Foster and Kaplan (2001) highlighted this

same phenomenon as "cultural lock-in" (p. 43) that freezes the organization and is difficult to

change because it is "self-reinforcing, self-sustaining, and self-limiting" (p. 45). Getting at these

underlying assumptions and beliefs identifies what is important and valued by staff. Culture

change can involve changing the symbols, vision, values, rituals, ceremonies, stories, heroes and

artefacts that can unite people and provide them with a sense of direction, pride, and belonging

(Bolman & Deal, 2008, pp. 253-254). Therefore, changing the culture can have a huge personal

impact at an individual level, meaning that implementing change starts with the person.

Change implementation begins with leaders diagnosing the organizational traps by

addressing the underlying assumptions through conversations and dialogues to understand what

is really going on in the organization (Argyris, 2010, pp. 118-150). Schein (2010) proposed an

approach including personal reflection and guided workshops to collect cultural data (pp. 80-87).

Interestingly both Schein (2010) and Argyris (2010) agreed that cultural surveys were not the

most effective tool to measure culture for the fundamental reason that participants typically

respond by using the espoused theory rather than the theory-in-use (Argyris, 2010, p. 149).

Conversely, Cameron and Quinn (2006) advocated a blended approach of quantitative and

qualitative data collection on corporate culture (p. 19-20). So to get at the hidden, unspoken, and

fundamental assumptions, rules and behaviors that block change progress and adoption, a

compendium of methods for data collection and staff engagement is required.

Culture is complex and multi-dimensional. Schein (2009) identified three levels of

culture as: (1) artifacts representing the structures and processes, (2) espoused values

representing the strategies, goals, and philosophies, and (3) underlying assumptions which are

the unconscious, taken for granted beliefs, perceptions, thoughts and feelings (p. 21) Culture also

operates at the individual, group and organizational level (Cameron & Quinn, 2006, pp. 16-17).

Culture is not the destination; rather it is a state of being within the organization.

Effective culture change must first be grounded in understanding the current culture of

how things get done in the organization (Argyris, 2010; Cameron & Quinn, 2006; Schein, 2010).

Since culture change is about transforming the organization, strong credible leadership combined

with a compelling vision and reason for change are also instrumental to success (Armenakis et

al., 2011, p. 322).

Changing culture and the organization is a continuous journey of renewal, especially if

the organization wants to survive and keep pace with the external environment (Foster & Kaplan,

2001, p. 48). Evolving into a learning organization (Senge, 2006, pp. 5-11) is integral to the

corporate renewal journey and involves reframing organizational dilemmas to understand that

there are multiple ways to respond (Bolman & Deal, 2008, p. 19).

To address culture and organizational change requires not only an understanding of the current state but also the state of readiness for the organization to embrace the transition from the current state to the future state.

Change readiness and transition. The complex and continuous nature of change that exists in organizations today requires leaders, at all levels of the organization, who "are resilient and who know how to manage change in a consciously competent manner" (Conner, 1992, p. 223). Additionally, Conner (1992) emphasized that to develop resiliency in people, change leaders must understand the impacts of change as well as how and when people will react to change (pp. 227-228). Conversely Hamel and Valikangas (2003) stated that the goal of a resilient organization is "zero trauma" (p. 513) which means being continually vigilant and anticipating change rather than trying to maintain the status quo (pp. 513-515). Additionally, Burnes (2005) discussed the need for self-organization enabling the impacted parts of the organization to effectively respond to change through a process of continuous improvement (p. 85). Bruch et al. (2005) highlighted the importance of selecting, engaging, and securing the right people early in the change process was critical to change success (p. 104). Balogun (2006) concluded that change recipients need to be viewed as change co-creators since they are closest to the change and work together informally to make sense of the change and mediate the outcomes (pp. 46-47).

Research has shown that people react either positively, seeing change as an opportunity, or negatively, seeing change as a danger and a loss of control, (Bouckenooghe, 2010; Conner, 1992; Furst & Cable, 2008) which has an impact on change readiness and transition planning. Furthermore, change readiness needs to be understood and addressed at the individual employee as well as the collective group and organizational levels (Rafferty, Jimmieson, & Armenakis, 2013, pp. 113-120). Similar to culture, resiliency and readiness starts with the individual,

including the change leader, and need to be monitored and addressed throughout the change

process (Conner, 1992, pp. 253-261).

Organizational change is not a one size fits all endeavor therefore planning the change

implementation requires taking into consideration the type of change (Amis, Slack & Hining,

2004; Anderson & Ackerman Anderson, 2010; Bouckenooghe, 2010), the state of readiness at an

organizational and individual level (Choi & Ruona, 2011; Rafferty et al., 2013), and the strength

of the leader-follower relationships (Bryant & Stensaker, 2011; Furst & Cable, 2008).

Furthermore research by Bouckenooghe (2010) highlighted that change is perceived differently

at different levels in the organization (p. 515) which impacts stakeholder and employee readiness

for and engagement in the change process.

Research by Lines (2004) showed a positive correlation between stakeholder

participation and a successful change implementation (p. 209). Armenakis and Harris (2009)

emphasized that a faulty assessment of change impacts would likely result in an unsuccessful

implementation; thus, engaging impacted stakeholders to diagnose the change impacts facilitates

a more accurate and comprehensive analysis as well as socializing the change (p. 130). Leaders

need to plan high impact changes with caution and sensitivity to ensure that the changes are

introduced and adopted by the impacted stakeholders otherwise they run a risk of changes being

backed out (Amis et al., 2004, p. 35). As pointed out by Werther (2003), successful strategic

change and organizational adaptability depend on employees buying into the strategic change

agenda and process (p. 32).

Developing resiliency and understanding readiness are foundational to moving people

and the organization through the transition process from current state to desired future state.

Bridges (2009) described this transition process in three phases where people start by letting go

of the current ways of doing things, then they move into a neutral and confusing place where the old is gone but the future state has not been fully implemented, and finally when coming out of transition, people are able to embrace the future state as a new beginning (pp. 4-5). Bridges (2009) emphasized that change is about the outcomes whereas transition is about the psychological process of letting go and unlearning the old ways in order for people to adopt the new way (p. 7). Additionally, Elrod and Tippett's (2002) research on change models also observed a similar transition process and recommended that to minimize "time spent in the 'death valley' of change" (p. 289) change leaders need to understand the change process, manage expectations, and proactively support their people through the process (pp. 287-289). All transitions start with an ending; therefore, acknowledging what is ending and people's sense of loss will help staff to overcome the more difficult part of transitions (Bridges, 2009; Conner, 1992; Schein, 2009). Amis et al. (2004) concluded "fast-paced change across an organization early on in the transition process is not sufficient to bring about lasting, long-term transformation" (p. 31). Managing this transition process is a critical role for leaders, especially middle managers.

Middle management is a pivotal role in change. Middle management refers to the organizational positions between first-level supervisors and executives (Herzig & Jimmieson, 2006, p. 628). Middle management is the coordinating role balancing between implementing strategic change and maintaining business operations (Bryant & Stensaker, 2011; Conway & Monks, 2011; Huy, 2002). Due to their position in the organization, middle managers are uniquely positioned to influence change readiness and employee engagement since they are closer to front-line staff and the requirements of work details (Bryant & Stensaker, 2011; Conway & Monks, 2011; Herzig & Jimmieson, 2006; Huy, 2002). Furthermore, Fullan (2011)

highlighted the need for change leaders to be hands-on and engaged in the change process with their people in order to be well advised before taking appropriate action (pp. 19-25).

The duality in middle management's role requires managers to be able to sell ideas and concepts not only to their subordinates but also up to top management; as reinforced by Conway and Monk (2011) "the source of the tension that emerged related to experiences of these middle managers as both targets of top-down changes and agents of change from the bottom-up" (p. 199). The challenge for middle managers in top-down change is they are expected to motivate others to implement change and sell them on ideas that middle managers may not fully agree with, and this can result in inconsistent behavior and feelings of untrustworthiness (Bryant & Stensaker, 2011, pp. 357-358). How middle management handles their conundrum can directly influence the readiness and engagement of employees which impacts the outcomes of the change initiative.

Though middle managers have a key role in organizational change, whether top-down or bottom-up, research highlights the demise and under valuing of middle management roles (Conway & Monks, 2011; Herzig & Jimmieson, 2006; Huy, 2002). This perspective can result in the importance of middle management's role in change being overlooked or under estimated. Bryant and Stensaker (2011) pointed out the middle management challenge; they are expected to remain positive and supportive of change that could potentially have an adverse effect on their careers in the organization (p. 356).

Middle management's involvement and role in change is pivotal to the overall employee engagement, organizational readiness, and ultimately the success of the change initiative. The literature highlighted the importance and requirements of middle managements role however this

leads to the question of middle management competency and effectiveness to take on this change leadership accountability.

The following quote attributed to Peter Drucker "culture eats strategy for breakfast" sums up the discussion for this section, especially since strategy is about implementing change. The research demonstrated that culture is a strong influencing factor on change that requires leaders to surface and address the underlying assumptions, beliefs, and rules that drive and justify individual and group behavior. To ready the organization for the transition from the current state to the future state requires an assessment of the impacts and peoples' reaction to these impacts. Engaging the impacted people in the assessment and the subsequent implementation planning increases the likelihood for successful change adoption. Also highlighted was the pivotal role middle managers play in the change process since they are between the senior leaders who set the direction and the people who must implement the change into operations.

Chapter Summary

The focus of this inquiry was on the question: how can AITF enhance its leadership capabilities to lead and sustain ongoing transformational change. To develop a change leadership competence requires leaders at all levels of the organization, especially middle managers, to develop their change leadership skills through experience and knowledge sharing. Leaders need to understand and proactively manage the impacts of change on people and the organization in order to develop transition plans to implement change. This requires engaging people and dealing with the aspects of the culture that either inhibit or enhance the change process. Effective change leadership requires courage, authenticity and ongoing commitment. Organizations with a commitment to develop a change leadership capability need to provide leaders at all levels, with

the executive support, learning opportunities, and a framework for change leadership. The

following chapter describes the methods used to conduct the research for this inquiry project.

CHAPTER THREE: INQUIRY APPROACH AND METHODOLOGY

The overall purpose of this inquiry project was to explore how AITF could enhance its leadership capabilities to lead and sustain on-going transformational and cultural change. In this inquiry project an action research approach was applied with an appreciative stance to explore the sub-questions: (a) what change leadership skills and experiences existed in AITF, (b) how could any gaps found in change leadership skills be addressed, (c) what strategies could be put in place to enhance organizational learning and adaptability to lead transformative and cultural change, and (d) what implications might the results from the AITF inquiry have for other organizations endeavoring to undertake transformative change?

This chapter describes the approach used to conduct the inquiry project, participants involved in the study, and the inquiry methods applied. The chapter concludes with a discussion on how ethical standards were applied.

Inquiry Approach

Action research. Action research is a participatory process that explores different aspects of the system to find a solution that fits the requirements and context of the organization being studied (Stringer, 2007, p. 5). Brydon-Miller, Greenwood, and Maguire (2003) articulated the value for action research as "the abiding respect for people's knowledge and for their ability to understand and address the issues confronting them and their communities" (p. 14). Based on my review of the literature (Brydon-Miller et al., 2003; Coghlan & Brannick, 2010; Glesne, 2011; Reason & Bradbury, 2008; Stringer, 2007), the following topics emerged to advocate the use of action research for the inquiry project.

First, action research is a participatory process that seeks to engage the people impacted by the change as well as the researcher in the process. It is through involvement in exploring the

issues and recommending a solution that readiness for change can be developed (Choi & Ruona, 2011, p. 65). In my role with AITF, I worked collaboratively with key stakeholders impacted by the transformative change. Action research was a good fit for the organizational leadership project to engage the stakeholders and impacted staff in the inquiry process.

Second, action research is a cyclical process to create knowledge through action (Brannick & Coghlan, 2007, p. 65). Concepts and theories are brought through the cyclical process to explore information at a deeper level to facilitate organizational readiness and learning (Rowe, Agger-Gupta, Harris, & Graf, 2011). Given its scientific research roots, AITF embraced critique and learning as an organizational practice. As a management consultant, I am familiar with process consultation (Schein, 1999) which is based in iterative cycles to collect and validate organizational information.

Third, the process for action research is focused on generating practical actions to specific issues. Action research facilitates the "proper identification of organizational issues" (Gregory, Armenakis, Moates, Albritton, & Harris, 2007, p. 79) which is critical to developing implementation actions. AITF had specific business requirements for the engagement, retention, and readiness of its staff for transformative change. The findings from this study provided AITF with recommendations to enhance its ability to manage on-going change.

Finally, according to Dick (2012) action research is suited to complex and turbulent situations since it facilitates responsiveness and flexibility. Through the cyclical process of action research, concerns and assumptions are reviewed resulting in faster response to emerging issues thereby creating local resilience (pp. 40-41). As highlighted in Chapter 1, AITF operates in a complex and turbulent environment with many external and internal drivers putting different pressures on the organization and its leadership at different times requiring AITF to be nimble

and responsive to these changes. Therefore the application of action research was expected to start the development of a change-ready and resilient leadership team to deal with the anticipated turbulence.

Appreciative stance. The action research project took an appreciative stance which "is the cooperative co-evolutionary search for the best in people, their organization, and the world around them" (Cooperrider, Whitney, & Stavros, 2008, p. 3). An appreciative stance enables change through its focus on possibilities and improvements rather than on what is broken and fixing a problem (Simons & Havert, 2012, p. 210). This inquiry project focused on enhancing change leadership skills. I believe that developing leaders through involvement in the change process is critical to achieving positive change outcomes.

Simons and Havert (2012) highlighted that an appreciative approach facilitates a top down and bottom up engagement of participants by creating an opportunity for the different perspectives in the organization to be heard and involved in understanding the current state, designing the future state, and developing the implementation plan (pp. 210-211). A review of research case studies concluded that projects using an appreciative approach tended to produce knowledge and action towards embracing change (Bushe & Kassam, 2005, p. 163). Given the technical and scientific strengths in AITF staff who were analytical and critical, while the full five-step sequence of the appreciative approach defined by Cooperrider et al. (2008) was not used, an appreciative stance was used to facilitate a focus on the possibilities for change and implementation actions.

Mixed qualitative and quantitative approach. A mixed method approach was used to collect quantitative and qualitative data for the inquiry project. Malina, Norreklit, and Selto (2011) stated that "combined quantitative and qualitative methods enable exploring more

complex aspects and relations of the human and social world" (p. 61). Quantitative data focuses

on the measurement for "how often and how many" (Malina, Norreklit, & Selto, 2011, p. 61)

whereas qualitative data facilitates understanding the organizational context and exploring the

issue through dialogue to comprehend what is really going on in the organization (Stringer, 2007,

p. 19). The mixed method approach provided different perspectives for the AITF inquiry results

that complimented each other enabling a robust analysis of the data (Ivankova, Creswell, &

Stick, 2006, pp. 3-4).

Participants

An inclusive approach was taken for the inquiry project by involving all 525 bargaining

and non-bargaining unit employees working for AITF. The all-inclusive rationale was to provide

AITF employees with the opportunity to participate in a change process that impacted all staff.

Stringer (2007) stated "community-based action research works on the assumption, therefore,

that all stakeholders-those whose lives are affected by the problem under study-should be

engaged in the processes of investigation" (p. 11).

Survey participants. In order to be inclusive to a wide range of participants (Stringer,

2007, p. 78), the online survey invitation and informed consent (see Appendix A) with the link to

the electronic survey was emailed to all 525 AITF employees. The online survey participant

group included staff with the organizational change history and experience which was the

primary focus of the research inquiry (Stringer, 2007, p. 35; Glesne, 2011, p. 43). The

participants were given fourteen days to complete the survey. A reminder email was sent out

eight days after the initial survey release, thanking those who had already participated and

reminding staff of the survey closing date.

Focus group participants. The original intent of this leadership project was to hold three focus groups including non-bargaining unit employees from different groups of non-management, middle managers (supervisors), and operations leadership. The focus groups were to include seven to nine participants each. If there were not enough participants to populate a specific focus group, the plan was to select more participants from the employee group.

A stratified purposeful sampling technique was used to select participants for each focus groups to ensure the sample pool represented non-union employees from all job levels, locations and business units to achieve a "relatively homogeneous subgroup" (Sullivan, 2009, p. 458) for the non-management, middle management and senior leadership participant pools. Union staff were excluded from the focus groups participant pool since the inquiry project focused on in-house change leadership capabilities in management level positions. An invitation to participate was issued to selected participants via email (refer to Appendix B) which included the informed consent, to 12 staff members for the non-management focus group and 10 staff members for the management focus group. The focus group volunteers emailed their consent back to the inquiry team member coordinating the focus groups.

Based on discussions with inquiry team members, it was decided to combine the middle manager and operations leadership focus groups into one focus group for management. This decision was made once it was confirmed that there were no direct reporting relationships between supervisor and operations leadership participants in the focus group thereby avoiding any undue influence concerns.

Inquiry team. To support the different stages of the action research project and to maintain participant anonymity, I created an inquiry team with AITF representatives and external representatives from the RRU MAL cohort. The invitation to participant on the inquiry team is

included in Appendix C. To test the survey questions and process, I engaged three members of

AITF's operations leadership team who had organizational knowledge, relationships, and change

leadership experience to provide cultural context (Tracy, 2013, pp. 6-7).

For the focus group questions and process, I recruited a fellow student from my RRU

MAL cohort and an AITF employee from the survey inquiry team to test the questions, focus

group process, and administer the selection process. The AITF employee selected the focus

group participants based on selection instructions provided by me and administered the member

checking of transcripts. The RRU MAL cohort member facilitated the focus groups and

transcribed the focus group session notes.

For the data analysis, I recruited two members of my RRU MAL cohort to assist in

identifying themes. To provide the organizational culture perspective, I invited two members of

the leadership team to review the findings in order to develop the recommendations and

implementation plan. These individuals were recruited based on their experience in leading

change at AITF and their accountability to implement the change recommendations. Since they

were "sponsors" and "agents" (Conner, 1992, pp. 106-107) for the change involving them in the

analysis and development of the recommendations increased their commitment to the change

(Coghlan & Brannick, 2010; Glesne, 2011; Stringer, 2007).

Inquiry Methods

To enhance the genuineness and credibility of the information generated by the project,

multiple methods were used to triangulate the data to find deeper meaning through "convergence

and dissonance" (Hussein, 2009, p. 3). According to Harrison (2013) using a convergent research

design facilitates the comparison of data to confirm and validate results (pp. 2158-2159). This

section describes the tools, study conduct, and data analysis techniques used in this project.

Data collection tools. "Multiple means of data development can contribute to research trustworthiness and verisimilitude, or sense of authenticity" (Glesne, 2011, p. 48). A mixed design of qualitative and quantitative data gathering tools were used in this inquiry project: online survey using Likert-type questions and focus groups. A description including the rationale for the choice of each tool is described below.

Online survey. The project started with the online survey. In order to reach the wide range of participants across multiple locations, an online survey (see Appendix D) was used in order to easily distribute the tool (Stringer, 2007, p. 79). The online survey containing the Likert-type questions was used to collect data on change leadership experiences and competencies. Using an online survey maximized anonymity for participants, enabled the respondents' ability to compare and rank their experiences (Fink, 2013, p. 1) and eased the data summarization which made "the bulk less intimidating" (Glesne, 2011, p. 193). Fink (2013) raised some disadvantages of surveys, specifically, that the survey population needed to be motivated and people may feel they were too busy to complete the survey (pp. 14-16). To mitigate these concerns, the reason for the survey was linked to the corporate strategic plan and the survey was designed using nominal and Likert-type questions.

A number of demographic questions were included on the online survey to enable my understanding of the composition of survey respondents based on job function, location, and years of service when compared to the total participant pool who received the survey (Fink, 2013, pp. 32-38) and to facilitate the examination of responses by sub-groups.

The body of the online survey questions was created based on research by Higgs and Rowland (2000) and Leppitt (2006) into change leadership competencies. A mix of 4 nominal and 39 Likert-type questions was used with a fixed response rating scale which facilitated

consistency and reliability in the responses (Cooperrider et al., 2008, pp. 204-205). The benefit

of using nominal questions was to obtain standardized data on the respondent's change

experience. The Likert-type questions provided data on the respondent's opinions about

leadership effectiveness and priorities for organizational change.

Framing the questions in a clear and unbiased manner using an appreciative stance was

important to obtaining data that was credible and authentic. To achieve my desired goal for data

quality, I pilot tested the survey questions and platform with inquiry team members.

The online software survey tool used was "FluidSurveys", a Canadian online survey

website with its databases located in Canada (FluidSurveys, n.d.). The survey tool was easy to

use for levels of experience. A copy of the survey questions is located in Appendix D.

Focus groups. In order to delve deeper into the issues and obtain a cross functional

perspective on the survey results, two focus groups were conducted. The focus groups each had

an independent facilitator who transcribed the session notes. Often characterized as a group

interview (Glesne, 2011, p. 130), guided by a facilitator, participants "describe their experience

and present their perspective on the issues discussed" (Stringer, 2007, p. 73). Krueger and Casey

(2009) highlighted criticisms that focus groups could produce intellectualize, made up, or trivial

results (pp. 13-15). To alleviate these concerns, the focus group questions were designed based

on the preliminary online survey results to ensure the focus group discussions were centered on

validating and exploring the information provided.

The facilitator was provided with a protocol to follow in terms of introductions,

explanation of the focus group process and the focus group questions (see Appendix E). To

ensure the questions were framed using an appreciative stance and remove any bias, the focus

group questions were reviewed with two members of the inquiry team. Protecting the focus

group participant's anonymity was a key requirement for me. The inquiry team member

coordinating the focus group meetings and third party facilitator ensured the names of the

volunteer participants were kept confidential and in a secure location.

Study conduct. The inquiry project was initiated when the action research team was

oriented to the project and online survey questions. The pilot testing for the online survey

included walking through the survey questions, asking the questions and discussing any unclear

questions. Based on feedback from the inquiry team, I revised the questions which were tested

again with the team using the online survey tool. Once the online survey tool was tested, the

survey invitation was sent to all 525 AITF employees. The "FluidSurveys" platform provided the

capability to remove all identifying and personal information which facilitated the availability of

generic, anonymous responses on the website for me to use.

Coghlan and Brannick (2010) highlighted that action research is a circular process of

acting, reflection on what was happened as a result of acting, and then applying the learnings to

plan the next actions (pp. 16-17). The first action was the survey which generated findings and

themes used to determine the focus and content for the focus groups.

The inquiry team was oriented to the process and procedures for the focus groups as

defined in the *Protocol and Questions for the Focus Groups* document (see Appendix E). The

pilot testing of the focus group process included going through the procedures and reviewing the

questions. As we refined the process and the facilitator was oriented to the process, the focus

group participants were invited through email distribution of the invitations (see Appendix B).

I ensured that neutral, interruption-free locations were scheduled for the focus groups to

ensure participant anonymity was maintained from those who were not part of these groups. The

participant's names were not recorded by the facilitator when the focus group notes were

transcribed. The transcribed focus group notes were sent to the participants of each focus group for member checking prior to being emailed to me. The request was for participants to review and offer any additional comments to the content to clarify that the transcriptions accurately reflected the discussion as they experienced it.

Data analysis. To uncover themes and relationships, data needs to be organized so that what was heard, recorded, documented and observed can be understood (Glesne, 2011, p. 184). As both quantitative and qualitative data was gathered, the approach used to analyze each data set are described below.

Quantitative data analyses. The number and percent of respondents selecting each response option for the demographic, nominal, and Likert-type questions was determined. For each Likert-type question the mean and standard deviation also was calculated. Further data analysis and comparisons were also examined across respondent sub-groups and for questions that asked respondents to rank order items, the total percentage of respondents who assigned each ranking to a response option was also determined for all respondents and for sub-groups. Finally, for the Likert-type items, percent selecting each response option were clustered to enable a comparison of the total percent of those who agreed (i.e. had selected both Agree and Strongly Agree responses) and those who disagreed (i.e. had selected both Disagree and Strongly Disagree responses) with the statement provided.

Qualitative data analyses. Analyzing the data from the qualitative research involved organizing, categorizing and coding the results which allowed the data to be reviewed to identify key experiences and patterns (Creswell, 2013; Glesne, 2011; Stringer, 2007). To minimize any biases in the data analysis, the "verbatim principle, using terms and concepts drawn from the words of participants" (Stringer, 2007, p. 99) was applied. Tracy (2013) referred to the

assignment of words and phrases that captured the essence of the data element as primary-cycle coding (p. 189). The focus group data were coded and the data sorted by these codes. The code book was instrumental for calibrating and creating a common understanding with members of the inquiry team as we organized and synthesized the codes into concepts, patterns and interconnected relationships (Tracy, 2013, pp. 190-195). Once the data was coded the data was aggregated into common themes (Creswell, 2013, pp. 186-187).

The data analyses phase concluded with an analysis and comparison of the survey and focus group results to triangulate the information for validation purposes and to find deeper meaning (Hussein, 2009, pp. 3-5). According to Creswell (2013), the triangulation process involves "corroborating evidence from different sources to shed light on a theme or perspective" (p. 251). A comparison of the data by respondent sub-groups, management and non-management, highlighted the shared and disparate perspectives across these sub-groups (Stringer, 2007, p. 99). To ensure the credibility of the analyzed data, I shared the information with two of my inquiry team members. Together we reviewed the raw data and agreed on the themes as identified. As a final step in the process, I validated the interpretations with the inquiry team and my advisor. As highlighted by Creswell (2013), I went through a "process of moving in analytical circles" (p. 182) to make sense of the data collected in order to tell the story.

Ethical Issues

This action research project involved human participants requiring it to follow the guidelines set out in the *Tri-Council Policy Statement for Ethical Conduct for Research Involving Humans* (Canadian Institutes of Health Research, 2010). This section describes how the requirements of *Royal Roads University Research Ethics Policy* (2011), and ethical obligations of the researcher were met.

Respect for persons. Respecting human dignity means recognizing, acknowledging and respecting the value of human beings in action research (Stringer, 2007, p. 54) and recognizing that our actions can affect people's lives therefore it is "our responsibility to act in the best interest of all" (Hilsen, 2006, p. 32). To align with *Royal Roads University Research Ethics Policy* (2011) concept of "undue influence", each participant was informed about the scope, objectives, process, and outcomes of the project to enable them to make an informed decision about voluntary participation and how to withdraw at any time from the project without repercussions (see Appendix A and B). The focus group participants were provided with the opportunity to review the transcripts of these session demonstrating an honoring of their input.

Respect for welfare. The participants of this inquiry project were professional staff working within the research and innovation system of AITF. I was not aware of any diminished capacity or overt vulnerability that any of the participants experienced. To maintain anonymity and confidentiality of participants, all personal information was removed from the raw survey data results and from the transcribed focus group notes. The data were stored without the use of personal information on an encrypted external storage device and only accessible to me.

The identities of the participants who volunteered for the focus groups were kept confidential and were not disclosed to me as researcher. As well, all focus group participants were required as per the informed consent form to agree to maintain as confidential the identity of fellow participants and the content of the comments made.

Justice. Research into humans must treat all individuals with fairness and equity. Respect for justice and inclusion has been addressed as all AITF employees were invited to participate in the research project through the survey data collection tool.

Conflict of interest. "As researchers we have a 'duty of care' in relation to all people we engage in the process of investigation" (Stringer, 2007, p. 54). For the research project, I had a dual role as a trusted advisor to the sponsor and executive committee, and the lead researcher. This duality required that I was clear about what role I am playing (Coghlan & Brannick, 2010, pp. 117-123). None of the research participants had a direct reporting relationship to me.

To offset any potential perception of bias, an inquiry team member was engaged for the final selection of focus group participants using the criteria that I developed so that participant identities remained unknown to me. A third party facilitator was engaged to lead the focus groups and transcribe the results.

Chapter Summary

In this chapter, I outlined the approach used to conduct the research project. I explained why action research was suited to studying the change leadership issue at AITF and why I chose the sampling and data collection tools applied in this project. I further explained how the research project was conducted and how the data was analyzed. The chapter wrapped up with a discussion about how the ethical considerations were addressed in the project. In the subsequent chapters, I present the findings and conclusions that emerged, my interpretation of these findings and the recommendations made to AITF leadership.

CHAPTER FOUR: ACTION INQUIRY PROJECT RESULTS AND CONCLUSIONS

In this chapter I describe the patterns, dynamics and characteristics that existed in AITF in response to the inquiry question: How can AITF's leadership team enhance its leadership capabilities to lead and sustain on-going transformational and cultural change? The sub-questions supporting the main question are (a) what change leadership skills and experiences currently exist in AITF, (b) how can any gaps found in change leadership skills be addressed, (c) what strategies can be put in place to enhance organizational learning and adaptability to lead transformative and cultural change, and (d) what implications might the results from the AITF inquiry have for other organizations endeavoring to undertake transformative change? This chapter describes the study findings and conclusions and then discusses the study limitations.

Study Findings

In this section the study findings highlighted reflect the opinions and experiences of AITF staff gathered through a change leadership survey (S) and two identically structured focus groups (FG). The findings uncovered and highlighted some of the characteristics, experiences, and dynamics particular to AITF that drive perceptions, opinions, and behaviors of the sample community included in the study. The focus of the inquiry project was on change leadership competencies, therefore contrasting the perspectives of management (Mgmt) with non-management (Non-Mgmt) respondents was germane to the inquiry project findings.

Survey response rates. The online survey invitation was emailed to all 525 AITF employees. There were 133 responses received resulting in a 25% response rate from staff across all locations. An examination of the responses to the demographic questions enabled a clearer understanding of those who chose to respond to the survey. As highlighted in Table 2 below,

there was an under representation of respondents from Vegreville (19%) and an over

representation from Calgary (33%) and 'Other' locations (38%).

Table 2

Survey Demographics by Work Location

Question 1 – Respondent Subgroup by Work Location	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Edmonton	63	84 of 336	25
Vegreville	15	21 of 110	19
Calgary	11	14 of 42	33
Devon	4	5 of 21	24
Other	5	6 of 16	38
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

As highlighted in Table 3, there was an under representation of respondents with lengths

of service of '3 years to less than 5 years' at 10% and '20+ years' at 13%. Comparatively there

was an over representation of respondents with 'Less than 1 year' (38%) and '5 years to less than

10 years' (35%) service.

Table 3

Survey Demographics by Length of Service

Question 2 – Respondent Subgroup by Length of Service	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Less than 1 year	15	20 of 53	38
1 year to less than 3 years	20	27 of 95	29
3 years to less than 5 years	2	3 of 32	10
5 years to less than 10 years	35	46 of 131	35
10 years to less than 20 years	16	21 of 116	18
20+ years	10	13 of 100	13
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

Table 4 highlighted that there was an over representation of 'Management' respondents (48%) and an under representation of 'Technologist' and 'Clerical' respondents at 12% and 11% respectively. By aggregating the 'Researchers', 'Administration/Business Professional', 'Technologists', and 'Clerical' response rates, this collective non-management subgroup was under represented (22%) when compared to the 'Management' sub group (48%).

Table 4

Survey Demographics by Subgroup for Function

Question 3 - Respondent Subgroup by Function	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Management	21	28 of 58	48
Researcher	29	39 of 140	28
Administration/Business Professional	29	39 of 135	29
Technologist	14	18 of 145	12
Clerical	4	5 of 47	11
Unknown	3	3 of 3	100
Totals	100	133 of 525	25

As highlighted in Table 5 below, 'Part-time employees' (33%) were over represented and 'Term/temporary employees' (20%) under representation in comparison to the overall survey response rate of 25%. The respondents with supervisory responsibilities were over represented (34%) in comparison to respondents indicating no supervisory duties (21%). Finally Table 5 also showed that bargaining unit staff were under represented at 15%, made more noticeable by the fact that non-bargaining unit staff were over represented at 33%.

Focus group response rates. There were two focus group events held. The first focus group (FG1) involved non-management staff. There were 12 staff members invited, 8 members volunteered to participate and 5 employees or 41% of those invited attended the session. The second focus group (FG2) involved management level staff. For this focus group 10 invitations

were sent out, 5 employees volunteered to participate and 2 employees or 20% of the invitees

attended.

Table 5

Survey Demographics by Employee Status, Supervision Duties, and Bargaining Unit

Question	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
4 - Respondent Subgroup by Employee Status			
Full-time employee	86	115 of 485	24
Part-time employee	4	5 of 15	33
Term / temporary employee	2	3 of 15	20
On contract	5	6 of 6	100
Unknown	3	4 of 4	100
Totals	100	133 of 525	25
5 - Respondent Subgroup by Supervise Staff			
Yes	38	51 of 148	34
No	59	79 of 374	21
Unknown	3	3 of 3	100
Totals	100	133 of 525	25
6 - Respondent Subgroup by Bargaining Unit			
Non-bargaining staff	72	95 of 286	33
Bargaining unit staff	26	35 of 239	15
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

In summary, an analysis of the demographics of the survey respondents concluded that

there was an over-representation from management staff and for employees with 'Less than 1

year' and '5 years to less than 10 years' service. By contrast, there was under-representation

from non-management and collective bargaining unit staff. The following comment from the

non-management staff focus group was perhaps an indication of the lack of participation "we

don't typically speak up but will quietly resist if there is not a full understanding of the change

and the plan" (FG1).

Survey respondent's previous change experience. As highlighted in Table 6 below, the management subgroup respondents reported having more experience leading change in their area of accountability (71%), sponsoring change (57%) and being a change agent (93%). However both groups reporting a similar degree of experience as a target of change and with different types of change. This summation implied that the survey respondents reported having the previous organizational change experience that enabled them to answer the questions about their observations of demonstrated change leadership behaviors.

Table 6

Survey Results for Respondent's Personal Experience with Change

Question	Total Percent Who Answered "Yes"		
	All	Mgmt	Non-Mgmt
7 - Have you previously managed the implementation of change in your area of accountability?	50	71	45
8 - Have you received any training in organizational change management (e.g. example in-house learning events, external training, certificate program, post-secondary program, etc.)?	44	79	37
9 - Indicate the types of organizational change initiatives you have been involved with?			
9a - Process improvement	65	86	62
9b – Installation and integration of a computer or application system	49	75	44
9c – Quality management system	37	64	31
9d – Creation of a new product or service offering	46	64	42
9e – Merger, acquisition, reorganization	41	71	34
9f – Other	16	18	16
10 - What roles have you played in previous change initiatives? Click on all that apply.			
10a - Sponsor: Individual or group who have the power and resources to sanction the change	23	57	14
10b – Agent: Individual or group facilitating the development and/or execution of implementation plans	62	93	56
10c – Target: Individual or group who must actually change	66	79	65

Question	Total Percent Who Answered "Yes"		
	All	Mgmt	Non-Mgmt
10d – Advocate: Individual or group who wants change but does not have sufficient power to sanction it however can influence others	42	64	37

Thematic findings. In this section the key thematic findings are discussed in depth and supported by selective evidence from the online survey and selective direct quotes from the focus groups to highlight the key data findings. Located in Appendix F are the online survey response rates by question and full reporting of the quantitative results of the Likert-type questions. In this section any responses included from the focus groups are identified as either (FG1) or (FG2).

There were three main themes identified during the data analysis phase of this action research project. These were: (1) the importance of understanding and managing change impacts across the different stages of the change process, (2) the desire to develop change readiness and engagement in the change process throughout the organization, and (3) the importance of visible leader commitment to change.

Theme 1: Importance of understanding and managing change impacts across the stages of the change process. Understanding and managing the impacts of change was identified by the action research project participants as an important factor in leading, implementing, and sustaining change. Participants voiced their desire to improve the management of organizational and people impacts to enable effective planning and implementation of the desired change.

Understanding why change was happening, assessing the impacts and developing realistic implementation plans to address these impacts was a shared theme raised by the respondents. To explore this theme in more detail, this section has been subdivided into two

topics: (a) understanding why change is happening; and (b) change leadership competencies required to manage the impacts of change.

Understanding why change is happening. Survey respondents were asked to rate their level of agreement or disagreement on a 5-point Likert-scale about their observations of leadership behaviors demonstrated in prior change initiatives. Table 7 below highlights the results of questions related to change leadership behaviors demonstrated that support why change was necessary and the management of change impacts. The change leader behaviors most observed by all respondents was communicating why change was necessary (11-a) with 61% agreeing and 23% disagreeing with this statement. The importance of delivering the change message was accentuated by this comment from a focus group participant.

> Often the reason for change is given with sugar coated words and needs to be translated into plain language. It would be more effective if the reason for change was given in clear and plain language with no spin put to the message. (FG1)

Table 7

Survey Results for Demonstrated Behaviors Related to Why Change and Change Impacts

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities:	Total Percent of Respondents Agreeing*			Total Percent of Respondents Disagreeing**		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
11-a. Understood and communicated the issues and reasons why change was necessary	61	57	62	23	28	22
11-l. Demonstrated personal commitment to achievement of change goals	55	65	53	21	23	21
11-g. Articulated and focused on benefits and desired outcomes of the change	52	57	50	22	20	23
11-b. Secured management commitment, budget and resources to support the change effort	49	54	47	22	27	21

11-k. Formulated implementation plan with milestones, resources, metrics and review mechanisms	41	38	43	34	39	33
11-c. Assessed and managed impacts of change on people and organization	34	30	36	35	38	34
* Respondents choosing Strongly Agree and Agree response options ** Respondents choosing Strongly Disagree and Disagree response options						

The next most observed behavior was related to the change leaders' demonstrated commitment to change (11-l) with 55% agreeing and 21% disagreeing. The third most observed behavior was related to articulation of the change benefits and desired outcomes (11-g) with 52% agreeing and 22% disagreeing overall. The next most observed change leader behavior was management's commitment to the change project (11-b) with 49% agreeing and 22% disagreeing. It was interesting to note that there was a difference of between 27% and 38% for all respondents agreeing and disagreeing with the four most observed change leader behaviors.

Most noteworthy in Table 7 above was that almost one-third of all survey respondents did not observe leaders managing the impact of change (11-c: 35%) or formulating an implementation plan with milestones, resources, and metrics (11-k: 34%).

Change leadership competencies required to manage the impacts of change. The survey respondents were asked to rank change leadership competencies at two different stages in the change process, initiating change and implementing change, using a 7-point Likert-scale, where 1 represented the most important competency and 7 the least important competency. Overall, the top 3 ranked competencies by all respondents were: (1) "building a case for change" (80% initiating, 50% implementing), (2) "change impact" (53% initiating, 48% implementing), and (3) "leadership presence" (47% initiating, 48% implementing), refer to table 8 and table 17.

As highlighted in Table 8, the competencies related to managing change impacts over the stages of change included 2 of the top 3 overall ranked competencies of building a case for change and change impact.

Table 8

Survey Results for Top 3 and Bottom 3 Ranked Competences for Stages of Change

Question	Total Percent of Top 3 Ranked Competencies*			Total Percent of Bottom 3 Ranked Competencies **		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
12: Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance.						
12-a. Build case for change: surfaces issues, articulates reasons why change is required and secures sponsor commitment	80	78	78	16	13	16
12-b. Change impact: scopes the depth and breadth of change impacts on people, processes, policies, stakeholders, customers and other organizational components	53	72	49	33	16	39
12-e. Transition management: develops and guides the change implementation with realistic timelines and goals; identifies and deals with resistance	32	17	37	44	54	41
Question 13: Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies?						
13-a. Build case for change: surfaces issues, articulates reasons why change is required and secures sponsor commitment	50	53	49	42	43	42
13-e. Transition management: develops and guides the change implementation with realistic timelines and goals; identifies and deals with resistance	49	38	52	33	48	32
13-b. Change impact: scopes the depth and breadth of change impacts on people, processes, policies, stakeholders,	48	72	40	42	20	48

customers and other organizational components							
* Respondents choosing 1, 2, or 3 response options as top ranked competencies							
** Respondents choosing 5, 6, or 7 response options as lowest ranked competencies							

Initiating change stage. For initiating change, the highest scoring change leader competency for all respondents (80%) was building a case for change (12-a), and it was also the highest ranking competency across both the management (78%) and non-management (78%) sub-groups. The importance of communication about why change is necessary was echoed by a focus group participant who stated "the business plan and vision is not clear and it is difficult to know where we are going. Engagement and involvement of stakeholders is not done making it difficult to get buy in through the organization" (FG2).

The next highest ranked change leader competency for all respondents was assessing the change impact (12-b) at 53%. A noteworthy observation was that another one-third (33%) of respondents ranked the change impact (12-b) competency in the bottom 3 priorities. Furthermore, there was a 23% difference in priority ranking between the management subgroup (72%) and the non-management subgroup (49%) for change impact with almost 40% of non-management respondents and 16% of management respondents ranking it as a low priority.

The importance of understanding the impacts of change was punctuated by a comment made in the non-management focus group "AITF needs to assess the impacts and communicate clearly what they see the impact will be and make sure they are talking to everyone who needs to be informed" (FG1). A participant in the management focus group offered the following guidance "see who will be impacted the most, understand what issues will they face and provide the resources to manage the challenge" (FG2). In scanning the focus group results the word "plan" was used 26 times and the word "impact" was used 23 times.

For initiating change, transition management appeared to be more important for non-management respondents (37% top 3, 41% bottom 3) then management respondents (17% top 3, 54% bottom 3). As stated by a focus group participant it is "important that key people are in the planning team to help develop the plan; get those who know and understand the day to day business involved" (FG2). Another participant stated "leaders need to put themselves in the change target's shoes, anticipate the concerns, and develop plans" (FG1).

Implementing change stage. For implementing change, over 50% of respondents ranked building a case for change (13-a) as important yet 42% of respondents disagreed and ranked it in the bottom 3 priorities. Almost 50% of respondents prioritized transition management (13-e: 49% top 3, 33% bottom 3) and change impact (13-b: 48% top 3, 42% bottom 3) as a higher priority however over one-third of respondents ranked these competencies in the bottom 3 priorities. Similar to initiating change, the spread between the top 3 and bottom 3 ranking for each of these competencies was 13% or less which implied some ambivalence in the respondents.

A notable observation was the difference in change leadership priorities between management and non-management related to change impact (13-b: 72% management, 40% non-management) and transition management (13-e: 38% management, 52% non-management). When identifying the least demonstrated change leader behaviors, the non-management focus group participants concluded the following "'formulate implementation plan with milestones' is the least demonstrated quality, followed by 'assessing and managing the impacts of change on people', and then 'assessing the readiness for change'" (FG1).

Shifting competency priorities between initiating change and implementing change. For non-management respondents, transition management shifted in importance from initiating

change (12-e: 37%) to implementing change (13-e: 52%). The priority shift in transition

management for the management respondents' doubled from 17% (12-e) in initiating change to

38% in implementing change (13-e). Also notable was the importance of change impact for

management respondents across initiating change (12-b: 72%) and implementing change (13-b:

72%), whereas building a case for change declined in importance by 29% for the non-

management subgroup from initiating (12-a: 78%) to implementing change (13-a: 49%). The

importance of the shift in focus between the stages of change was underscored by this focus

group comment "having an implementation plan is the most important focus area but the plan

has to be developed based on the criticality of the change" (FG2).

Immediate leadership actions for managing change impacts. Respondents were asked to

rank their top 3 leadership actions that they believed would significantly improve change

management within AITF. Table 9 highlights the actions identified that were related to

understanding why change is necessary and managing the change impacts. It is also interesting to

note that the top three actions identified by almost half of all respondents were "taking part in

open dialogue" (14-b, 50%), "receiving well designed orientation and training" (14-k, 45%), and

"opportunity to be more involved in front end design" (14-a, 42%).

Table 9

Survey Results for Priority Leadership Actions Related to Managing Change Impacts

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented	Total Percent in Top 3 Ranking		
	All	Mgmt	Non-Mgmt
14-b. Taking part in open dialogue sessions with senior leadership to better understand the need and drivers for change	50	52	48
14-k. Receiving well designed orientation and training required to successfully implement my part of the change before the change is introduced	45	19	52

14-a. Having the opportunity to be more involved in the front-end design of the changes being contemplated	42	62	35
14-e. Participating in working sessions to assess the impacts of the change on processes, staff, and technology	39	38	39
14-f. Using small scale pilots of proposed changes so that wrinkles can be ironed out before they are implemented more broadly	30	29	30
14-g. Having the opportunity to be more involved in the testing and integration planning of the changes that impact my department / function	23	10	28

Half of the respondents, including management and non-management, ranked understanding the needs and drivers for change (14-b) as a top priority. The most noteworthy difference in priority between management and non-management respondents was related to open dialogue with senior leaders to shape the change (14-a: 62% management, 35% non-management) and training tools to aid in the implementation of change (14-k: 19% management, 52% non-management). Another one-third of respondents highlighted the importance of assessing and working through the impacts of change using workshops (14-e), small-scale pilots (14-f) and testing (14-g). The difference in perspectives between management and non-management respondents was highlighted by a focus group participant about a previous change initiative "we were given a mandate but no clear direction and vision. It was left up to people to figure it out; we were thrown into the middle of it" (FG2).

In summary, a common thread through the survey and focus group results was the importance of assessing the impacts of change and then managing the change transition. To assess the impacts of change requires a critical first step, the understanding of why change was necessary. Almost two-thirds of survey respondents agreed that leaders tended to explain why change was necessary and just over 50% agreed that change leaders' also articulated the change benefits. Conversely one-third of respondents indicated that they had not observed change leaders assessing the impact of change or formulating an implementation plan. To implement

change requires an understanding of the change impacts in order to develop a transition plan. The major difference in priorities between management and non-management were related to change impact and transition management. Almost three quarters of management respondents ranked change impact of higher importance and less than 40% ranked transition management as important across the stages of change. By comparison only half of non-management staff ranked change impact as important across the stages of change and over 50% ranked transition management as more critical for implementing change. The next theme discussed is related to developing change readiness and engagement in the change process.

Theme 2: Desire to develop change readiness and engagement in the change process throughout the organization. Engaging people and readying the organization for change were leadership opportunities identified by the action research participants as important to achieving the desired outcomes for change. There was a strong desire expressed by both management and non-management participants to be engaged throughout the change process to enable organizational readiness and adaptability.

This section has been subdivided into the following topics to explore this theme in more detail: (a) engaging the people impacted by organizational change facilitates the adoption of change, and (2) a change leadership practice was not a priority for developing a change ready organization.

Engaging the people impacted by organizational change facilitates the adoption of change. This topic was underscored by the following comment made in a focus group "if you don't get the people properly engaged or managed well, it will affect the culture for years to come" (FG2).

Respondents were asked to rate change leader behaviors observed in previous change initiatives. As highlighted in Table 10, nearly 50% of respondents observed leaders engaging others in the change process (11-d) however almost one-third failed to observe this behavior. Conversely one-third of respondents observed leaders assessing readiness for change (11-j) and another 29% disagreed with this statement.

Table 10

Survey Results for Change Leader Behaviors Related to Change Readiness and Engagement

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities:	Total Percent of Respondents Agreeing*			Total Percent of Respondents Disagreeing**		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
11-d. Engaged others in the achievement of change goals	45	42	46	29	27	31
11-j. Assessed the readiness of the organization and people to embrace change	36	42	35	29	35	28
* Respondents choosing Strongly Agree and Agree response options ** Respondents choosing Strongly Disagree and Disagree response options						

A focus group participant emphasized the need for engagement by stating "key groups are not being brought into the planning stages. Key people and groups are brought in as an afterthought" (FG1). In exploring, previous change initiative failures, a non-management focus group participant stated "a root cause is that those with insights into the change are not able to influence the change plan or rollout" (FG1) and another participant echoed this statement with "the organization is not inviting all the key stakeholders groups into planning sessions" (FG1).

The survey also asked respondents to rank change leadership competencies at different stages in the change process. Table 11 highlighted that during the initiating stage of the change process, one-third of respondents ranked human dynamics (12-d: 34% agreeing, 47%

disagreeing) and stakeholder engagement (12-c: 31% agreeing, 49% disagreeing) in the top 3

change competencies and almost 50% of the respondents ranked both of these competencies in

the bottom 3 priorities.

With a difference of less than 20% between the top 3 ranked and bottom 3 ranked change

leader competencies, there was a noticeable lack of priority given to the human dynamics and

stakeholder engagement competencies by respondents. However, in the implementing change

stage, there was a noticeable 23% increase in the importance given to human dynamics (13-d)

from initiating change (34%) to implementing change (57%). This same pattern was observed in

the non-management subgroup with an increase of 18%, however for the management subgroup

there was a 7% decrease from initiating change (12-d: 41%) to implementing change (13-d:

34%). As one focus group participant stated when discussing stakeholder engagement and

addressing impact issues "whoever is the stakeholder in developing the plan they must be able to

take feedback and disclose information related to the feedback in order to address all the issues"

(FG1).

Table 11

Survey Results for Top 3 and Bottom 3 Change Competencies Related to Engagement

Question	Total Percent of Top 3 Ranked Competencies*			Total Percent of Bottom 3 Ranked Competencies **		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
12: Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance.						
12-d. Human dynamics of change: understands and deals with the people dynamics and helps others understand how people move through the change process	34	41	32	47	38	51

12-c. Stakeholder engagement and collaboration: influences and engages others by building coalitions and effective working relationships through open dialogue	31	39	30	49	48	49
Question 13: Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies?						
13-d. Human dynamics of change: understands and deals with the people dynamics and helps others understand how people move through the change process	57	34	50	34	34	35
13-c. Stakeholder engagement and collaboration: influences and engages others by building coalitions and effective working relationships through open dialogue	37	48	34	49	43	51
* Respondents choosing 1, 2, or 3 response options as top ranked competencies ** Respondents choosing 5, 6, or 7 response options as lowest ranked competencies						

Also noteworthy in Table 11 above, is the difference in priority between management and non-management respondents for the implementing change stage. Fifty percent of non-management respondents ranked human dynamics (13-d) higher in importance by 16% compared to management respondents (34%). Conversely nearly 50% of management ranked stakeholder engagement (13-c) higher by 14% in comparison to non-management respondents (34%). A comment made by a focus group participant underscored the importance of people engagement "previously I have seen an informal group put together to help the sponsor and advocate for the people going through the change. Someone who would bring forward concerns and be a voice for employees" (FG1). Another participate shared a contrary opinion that "AITF is involving people but they are not listening to those who they ask advice from. They will proceed without modifying the change to incorporate the concerns or advice that others have given" (FG1).

Survey respondents were asked to rank their top 3 leader actions. Table 12 highlights that over 90% of all respondents indicated that these specific engagement options provided (14-d, 14-j) were not important enough to make it into their top three leadership actions, as highlighted in theme 1 discussion on leadership competencies to manage change, to improve their perceptions of the way change can be implemented

Table 12

Survey Results for Ranked Leadership Actions Related to Engagement and Readiness

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented	Total Percent in Top 3 Ranking		
	All	Mgmt	Non-Mgmt
14-d. Being given more lead time to prepare before a change is actually implemented	7	5	9
14-j. Having the opportunity to participant in the design and planning for training and development activities for the change rollout	7	14	5

Though these suggested leadership actions in the survey were not a priority, focus group participants suggested some potential leadership actions for engagement such as "inform people as best as you can, give the information that you can and let people know what you can't disclose or do not know" (FG2) and another participate contributed that leaders needed "to bring together key stakeholders to get input and consider the impacts to the people and organization. The planning process would force leaders to work through the issues and consider how to manage the change" (FG2). The following suggestion for involving the people impacted by the change was reinforced by the following comment:

> Need to give employees time to work on the change and clear workloads so the change can be implemented properly. We have a full workload and there needs to be some consideration given to the time it takes to implement the change. (FG1)

A change leadership practice was not a priority for developing a change ready

organization. Table 13 below highlights the survey respondents' observations on change

leadership behaviors related to the development of a change leadership competency and practice.

Most noteworthy was that over one in three (38%) of all survey respondents, including

management and non-management, had not observed leaders developing change leadership

capabilities in others (11-h). A notable statement from the management focus group was "AITF

has given us some change management training but it was very basic. What you would read in a

text book" (FG2).

Table 13

Survey Results for Change Leader Behaviors Related to Developing Change Leaders

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities:	Total Percent of Respondents Agreeing*			Total Percent of Respondents Disagreeing**		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
11-i. Demonstrated ability to reflect and learn from situations and others	40	34	41	30	24	31
11-n. Applied appropriate change concepts, tools, and processes	34	27	36	26	35	24
11-h. Developed change leadership capabilities in others	33	30	33	38	39	38
* Respondents choosing Strongly Agree and Agree response options ** Respondents choosing Strongly Disagree and Disagree response options						

One-third of respondents observed leaders applying change concepts (11-n). However

26% disagreed with this statement which was reinforced by the following comment made by a

focus group participant "there is no formal change management process. It is done case by case

and change management is very sporadic sometimes it is done diligently and sometimes none at

all" (FG2).

Perhaps most noteworthy in Table 14 below for the initiating change stage was both management (75%) and non-management (61%) respondents ranked change management discipline (12-g) as a low priority; however nearly one-third of all respondents ranked it in the top 3 priorities. Similarly for the implementing change stage, it was ranked as a low priority by a large majority of both management (77%) and non-management (58%) respondents.

Table 14

Survey Results for Top 3 and Bottom 3 Ranked Competences Related to a Change Practice

Question	Total Percent of Top 3 Ranked Competencies*			Total Percent of Bottom 3 Ranked Competencies **		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
12: Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance.						
12-g. Change management discipline: knowledgeable about different change theories, tools and processes and applies these skillfully to the situation	27	17	30	64	75	61
Question 13: Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies?						
13-g. Change management discipline: knowledgeable about different change theories, tools and processes and applies these skillfully to the situation	24	10	28	62	77	58
* Respondents choosing 1, 2, or 3 response options as top ranked competencies ** Respondents choosing 5, 6, or 7 response options as lowest ranked competencies						

Another noticeable trend in Table 14 above was non-management staff who ranked change management discipline higher than did management by 13% and 18% for initiating change (12-g, 30%) and implementing change (13-g, 28%) respectively. Focus group participants highlighted the importance of change management disciple by stating "that they

were surprised to see 'Change Management as a discipline' at the bottom of both [competency] lists" (FG1).

Focus group comments about learning from previous change experiences included "employees have had bad experience regarding change from the past and are 'numb to change'. The combination of the past experience and the intelligence of the employee population have created low expectation of good change management." (FG1) and another comment was "as an organization we need to learn from previous change management attempts and modify how we manage change" (FG1). However as highlighted in Table 15, only one-quarter of staff ranked lessons learned sessions (14-i) as a top leadership priority.

Table 15

Survey Results for Ranked Leadership Actions Related to Engagement and Readiness

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented	Total Percent in Top 3 Ranking		
	All	Mgmt	Non-Mgmt
14-i. Conducting regular lessons learned and follow up sessions to understand what worked and what we could do better	21	24	21

In summary, engaging people throughout the change process was neither a top nor a bottom priority as expressed by the inquiry project participants. However lack of engagement was mentioned frequently by focus group participants. Noteworthy was the fact that developing a change management discipline was not ranked as an important priority by the participants. In the next section, the importance of visible leader commitment to change will be explored.

Theme 3: Importance of visible leader commitment to change. Results from the survey and both focus groups highlighted that leadership presence and direction was important to staff. The following statement from a focus group participant reinforced this response:

We would actually like a leader who gave clear direction of expectations and would come out and say this is what I need you to do rather than letting us try to figure out what is needed to be done to make the change successful. (FG1).

As highlighted in Table 16, when asked about behaviors related to leadership visibility and presence, survey respondents were ambivalent with just over one-third observing these leadership behaviors (11e, 11-f, and 11-m) and just under one-third to one-quarter disagreeing with these statements, thereby indicating that they had not observed these behaviors in their leaders/managers.

Table 16

Survey Results for Change Leader Behaviors Related to Leadership Presence

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities:	Total Percent of Respondents Agreeing*			Total Percent of Respondents Disagreeing**		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
11-e. Influenced and motivated others through personal advocacy and vision	44	46	43	31	31	31
11-f. Developed coalitions and relationships with other leaders and teams	40	42	40	22	27	20
11-m. Was resilient and dealt constructively with ambiguity	39	30	41	25	20	27
* Respondents choosing Strongly Agree and Agree response options ** Respondents choosing Strongly Disagree and Disagree response options						

Perhaps the following comment made by a focus group participant illustrated respondents' perceptions about leadership involvement in the change process.

We don't want to be listened to, the feedback needs to be taken and responded to. We want leaders to take action or say no and give a reason for the decision. (FG1)

Table 17

Survey Results for Top 3 and Bottom 3 Ranked Leadership Focused Competences

Question	Total Percent of Top 3 Ranked Competencies*			Total Percent of Bottom 3 Ranked Competencies **		
	All	Mgmt	Non-Mgmt	All	Mgmt	Non-Mgmt
12: Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance.						
12-f. Leadership presence: high personal commitment to change goals and deals with adversity while remaining objective; deals effectively with ambiguity and is resilient to see change through to completion	47	54	45	41	38	42
Question 13: Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies?						
13-f. Leadership presence: high personal commitment to change goals and deals with adversity while remaining objective; deals effectively with ambiguity and is resilient to see change through to completion	48	48	48	34	38	33
* Respondents choosing 1, 2, or 3 response options as top ranked competencies ** Respondents choosing 5, 6, or 7 response options as lowest ranked competencies						

Table 17 highlights survey respondents ranking for competencies related to leadership presence at different stages in the change process. Most noteworthy is the 50% of respondents who ranked leadership presence as a top 3 priority for both the initiating (12-f) and implementing (13-f) change stages. On the other hand, this competency was ranked in the bottom 3 priorities by 41% of respondents for initiating change (12-f) and by one-third for implementing change (13-f).

Feedback from the focus groups reinforced the desire for more leadership presence. One focus group participant stated "key leaders are not on site to support change and display their

own support for the change" (FG1), and still another stated "leaders don't take on change with

enough buy in from others and the leaders don't demonstrate their own commitment. They will

outline their expectations and either disappear or not put their own focus to the change" (FG1). A

participant from the management focus group highlighted that "change leaders need to

understand the organization and individual team cultures. All functions work differently and

have very different cultures. 'One size fits all' does not work here" (FG2).

A focus group participant commented "AITF leaders will set the expectations of change

and then leave it up to the line to figure it out on their own 'and we better get is right'" (FG1). In

scanning the focus group results the words "trust" or "mistrust" were used 10 times, and the term

"middle management" was used 9 times. In exploring the level of trust between management and

non-management the following comments from focus group participants related to trust and

middle management stand out:

> Change starts at senior leadership but they don't know what is going on at the floor . . ..
> They don't understand day to day operations and what may be the right thing for one
> group is not for the others. (FG2),

> General managers and up – very few of them have been in the 'trench' and they don't
> have the technical competence in their area to understand what happens in the field and
> the actual impact changes have to the organization. (FG1), and

> We will see the intermediate leaders but not the Senior Leaders of the organization.
> (FG1).

The following comment by a focus group participant appears to characterize the gap between

management and non-management.

> A disconnect exists between senior leaders and the line functions in the organization.
> Both have developed from very different backgrounds and education. We use very
> different language and thinking styles. It is hard to bridge between the two; there needs to
> be some translation between the two groups. (FG1)

Most noteworthy in Table 18 below, the percentage of respondents who preferred information sessions with leaders (14-c, 24%) was double the percentage of respondents who indicated a preference for written communication (14-h, 11%).

Table 18

Survey Results for Ranked Leadership Actions Related to Leadership Presence

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented	Total Percent in Top 3 Ranking		
	All	Mgmt	Non-Mgmt
14-c. Cascading of the change initiatives through briefings and information sessions with leaders and direct managers	24	38	20
14-h. Receiving more written information about how the change will be implemented	11	10	13

Highlighting the need for staff to experience visible engagement and participation by their senior leaders, a focus group member commented that they "feel department and frontline leaders are demonstrating a personal commitment but we are not seeing it from senior leadership" (FG1) and another participant stated

> In a number of presentations the wrong leader is giving the presentation, often a leader who is not directly involved in the change is used because of convenience but they don't have a full understanding of the reason or impact of the change. (FG1)

To summarize, this section highlighted the key themes that emerged from the analysis of the data collected from inquiry participants. Respondents clearly indicated the importance of understanding why change was happening and addressing the impacts to facilitate the adoption of change. There was also a strong desire expressed by the inquiry participants to be actively engaged in the change process in order to develop the readiness for change across all levels in the organization to implement change. In order to support the change transition process, respondents also strongly indicated the significance of leadership engagement, visibility and

commitment throughout the change process. Throughout the findings there was sub-theme highlighting the perception of the respondents about the senior leaders' lack of engagement and understanding business impacts. In the next section, the study conclusions will be discussed by grounding and illuminating the study findings in the learnings from the research literature.

Study Conclusions

The purpose of this study was to investigate how AITF could enhance its change leadership capabilities to lead and sustain transformational and culture change. Taking into consideration the study findings and the literature reviewed the following conclusions were developed: (1) AITF needs to define change leadership expectations and articulate them to leaders, (2) Enhancement of the engagement process between leaders and staff for implementing change is required, (3) Organization culture could jeopardize AITF's ability to implement and sustain transformational change, (4) Alignment between management and non-management staff is required to support the strategic change agenda, and (5) Managers require learning opportunities to become more effective and competent change leaders.

Conclusion 1: AITF needs to define change leadership expectations and articulate them to leaders. Engaged and visible leadership participation in the change process demonstrates commitment to the change and legitimizes the change effort. The research participants reported valuing leadership involvement in the change process as evidence by their agreement for the top three ranking competencies in the online survey of "building a case for change" (80% initiating change, 50% implementing change) and "leadership presence" (47%, initiating change, 48% implementing change). The focus group participants also stated "this population needs to see honesty and commitment from the leaders" (FG1), "the trick is how to get the technical teams and the leaders together for a common understanding" (FG1), and

another participant highlighted "a benefit will be getting everyone aligned and eliminate divergent ideas" (FG2).

Conner (1992) highlighted the four key roles in change (pp. 106- 107) and emphasized the role of change sponsor as the leader who legitimizes the change by demonstrating their support and commitment to the change both publically and privately (Conner, 1992, pp. 113-114). However, as highlighted by Aitken and Higgs (2010), a change sponsor can also be a change target therefore these change roles are not hierarchical but dynamic in nature (pp. 42-43). Therefore understanding the overall scope, competencies, and expectations of the change leader role, which can encompass Conner's (1992) four change roles, is critical (Aitken & Higgs, 2010, pp. 42-45).

The focus group participants discussed the need to "develop trust and credibility. Leaders just can't come in and expect that people will accept everything. Leaders need to develop trust and relationships and be visible and accessible during the change. 'Walk the talk'" (FG1). This is supported by Kouzes and Posner's (2007) discussion on the attributes of leadership when they stated "credibility matters" since it impacts the commitment, loyalty, and productivity of staff (p. 38). Their research pointed out four attributes of credible leaders: honesty, forward-looking, inspiring, and competent (pp. 28-36).

Research by Higgs and Rowland (2005) underscored the importance of change leadership as facilitating the change process which not only builds change capacity and resiliency in the organization (pp. 146-147), it also encourages staff engagement. To build trust with staff and a change capable organization, Higgs and Rowland (2011) stated "leaders need to focus efforts on doing change with people rather than doing change to them" (p. 331). Similarly, Elrod and Tippett (2002) highlighted that to develop resiliency and perseverance to move through the

change process, leaders need to provide direction and guidance to their staff (p. 289). By using

existing organization routines, trust can be established between management and staff through

the predictability of knowing about what is changing as it changes (Bryant & Stensaker, 2011,

pp. 365-368).

Concurring with Kouzes and Posner's (2007) "forward-looking" (p. 33) attribute for

leader credibility, Hamel and Valikangas (2003) stated that in order for leaders to anticipate

change and respond proactively, they needed to get close to where change is happening by

talking with front-line staff and customers while at the same time operating with a philosophy

that some of what the organization does today will be irrelevant in the future (pp. 516-518). This

understanding requires honesty, trust, and straight-talk between leaders and their followers.

In discussing why change is necessary, focus group participants highlighted that "there

tends to be a lot of unclear motivation for the change" (FG1) and "corporate goals need to be

understood throughout the organization" (FG2). For an effective change leadership practice to be

established, Gill (2003) emphasized vision, strategy, and inspiration as key elements along with

values, empowerment, and motivation (p. 312). Supporting the importance of initiating change,

Leppitt (2006) highlighted that 66% of the change frameworks he studied tended to focus on the

planning and change initiation stages suggesting a stronger emphasis on the reason why change

was necessary and securing senior leadership commitment to change (p. 133).

Organizational leaders must not only provide a strong and compelling reason for change

but they must also demonstrate, through their actions, their commitment to the change. As Bruch

et al. (2005) stated "the primary leadership issue in strategic change - deciding what change

would be right – really needs to be resolved at the beginning of the process" (p. 99). "Leaders

inspire vision" and "leaders cannot command commitment, only inspire it" (Kouzes & Posner,

2007, p. 17). In his research on change leaders, Fullan (2011) concluded that leading change is about action; leaders need to be "walking the walk" (p. 16) in order to learn what is going on, rather than being a spectator and just talking about change (pp. 16-20).

This conclusion highlights that for change leaders to be effective and successfully lead change, they need clarity on what is expected of them and their accountability in the change process. By defining the change leader role and expectations, Anderson and Ackerman Anderson (2011) emphasized that this would increase the level of awareness leaders bring to the role thereby changing their behaviors (pp. 82-83). However, leaders cannot implement change without the involvement of others. The next conclusion discusses the importance of engaging staff and middle managers throughout the change process.

Conclusion 2: Enhancement of the engagement process between leaders and staff for implementing change is required. Change success is dependent on the involvement of the people impacted to implement change. The online survey respondents agreed by ranking "change impacts" in the top three leadership competencies at 53% for initiating change and 49% for implementing change. Half of the survey respondents (49%) also agreed that "transition management" was important during the implementation stage of change. Focus group participants reinforced the importance of assessing the impacts of change by observing "leaders should consider the nature of the change, impact to the organization, and complexity and tailor the approach" (FG2), "actually doing the assessment would be a good first step" (FG1) and another participant indicated that "there needs to be a better assessment of the full impact of the change" (FG2). This impact assessment was reinforced by 39% of online survey respondents agreeing that "participating in working sessions to assess change impacts" was an important leadership action.

Ahn et al. (2004) concluded that one of the leading indicators for successful change was the engagement of employees from all levels in the organization (p. 115). Furthermore, they highlighted that it was the role of the leader to become actively involved by developing networks and bringing staff together to analyze the situation from different perspectives to understand the underlying issues (p. 121). In order to do the change right means gaining acceptance for the change and involving "the right people to sell, implement, and drive the program from start to finish" (Bruch et al., 2005, pp. 101-104).

Focus group participants indicated what engagement meant through these comments:

We need a project plan to get onboard (FG1);

Middle managers understand both sides and are accountable to both groups. They are the only group with a good level of insight into the impacts of the change and understanding of why it needs to be done (FG1); and

This group made a very clear distinction between a leader and a manager and felt that most of AITF was managing the day to day task but not taking on a leadership role. They were also very clear that they felt that middle and direct leaders were performing very differently than the senior level leaders (FG1).

Balogun (2006) recommended that change workshops and informal discussions continue throughout the change process in order to address staff and middle manager questions and interpretations of how to implement change (p. 45). Furthermore, the role of middle managers is to develop the operational plans in support of strategic direction however it is the front-line managers and staff who must implement these plans; therefore they must be engaged in the change process (Gilley et al., 2009, p. 39). Armenakis and Harris (2009) concurred and pointed out that change recipients' self-efficacy is enhanced when they participate in solving their own problems and implementing their solution choices (p. 130). Meyer and Stensaker (2006) agreed that involving staff members from across the organization creates an environment of ongoing

dialogue about how to implement change (p. 224). However, they also advised that to develop a change capable organization, change activities must be prioritized and resourced in conjunction with the existing operational commitments to understand the cumulative effect of change (pp. 219-220).

There is a paradox in the middle managers' role in the change process as both a target and agent of change caught between top-down driven strategies and bottom-up change (Conway & Monks, 2011, p. 199). Choi and Ruona (2011) concluded "in order for organizational members' involvement and participation in the change process to have successful outcomes, they must be knowledgeable, capable, and motivated to make a genuine contribution" (p. 63).

In support of this conclusion, Lines (2004) research emphasized that "broad involvement of organizational members that are affected by change is associated with success at implementation" (p. 211). Lines (2004) further highlighted that a genuine invitation to participate was important especially for disruptive change (pp. 211-212) that impacts behaviors and the underlying culture. This leads naturally into the next conclusion about the influence of organization culture on the change process.

Conclusion 3: Organization culture could jeopardize AITF's ability to implement and sustain transformational change. Underlying the culture of an organization are the unseen assumptions, beliefs, and behaviors that drive peoples' actions. Though specific questions about culture were not included in the online survey, comments made by focus group participants indicated some organization patterns and subcultures which could potentially impact the success of AITF's transformational change journey. These comments include:

> AITF is a very detailed oriented audience who wants to analyze data with a very critical eye and will be analytical of content. The leaders are not factoring in the profile of the audience (employee population) in their communication or pre planning (FG1);

In general the population is: inoculated to change; jaded; cynical, introverted, not good communicators (FG1);

We have a difficult organization because we are all trained to question and analyze everything. It is difficult for anyone to answer all the questions we will have (FG2); and

This is an unforgiving environment with high expectations from the workforce (FG1).

Schein (2010) advised leaders to understand the different subcultures and micro cultures at work in an organization because often they work at cross purposes (pp. 55-65). Additionally each subculture can make assumptions and apply mental models (Senge, 2006, p. 163) that determine how each subculture views and interacts with each other. As pointed out by Schein (2010) often organization issues related to bureaucracy and conflicts are symptoms of misaligned subcultures (p. 65). Cameron and Quinn (2006) discussed the degree of congruence between the subcultures as an indication of alignment, so the degree of incongruence present in the organization could signal a need for change (pp. 73-74).

As discussed in Chapter 1, AITF has a long history with its corporate roots reaching as far back as 1921. As the organization grew and matured, most likely its culture unfolded without conscious design as a result of the accumulative effect of policies and decisions (Conner, 1992, p. 169). Therefore recognizing the attributes of its current stage in its culture evolution process is critical to AITF's change journey (Schein, 2010, p. 273). Additionally, understanding the influencing factors, strengths and challenges of the existing corporate culture and subcultures is critical, especially for organizations in their mid-life, and may require different change approaches to transform any embedded, dysfunctional behaviors (Schein, 2009, pp. 152-153).

As highlighted by Conner (1992) managing culture is critical to enhancing resiliency and reducing dysfunctional behaviors in the organization (p. 173) and changing culture requires a strong, deliberate focus from executive management (Conner, 1992, p. 174; Schein, 2010, p.

317). Similarly, Anderson and Ackerman Anderson (2010) identified six conditions for culture change success starting with the need for a business case highlighting that culture change is a business imperative linked to corporate strategy (pp. 195-197). They also highlighted that it is imperative for senior leadership, from the CEO down, to model the new behaviors at all times (p. 196). "Model the way" (pp. 15-16) as described by Kouzes and Posner (2007), means you behave the way you expect others to behave, "every day and in every way" (Aitken & Higgs, 2010, p. 112), even when others do not reciprocate the behavior (Fullan, 2011, p. 33).

Argyris (2010) identified productive and counterproductive cultures and further demonstrated that to change culture requires people to unlearn their current "theory-in-use" mindsets so they can learn new ways (pp. 119-121). However, the unlearning and learning process requires people to be cognizant of the context in which they operate and how mental models used influence their day-to-day interactions in the organization (Oshry, 2007, pp. 15-19). This is particularly relevant when assessing the different perspectives between the management and non-management levels explored in the next topic.

Conclusion 4: Alignment between management and non-management staff is required to support the strategic change agenda. Alignment between leaders and followers is essential over the long-term to build a change-adaptive organization otherwise organizational performance could be undermined between potentially conflicting priorities (Werther, 2003, p. 42). There was a noticeable difference in change leadership priorities between management and non-management responses in the online survey results. Overall the change impact competency was of a higher priority to management respondents across the stages of change, whereas the change leader competencies of transition management and human dynamics were of more importance to non-management respondents, especially during the implementing change stage.

The differences in focus could be characterized as planning versus implementing which tends to align with the difference in focus between leaders and followers. However as highlighted in the culture discussion above, if the two groups are operating with different expectations of each other and are not addressing the underlying assumptions, they will continue to perform in the same way engaging in the "dance of the blind reflex" (Oshry, 2007, pp. 64-68) and remain out of alignment for implementing the strategic change agenda. This difference in perspective between leaders and followers was emphasized by focus group comments such as "there is a difference between the VPs and the intermediate leaders. VPs are absent and do not demonstrate their commitment, the intermediate leaders are left to implement and work through the change on their own" (FG1) and "the senior leaders and the working business units are in two different worlds and there is no common ground" (FG1). Other focus group comments highlighted the silos between operating units: "each group has its own function and drivers" (FG2) and "each group needs a better understanding of each other" (FG2). These comments highlight the potential tension between tops, middles and bottoms in the organization (Oshry, 2007, pp. xiii-xiv).

As pointed out by Werther (2003) if the differences in leader and follower perspectives and assumptions are not addressed there is a potential for collision which can fuel a cycle of change resistance (p. 35). However, Furst and Cable (2008) stated managers needed to focus their efforts on overcoming employee resistance for change to be successful, and furthermore employees' interpretation of the change could be linked to their affinity with their leader (p. 458).

Understanding the dynamics of and what influences the leader-follower relationships is important in the development of a change leadership competence.

Conclusion 5: Managers require learning opportunities to become more effective and competent change leaders. Developing a change leader competence is about personal mastery and self-reflection, requiring leaders to look at how their actions and behaviors contributed to the problems they experienced (Senge, 2006, p. 12). Knowles et al. (2012) pointed out that learning is realized through experience; therefore is a continuous process (p. 192). However for learning to happen, there needs to be an environment established enabling ongoing exploration and growth opportunities (Knowles et al., 2012, pp. 192-193).

Though over 60% of the online survey respondents did not rank "change management disciple" in the top three change leader competencies, there were comments made by focus group participants about the effectiveness of change leadership skills which indicated a need for improvement. Comments such as: "overall I believe that AITF has a poor management of change" (FG1), "leaders need to get experience in working at change and facilitating teams" (FG1), and "turnover has caused a lack of depth in our organization for managing change" (FG1). Noteworthy, was an acknowledgement by the focus group participants about recent improvements, "the current change seems good so far" (FG1) and "the JDE implementation is an example of a recent change that was handled very well" (FG1).

Senge (2006) defined a learning organization as "an organization that is continually expanding its capacity to create its future" (p. 14). To develop the organization resiliency to embrace ongoing change requires the continuous renewal and growth of the organization's change leadership competence. Then, as Argyris (1993) stated, a learning environment becomes not about "selecting the right words" but about "selecting the right action strategies and values that will facilitate leading-learning" (p. 17). Shanley (2007) stated that the most direct way for leaders to learn how to manage change was on the job experience since direct engagement

facilitates leaders' learning about what is really going on (p. 969). Additionally, for change to become a routine practice within the organization, it needs to become integrated into the organizational processes (Soparnot, 2011, p. 643).

To become a learning organization means letting go certain paradigms which Senge (2006) called "learning disabilities" (p. 18). To overcome these learning disabilities means the following: becoming more outcome focused, taking accountability for our actions, focusing on the longer term, noticing the subtle changes in our environment, accessing the broader impacts of change, and accepting that management does not have all the answers (Senge, 2006, pp. 18-25). Therefore to move towards team learning, Senge (2006) emphasized conversations and dialogue to get to the root cause of issues by exploring issues from different perspectives and reaching a common understanding (pp. 221- 224). Change is really all about people engaging and working with other people to find solutions.

In summary, the literature validated this inquiry's findings that strategic change needs to be led by competent change leaders who not only understand their role but also engage others throughout the change process. Literature supported research findings on what are the five focus areas for developing and growing a change leadership competence within the organization. First, change leaders must understand their role and what is expected of them. Second, effective engagement strategies are required to bring staff and managers together to understand and manage the impacts of change. Third, understanding and addressing the cultural influences is critical in order to develop a change capable organization. Fourth, strengthening the working relationship between leaders and followers is important for ongoing alignment and change readiness. And finally, putting in place a framework to create leader-learning opportunities supports the ongoing development of change leadership capabilities.

Scope and Limitations of the Inquiry

The scope of this inquiry project was on change leadership competencies and limited to the employees working for AITF at the time of the study. There was an unequal representation of non-bargaining and bargaining unit staff as well as for staff across the different locations with Vegreville being under represented and Calgary over represented. There was also an unequal representation of employees based on years of service with a noticeable under representation from staff with more than 10 years of service. While it cannot be determined with any certainty what the impacts have been of this somewhat skewed sample of voluntary participants, the reader should be cautious not to over-generalize the results and conclusions beyond the scope of the study.

The online survey included ranking questions about the importance of specific change leadership competencies over the change process and the focus group also sought comment on the practice of these competencies. However neither data collection method asked for self-assessments or assessments of existing change leadership competencies within the organization. Therefore, while areas of some concern were identified, the reader should be cautious not to misinterpret the results as being a definitive assessment of the change leadership competencies within AITF at the time of the study.

Since there was a potential power imbalance between myself and potential participants, I was not able to facilitate the focus groups. As I reviewed the transcripts, I noticed there were areas where answers were given or questions were asked by participants that, if I was able to facilitate, I would have probed further. This resulted in those issues and questions not being answered and may have impacted the depth and richness of the qualitative data collected.

Initially there were 22 participants invited to the focus groups that would have resulted in three focus groups of seven to eight participants. However, once dates were set for the external facilitator, only seven people were available; five from the non-management group and two from the management group. The lower than anticipated participation rates in the focus groups may have impacted the depth and richness of the qualitative data collected.

Chapter Summary

The intention of this action research project was to engage management and non-management employees to identify actions that AITF leadership could take to enhance its change leadership competency. The study findings revealed that AITF staff desire engagement in the change process as well as active and visible leadership for organizational change initiatives. The conclusions verified that in order for AITF to enhance its change leader competence, leaders need to understand what is expected of them as change leaders and have opportunities to be directly involved in the change process in order to learn and develop these skills.

The research results indicated that there are opportunities for AITF to enhance its change leadership capabilities and practice by responding to and incorporating each conclusion into their corporate change strategy. This would include ensuring that managers leading change have clear expectations and accountabilities for change, staff have opportunities to be directly engaged in the change process to assess impacts and manage the transition, organization culture is taken into consideration as part of the change process, and opportunities are provided for leaders and staff to learn from each other through conversations and dialogues. In the next and final chapter, the recommendations provided reflect these conclusions and offer a roadmap for how AITF may respond to these research findings.

CHAPTER FIVE: INQUIRY IMPLICATIONS

In this final chapter, the literature, research findings and conclusions have been synthesized to develop recommendations for AITF leadership to integrate into their strategic change agenda. This chapter concludes with an assessment of the organizational implications and risks if the recommendations are not implemented, and proposes guidance for future research.

The inquiry question explored for this research project was: How can AITF's leadership team enhance its leadership capabilities to lead and sustain on-going transformational and cultural change? The further exploration of the following sub questions contributed to additional understanding of AITF's change leadership capacity and preferred approaches to developing competence. The sub-questions supporting the main question were: (a) What change leadership skills and experiences currently exist in AITF? (b) How can any gaps found in change leadership skills be addressed? (c) What strategies can be put in place to enhance organizational learning and adaptability to lead transformative and cultural change? and (d) What implications might the results from the AITF inquiry have for other organizations endeavoring to undertake transformative change?

Study Recommendations

Developing a leadership capability to manage organizational change is critical to enabling strategic change (Aitken & Higgs, 2010, p. 289; Shanley, 2007, p. 976). "Leaders' success then will be measured not by the number of followers they have, but rather by the number of individuals that they have inspired to become leaders themselves" (Slater, 2008, p. 67). The intent of the following recommendations is to create a framework to enhance AITF's change leadership capacity and organizational adaptability to sustain its strategic change agenda over the next three to five years.

The recommendations, which are each discussed in detail below, are:

(1) Establish executive accountability and visibility for change leadership by appointing an executive owner with overall responsibility for organizational change leadership and incorporating change leadership measures into AITF's corporate goals;

(2) Establish a strategic change office to ensure consistency in approach, engagement of staff across the strategic change agenda, and organization-wide communication on the change agenda;

(3) Assign change leadership accountability for each strategic initiative to ensure staff engagement in the change process and a well-executed transition management process;

(4) Develop and implement a program for the ongoing development of a change leadership competency across the organization; and

(5) Establish a network of change leaders, agents, and advocates to facilitate the adoption of change.

Recommendation 1: Establish executive accountability and visibility for change leadership. Developing a change-capable organization requires an investment and commitment of time, resources, and organizational infrastructure to establish a strategic change discipline (Anderson & Ackerman Anderson, 2010, p. 108). Therefore, to integrate and facilitate change adoption across its strategic agenda, it is recommended that AITF assign accountability for change leadership to a senior executive reporting to the CEO (p. 120). This executive does not own the strategic change initiatives but creates the conditions and infrastructure for the successful adoption of change and the development of change leadership competencies across the organization (p. 121). To reinforce the importance and visibility of change leadership, it is

also recommended that AITF build change leadership measures into its 2014/2015 corporate goals and subsequent reporting processes.

Kouzes and Posner (2007) emphasized that leaders must "model the way" (pp. 15-16) which means providing clarity to staff on what is important. Therefore by elevating the importance of change leadership as an executive accountability, tracked and reported as part of AITF's corporate goals, this action provides a talisman to the leaders and staff to 'walk the talk' by being visible and engaged throughout the change process. As noted by Balogun (2006) leaders must be consistent in their actions, words, and behaviors (p. 47), and more importantly at an individual as well as a group level. For a strategic change agenda to be successful, it requires committed and engaged sponsorship that cascades through all levels of the organization and the resources required to meet the demands of change (Conner, 1992, pp. 112-122). Thus by placing the accountability and visibility for change leadership at the executive level, AITF management is confirming its commitment of staff, budget and time to deliver on the strategic change agenda.

Recommendation 2: Establish a strategic organizational change office. AITF has undertaken a multi-year transformative journey to address the internal and external drivers for change. Additionally, the inquiry project respondents indicated that there is room for improvement in how AITF leads organizational change. Therefore, to enhance its change leadership competence, it is recommended that AITF establish a strategic change office for the next three years to oversee the change process and development of change leadership skills. To ensure executive visibility and accountability, it is also recommended that this strategic change office report to the executive given the accountability for change leadership. Anderson and Ackerman Anderson (2010) advocated that the strategic change office report at the executive

level to ensure it has visibility and that change is discussed at the highest levels in the

organization (p. 127).

Additionally, cultivating change leadership competence requires more than developing

people, it involves establishing the infrastructure, processes, and systems to support the

integration of AITF's strategic change agenda into business operations (Anderson & Ackerman

Anderson, 2010, p. 128). The AITF strategic change office will need to provide the ongoing

coordination, facilitation, and integration of change activities across the strategic initiatives by

working with the impacted AITF leaders and staff. As indicated by the AITF participants in the

inquiry research project, improvement was required in the change processes and the engagement

of staff. Aitken and Higgs (2010) advised that organizations need to develop their change

leadership framework by taking into consideration its current state, strategy, culture, and

capabilities to determine what is needed, the gaps and the priorities (pp. 272-273).

Additionally, the strategic change office can be the organizational catalyst to integrate

process consultation and appreciative inquiry into the change leadership framework to enable

organizational learning and change through diagnosis and intervention (Cooperrider et al., 2008,

pp. 3-4; Schein, 1999, p. 661). This positions the strategic change office to provide guidance and

coaching to the AITF change leaders and agents on how to address issues and navigate the

organization culture (Coghlan & Brannick, 2010, pp. 154-155).

A key benefit of the strategic change office will be its enterprise-wide and integrated

visibility of the change impacts on people, the organization and culture. Therefore it can manage

and report on the corporate impacts and readiness by stakeholder and time period. This

comprehensive dashboard of impacts can facilitate dialogue to assess change risks and adoption

in order to prioritize the changes, develop realistic transition plans and coordinate the timing of

the impacts on specific stakeholder groups. The strategic change office plays a pivotal role in overseeing the management of the change, as emphasized by Bridges (2009) when he stated "the first thing you're going to need in order to handle nonstop organizational change is an overall design within which the various and separate changes are integrated as component elements" (p. 101).

Another key role for the strategic change office is to assess the pace and volume of change in order to make recommendations on what changes are critical and minimize any incremental changes that could be disruptive (Bridges, 2009, pp. 102-103) to operations and customer service. This proactive planning and forecasting of change impacts can help to minimize the potential of change fatigue and contribute to enhancing the ability of employees and leaders to manage complex and simultaneous change events (Stensaker & Meyer, 2012, pp. 118-119). Therefore the strategic change office provides a service to the organization for sense-making to understand what is going on and confirm that the organization has the capacity to succeed in order to bring about the right change at the right time (Aitken & Higgs, 2010, p. 135-136; Anderson & Ackerman Anderson, 2010, p. 123-124).

Since the strategic change office will have the overall visibility of the change impacts and progress, it is well positioned to coordinate and orchestrate an enterprise-wide organizational change engagement and communication program to address the following organizational needs: keep staff up-to-date on the progress of the strategic change agenda, highlight the challenges being addressed, identify areas where input and feedback from staff is required and how they can participate, broadcast the success stories from the employee and leadership perspective, and provide a dashboard on the achievement of key milestones and desired outcomes being celebrated.

Another critical role of the strategic change office is to collect feedback, assess, and report the state of the culture and change leadership competency across the organization. This information can be used to provide input to the leadership development programs, the establishment of communities of practice, and adjustments to the implementation plans supporting the long-term change agenda. As highlighted by Cameron and Quinn (2006) culture runs deep in the organization and therefore to shift culture, it needs to be integrated, incorporated and orchestrated into all change activities and initiatives across the organization (p. 104). Additionally, Schein (2009) stated the following about culture "if you do not manage culture, it will manage you-and you may not even be aware of the extent to which this is happening" (p. 215).

Recommendation 3: Assign change leadership accountability for each strategic initiative to ensure staff engagement in the change process and a well-executed transition management process. As AITF takes a deliberate, integrated approach to enhance its change leadership competence, leading change will become a strategic organizational discipline (Anderson & Ackerman Anderson, 2010, pp. 106-107). Growing this strategic capability involves developing in-house change agents who have accountability for implementing change and living "with the consequences of their decisions" (Meyer & Stensaker, 2006, p. 227).

Research has highlighted that change leadership responsibilities are part of the day-to-day activities for leaders (Aitken & Higgs, 2010, pp. 257-270; Meyer & Stensaker, 2006, pp. 218-220; Gilley et al., 2009, p. 39). Furthermore Aitken and Higgs (2010) stated that the roles in the change process need to be understood in order to identify what leadership skills and qualities are required for each change role (p. 42). Therefore, in addition to assigning an executive accountable for change leadership, it is also recommended that AITF assign accountability for

leadership for each of the strategic change initiatives. This will require that AITF define the expectations for change leadership at all levels in the organization and include these in the performance measures and position profiles for AITF managers to reinforce their accountable for leading change.

The research study participants indicated that it was important to understand why change is necessary and to be engaged in assessing impacts and transition planning. Therefore, by assigning accountability to change leaders to engage and involve the people impacted by change in the change process, AITF can increase the likelihood of change being implemented and adopted within the organization. Research showed that recipients of change need to be active contributors and involved in impact assessment and transition process which enables change readiness and adoption (Balogun, 2006; Choi & Ruona, 2011; Higgs & Rowland, 2011; Werther, 2003).

As highlighted by the inquiry project participants, there was a strong desire to be involved in the change process to understand what was impacting them so that they could develop plans to implement the changes and mitigate any adverse impacts. The participants also highlighted the need for middle management to be involved in the change process. In order to develop ownership for change, Fullan (2011) pointed out that change leaders need to engage people and teams in the testing of new ideas while listening and learning from their reactions (p. 53). Additionally, the underlying proposition for action research and appreciative inquiry is to engage people to investigate and resolve problems that confront them on a day-to-day basis (Coghlan & Brannick, 2010; Cooperrider et al., 2008; Stringer, 2007), which is similar to process consultation designed to help people to diagnose and develop action plans (Schein, 1999, pp. 644-647) to their organizational challenges.

To enable ownership for the change impacts and transition management, middle managers need to play a pivotal role in the change process (Conway & Monks, 2011, pp. 199-200). Therefore it is further recommended that middle managers are assigned accountability for the development and execution of the engagement plans to assess impacts and prepare transition tactics for the implementation of change. As concluded by Lines (2004) "the effects of participation are stronger when the change is intended to increase the level of efficiency in the organization" (p. 211). Additionally, Bolman and Deal (2008) highlighted research that showed employee participation in the change process was a powerful technique contributing to improvements in morale, productivity and performance (p. 151).

Recommendation 4: Develop and implement a program for the ongoing development of a change leadership competency. To ensure that there is a sustainable change leadership competence over the long-term to support AITF's strategic change agenda, it is recommended that change leadership competency development be incorporated into AITF's leadership development program. It is further emphasized that the development programs incorporate classroom and on-the-job learning opportunities as well as coaching and mentoring to reinforce and support the learning process (Bolman & Deal, 2008, pp. 148-149; Brookfield, 1986, pp. 30-31). Additionally, as highlighted by Kouzes and Posner (2007), leadership skills can be learned through observation and practice (pp. 339-341). This highlights the organizational need to ensure that the senior leadership team members are being good role models for other leaders and staff by "modelling the way" (Kouzes & Posner, 2007, pp. 73-79) as well as actively serving as mentors and coaches to other leaders.

It is also recommended that AITF conduct an assessment of its current change leadership capabilities to identify its leadership strengths and areas for improvement in the competencies

required to advance its strategic agenda. As Higgs and Rowland (2000) observed the

"competency development process needs to mirror context" (p. 127) meaning that AITF's

leadership program needs to be developed and managed based on the leadership requirements for

the short and long term needs of the change program.

To develop an adaptive organization, it is recommended that AITF adopt practices and

techniques for managing knowledge by promoting learning at all levels in the organization

through the application of systems thinking (Senge, 2006, p. 315). This requires middle

managers to incorporate and integrate innovative practices and engage with their staff in deep

probing conversations to develop shared visions, understand what is really going on in the

organization, and to develop ownership for change within their group (Fullan, 2011, p. 53;

Senge, 2006, p. 319).

To support the development of a change capable organization, it is also recommended

AITF incorporate change leadership competencies into its Talent Management practices to

ensure that its processes for the selection, development, advancement, and succession of

organizational leaders are aligned with AITF's strategic agenda (Aitken & Higgs, 2010, p. 269).

Defining the change leadership accountabilities and expected behaviors will provide

guidance for talent management processes for the screening and onboarding of managers and

staff. As highlighted by Doyle (2002), often managers lack the change-related experience and

skills to deal with complex situations with multiple stakeholders (p. 475), therefore

understanding what is expected of a change leader can facilitate the assessment of the manager's

skills to identify areas for further development and support.

To enable high performing teams, clearly defining roles and identifying who is best

suited to perform tasks at the different points during change process is required (Bolman & Deal,

2008, p. 112). Additionally, Battilana et al. (2010) concluded that different leadership

competencies need to be emphasized at different stages in the change process (p. 436). Therefore

not only is identifying team accountabilities important but also establishing a cohesive structure

for managing change is needed to enable a high performance team (Bolman & Deal, 2008, pp.

112-113). It is also recommended that the executive accountable for change leadership establish

a process to match change leadership capabilities with the requirements to lead each individual

change initiative.

      Recommendation 5: Establish a network of change leaders, agents, and advocates to

facilitate the adoption of change. A sustainable change-savvy and adaptable organization

requires the ongoing development and nurturing of its change agents and advocates engaged in

the organizational change governance and communication processes (Choi & Ruona, 2011, p.

63). Thus organizational change cannot be dependent on a single leader, and as Smith (2002)

observed, successful change requires enterprise-wide executive and localized middle

management leadership that is coordinated (p. 80). Additionally, Higgs and Rowland (2005)

highlighted research evidencing the shift in change leadership from top-down, leader-centric

models to a supportive network of change leaders to facilitate long-term strategic change (p.

145).

      It is important for AITF senior leaders and managers to remain active and visibly

engaged throughout the change process. Therefore putting in place a mechanism to enable

dialogue and feedback on the change agenda and culture implications facilitates leadership

engagement and conversation. This diffused model of change leadership puts in place a network

of change "ambassadors working throughout the organization to gain understanding and

alignment" (Balogun, 2006, p. 46). This ongoing dialogue between AITF leaders, middle

managers and staff will facilitate leader-follower alignment and can establish trust as

assumptions are clarified between the different levels of the organization (Werther, 2003, p. 43).

Therefore the recommendation is for AITF to develop a change agent network that

includes senior leaders, middle managers and key staff who can champion and guide the

implementation of AITF's strategic change agenda. This change leadership capability needs to

be coordinated and integrated across the multiple, and often simultaneous, change initiatives

within the broader AITF change agenda. It is also recommended that the strategic change office

be accountable for the coordination of the change agent network.

This will facilitate an enterprise-wide visibility of change, the impacts, and change

readiness, as well as enabling multiple feedback loops from different sources about what is really

happening in the organization. As Hamel and Valikangas (2003) observed executive leadership

needs uncensored feedback and assessment of the implications of change, therefore they

recommended plugging into the free thinking elements in the organization (p. 517). Based on the

feedback received through this feedback mechanism, then the appropriate leadership actions

through the relevant leadership group, executive, middle management, and front-line supervisor,

can be executed.

In summary, the recommendations made to AITF provide a holistic framework designed

to enable the enhancement of AITF's change leadership competency by: assigning executive

accountability and visibility for change leadership, establishing a strategic change office to

facilitate change leadership across change initiatives and the organization, putting in place

change leaders accountable for managing the impacts of change and transition management,

providing a mechanism for the ongoing development of change leadership skills, and finally

putting in place a change leadership network enabling organizational learning and change. The

cumulative benefits and results of these actions over time will contribute to developing and sustaining a change-savvy and adaptive organization.

Organizational Implications

The study recommendations should be implemented as a corporate initiative in a coordinated and planned manner sponsored through the executive leadership team. Critical to the success of any change program is "doing only what you can really commit to" (Bruch et al., 2005, p. 101). To advance the changes proposed in the research study, the Organization Sponsor incorporated change leadership performance measures in the relevant 2014/2015 corporate goals. These goals were reviewed with other Executive Committee members and approved by AITF's Board of Directors. This represented a clear indication of AITF's commitment to establishing change leadership as an importance corporate initiative and competency.

The critical next step is for the CEO to confirm executive accountability for the change leadership program and approval of the strategic change office function. At the time of this report, internal discussions, led by the CEO, were underway with Executive Committee members on change leadership accountabilities. Once this action has been finalized by the CEO, then the other implementation actions can be confirmed and resourced.

To ensure that the recommendations are implemented, a program charter for the implementation of the remaining change leadership recommendations needs to be developed and approved by the AITF Executive accountable for change leadership. The charter would confirm the program steering committee and governance processes, assign the necessary resources, identify key milestones, and outline the overall implementation schedule. This approach provides visibility and demonstrates commitment to the change, and is aligned with the approach AITF is taking to manage and track progress for its other strategic change initiatives.

Maintaining its current approach for managing and leading change is not a viable option for AITF. Also, by providing staff the opportunity to participate in the research project, an expectation of change has been created. If no further action is taken, then an opportunity to further engage employees and improve the management of change will have been lost, potentially resulting in further deterioration of trust between management and non-management staff. To embrace and lead change, Elrod and Tippett (2002) stated "the leader must be able to articulate and reinforce the rationale for initiating the journey and taking each incremental step toward the goal" (p. 288).

The following is a discussion of the organizational implications as AITF undertakes its implementation of the study's recommendations.

Organization capacity to undertake change. To enhance its change leadership capabilities, AITF will require additional time, effort and commitment from its managers. However, these same managers will be expected to simultaneously lead and engage in other change initiatives in support of the strategic agenda. This could create an additional burden on AITF leaders and staff potentially resulting in missed project deadlines or changes impacts not being fully addressed. To mitigate these risks, AITF's corporate project management office will need to track individual initiative progress and resource commitments in order to escalate any potential conflicts or issues to the sponsors and the strategic change office.

In trying to balance between strategic initiatives and day-to-day operations, leaders will need to make choices about the staff allocation between change initiatives and day-to-day business operations. If staff are not allocated to work on the strategic change initiatives, this action could be perceived as resistance to change. However, as pointed out by Choi and Ruona (2011), this behavior needs to be reframed from a perspective of change readiness representing a

natural concern about priorities and expectations (p. 53). This resource dilemma could result in senior leadership reassessing priorities and staffing requirements.

Another potential draw on organizational capacity will be the increased engagement of staff in the change process to assess the impacts and engage in the transition process to implement change. The same challenges of availability and bandwidth encountered with management staff could be realized with non-management staff. Another consideration could be non-management staff workload commitments to provide research and project services to AITF customers. Additionally, the organization will need to address the potential of lost productivity as staff multi-task between operational deadlines and project activities. This will require better planning and scheduling of resources between middle management and the strategic change initiatives. Research by Ahn et al. (2004) highlighted that in order to sustain ongoing change, focus and coordination is required to balance short-term and long-term requirements (p. 116).

Leadership capability and the pace of change. To undertake the strategic change agenda and develop change leadership competencies requires skilled changes leaders to coach and mentor. These change leader coaches will need to be available and have capacity to support AITF leaders and managers with less experience in leading change. As more leaders are engaged in the change process and given the opportunity to develop their change leadership skills, executive leadership will need to acknowledge that the pace of change may need to be slowed in order to facilitate the learning process and address the implications of change. The creative tension between pace of change and change competency will need to be assessed at key milestones in the overall change agenda to understand the risks and impacts of going either too slow or too fast to mitigate unanticipated outcomes (Amis et al., 2004; Balogun 2006; Bruch et al., 2005).

Another consideration for pace of change is the ability of the AITF organization to absorb ongoing change without a significant disruption to day-to-day operations and customer service. If inexperienced change leaders push change implementation before the organization is ready to accept change, this could result in rework or changes being rolled back. This could result in further loss of productivity, reduced staff morale, and increased turnover. Bridges (2009) pointed out that as people transition through change they "can deal with a lot of change if it is coherent and part of a larger whole. But unrelated and unexpected changes, even small ones, can be the powerful straw that breaks the camel's back" (p. 45). Therefore, the coordination and planning of change implementation needs to be well orchestrated while at the same time the readiness to accept change must be understood and leveraged (Burke, 2008, pp. 749-757).

Culture and organizational traps. AITF's strategic change agenda is expected to shift behaviors and culture in the organization however there are several paradoxes at play that need to be understood. Some of the key paradoxes that influence AITF's culture include: perceived differences in workforce generations, academic research mindset and entrepreneurial focus, balance between government and industry requirements, self-contained operating divisions shifting to project-oriented matrix structure, operations and corporate functions, and short-term financial commitments in the context of longer-term economic and societal outcomes. As Argyris (2010) pointed out, organizational traps are created when people act in ways to protect themselves to preserve the status quo which can undermined the change through "counterproductive and ineffective actions" (pp. 65-75). Interestingly, Argyris (2010) highlighted this defensive reasoning as a paradox itself (p. 75). Therefore diagnosing the organization traps requires an understanding of existing culture, behaviors, and reasoning processes that need to be addressed before culture change can be undertaken (Argyris, 2010, pp.

188-195). Additionally, in discussing organizational traps, Schein (2009) highlighted the need for conversation and dialogue to address misunderstandings in order to get to the root cause of cultural and behavioral issues (pp. 205-207).

To summarize the organizational implications for the implementation of the recommendations requires ongoing executive oversight and tracking of the pace of change and overall change leadership capacity. As AITF advances change, the ability of the organization to be proactively engaged and absorb the changes will impact transition effectiveness.

Implications for Future Inquiry

The focus of this study was on enhancing change leadership skills in order to develop a change-capable and adaptable organization. However, this highlighted certain areas that require greater attention when developing competencies for leading long-term transformational programs. These implications are discussed here to provide some guidance to organizations intent on undertaking a large-scale transformational journey.

First, leader-follower dynamics was not the primary focus of this inquiry, however it became evident that the relationship and accountabilities for change leadership between leaders and followers can influence the change process and outcomes. Further research into how the dynamics of leader-follower relationship impacts the change process and change success would have particular relevance to understanding organizational resiliency and adaptability during transformational change. This would contribute to our understanding of what change leadership competencies are more critical at different levels in the organization from front-line staff to middle management to executive leaders and how organizations can establish environments of change accountability that are sustainable.

Second, this study looked at the relative importance of different change leadership competencies at specific points in the change process, namely when change is initiated and implemented. However, there is a need for research that explores this shift in focus and emphasis on change leadership skills as the change program evolves over its life cycle. Furthermore, the cumulative impact of multiple change initiatives on the change leadership capabilities and priorities needs to be better understood. As change becomes the new norm and organizations need to develop their change resiliency and adaptability, how organizations can integrate change leadership into day-to-day operations and manage the transition process needs to be better understood. Additionally, as organizations become more change-savvy, how does this impact the change leadership competency development over time to enable a learning organization?

Finally, culture was not a major theme in this inquiry, but there was enough discourse exhibited to merit a closer investigation of this topic. The literature showed that culture is a major influencer in organizational change; however research into leadership competencies and strategies for dealing with the underlying dynamics of organizational traps, the difference between defensive reasoning and espoused values, was limited. Further research into understanding what leadership competencies are required to address organizational traps would contribute to the overall profile of a change leader. Furthermore, understanding how organizational traps impact the pace of change and change adoption would assist in developing interventions for change leaders to assess change readiness and organizational resiliency in an environment of non-stop change.

What is clear is that longitudinal research designs that use real-time data are vital to provide scholars, and more importantly practicing change leaders, with the insight into what competencies are more critical during different stages of the transformative change process. This

research could also contribute to the understanding of what competencies are more appropriately aligned with where the change is really happening in the organization, and clarifying the respective accountabilities between the different leadership levels as well as followers in order to create a change adaptable organization over the long-term.

Report Summary

This chapter outlined the recommendations and implementation plan to support AITF's enhancement of its change leadership competency. The recommendations included establishing change leadership as a strategic focus by appointing an executive accountable for change leadership and including performance measures for change in corporate goals related to the strategic change agenda. To complement the executive focus on change leadership a support infrastructure through a strategic change office, change agent network and leadership develop program was recommended. The implementation plan recognized the requirement to plan and manage this change as a strategic initiative. Also identified were the organizational challenges and opportunities related to capability, leadership competency, pace of change, and organization culture that need to be considered and addressed as the recommendations are rolled out.

In my current management consulting role with AITF, I am working with the Executive Sponsor and initiative leaders to establish a change leadership network across the current strategic change initiatives. In addition to establishing the change leadership network, also underway is the engagement of impacted staff and leaders in the impact assessment and implementation planning. This activity will also involve developing large group facilitation skills and techniques enabling the engagement of more staff through different types of interventions to efficiently and effectively understand impacts and identify implementation options.

AITF is embarking on a courageous journey to enhance its change leadership competency while at the same time advancing a large scale transformational change agenda. This will be a challenging undertaking that will test organizational leadership's patience and resolve; however, the research findings suggest that there is a desire and commitment within AITF to champion change and improve the organization's ability to manage and lead change. The Organization Sponsor has demonstrated her commitment to enhancing change leadership by including transformation measures in the corporate goals and working directly with the CEO to establish executive accountability for change leadership oversight and competency development. Although the senior leadership team is feeling the pressure of leading the strategic change agenda and coping with the pace of change, AITF has the ability to moderate its development of its change leaders by balancing short-term and long-term requirements. Adopting the recommendations contained in this paper will ensure AITF leaders have the right skills and support infrastructure in place at the right time to provide the right leadership for their transformational change agenda.

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APPENDIX A: ONLINE SURVEY INVITATION AND INFORMED CONSENT

Monday, January 13, 2014

To AITF Staff

As part of Alberta Innovates – Technology Futures organizational focus on strategic and business planning, the organization in interested in understanding its current capabilities and employee perceptions about implementing change. Since AITF is an applied research organization, it has agreed to participate in a research project.

I would like to invite you to be part of a research project that I am conducting on change leadership. This project is part of the requirement for a Master's in Arts, Leadership (MAL) degree, at Royal Roads University (RRU). My credentials with Royal Roads University can be established with Dr. Brigitte Harris, Director, School of Leadership, at [phone number] or email [email address].

The objective of my research is to study the leadership skills required to lead transformative change. The title of the research is "***enhancing change leadership capability and organizational adaptability to enable transformative change***".

In addition to submitting my final report to Royal Roads University in partial fulfilment for a Master's Degree in Leadership, I will also be sharing my research findings with AITF. A copy of the final report will be published and archived in the RRU Library, as well as in the Thesis Canada Portal of Library and Archives Canada, and ProQuest/UMI. I may also submit an abstract to a leadership conference, workshops, or articles for publication to appropriate journals.

A component of this research includes this anonymous online survey which is estimated to take about 15 to 20 minutes to complete. The survey is now open and will remain open until Friday January 24, 2014. The questions refer to your experiences and observations when participating in previous organizational change initiatives, and what leadership skills and approaches have, in your opinion, been effective.

The survey will be conducted via the Fluid Survey platform which houses its data in Canada.

The information you provide will be summarized, in anonymous format, in the body of the final report. At no time will specific comments be attributed to any individual unless your specific agreement has been obtained beforehand. All documentation will be kept strictly confidential.

Subsequent to the thesis being published, the data will be stored on an encrypted external drive for five years as per AITF data retention policies. This data will be retained by me as part of my research records.

You are not required to participate in this research project through completion of this survey. If you do choose to participate, and later change your mind, due to the anonymity associated with the survey data collection, it will not be possible to identify or remove individual participant responses.

The survey is password protected and I will be the only person who has access to the survey results which must be accessed using a password.

By clicking on the survey link below you are indicating that you give free and informed consent to participate in the survey. If you do not click on the link below, this indicates that you do not wish to participate in the survey.

Please click on the link below to enter the survey (insert survey link here).

If you have any questions about the research, please contact me at [email address].

Sincerely,
Caroline Conway

APPENDIX B: FOCUS GROUP INVITATION AND CONSENT FORM

To: Workshop Participants

Group A: Non-managerial staff
Group B: Management staff

As you may be aware from correspondence sent in January from Sandra Scott and Caroline Conway about a research project on change leadership competencies that AITF is participating in. On January 13, 2014 a survey was sent to all AITF employees to collect data about people's observations and experiences during a major change initiative.

The research project is now entering its next phase to gather feedback from staff through focus groups based on the survey results and to delve deeper in the research question of how to "***enhance change leadership capability and organizational adaptability to enable transformative change***".

We are gathering together a group of 7 up to 12 participants to represent the [non-management / management] in the organization. Your name has been randomly selected to participate in a focus group with other [non-management / managerial] staff members.

Participation in this focus group is voluntary. If you decide to participate, please follow the instructions below to provide your Consent to participate.

The focus group is scheduled for 2 hours. Our preference is for participants to attend the event in person however we booked rooms in each locations to participate through a conference call bridge.

Focus Group Date: Date
Workshop Locations: Locations
Conference call number: [phone number] participant code: xxxxx

Time code: xxxxxxx

Due to the nature of focus groups and the inclusion of up to 12 participants in the session, individual anonymity cannot be assured. However, collected data will be coded to eliminate personal identification, and reported anonymously. Each member of the focus group will agree to treat as confidential the identity of all other members and the content of the discussion which took place and to not discuss this with anyone who was not a part of the group.

Information in the focus group session will be captured through flipcharts. The workshop results will be transcribed and, where appropriate, summarized, in anonymous format, in the body of the final report. You will have an opportunity to review the transcribed notes from the focus group you participated in to ensure the notes are reflective of the proceedings. At no time will any specific comments be attributed to any individual unless specific agreement has been obtained beforehand. All documentation will be kept strictly confidential.

You are not compelled to participate in this focus group. If you do choose to participate, you are free to withdraw without prejudice, up to March 14, 2014. Your decision to not participate will also be maintained in confidence. However, due to the anonymity associated with the aggregation of focus group data, it will not be possible to identify or remove individual participant responses.

To ensure freedom from bias in the conduct of the focus groups these will be facilitated by a professional facilitator who has no other connection to AITF. As the researcher, in compliance with the ethical requirements of the study, Caroline will have no knowledge of the identities of those who responded to this invitation and who participated in a focus group.

Consent to Participate

To provide your free and informed consent to participate in this focus group, please forward this email following the instructions below.

    a) Forward this email to [email address]

    b) In the body of your email,

        a. Enter your name and the date;

        b. Verify that you are giving your free and informed consent to participate in this focus group.

<u>About the Change Leadership research project:</u>

The objective of Caroline's research is to study the leadership skills required to lead transformative change and develop organizational adaptability within AITF. This project is part of the requirement for a Master's Degree in Masters of Arts, Leadership, at Royal Roads University (RRU). Caroline's credentials with RRU can be established with Dr. Brigitte Harris, Director, School of Leadership, at [telephone number] or email [email address].

In addition to submitting a final report to Royal Roads University in partial fulfilment for a Master's Degree in Leadership, Caroline will also be sharing her research findings with AITF Executive Leadership team. Upon completion of the thesis, participants will receive a copy of the final report upon request. A copy of the final report will be published and archived in the RRU Library, as well as in the Thesis Canada Portal of Library and Archives Canada, and ProQuest/UMI. The findings from this report may also be used as input for external conferences, presentation and publications.

Please feel free to contact Caroline Conway at [email] at any time should you have additional questions regarding the project and its outcomes.

Sincerely,
Inquiry team member name
Title

APPENDIX C: INQUIRY TEAM MEMBER LETTER OF AGREEMENT

In partial fulfilment of the requirement for a Master of Arts in Leadership Degree at Royal Roads University, Caroline Conway (the Student) will be conducting an inquiry research study at Alberta Innovates - Technology Futures (AITF) to study the leadership skills required to lead transformative change and develop organizational adaptability within AITF. The Student's credentials with Royal Roads University can be established by calling Dr. Brigitte Harris, Director, School of Leadership, at [phone number] or email [email address].

Inquiry Team Member Role Description

As a volunteer Inquiry Team Member assisting the Student with this project, your role may include one or more of the following: providing advice on the relevance and wording of questions and letters of invitation, supporting the logistics of the data-gathering methods, including observing, assisting, or facilitating a focus group, taking notes, transcribing, or analyzing data, to assist the Student and the *Alberta Innovates - Technology Futures* organizational change process. In the course of this activity, you may be privy to confidential inquiry data.

Confidentiality of Inquiry Data

In compliance with the Royal Roads University Research Ethics Policy, under which this inquiry project is being conducted, all personal identifiers and any other confidential information generated or accessed by the inquiry team advisor will only be used in the performance of the functions of this project, and must not be disclosed to anyone other than persons authorized to receive it, both during the inquiry period and beyond it. Recorded information in all formats is covered by this agreement. Personal identifiers include participant names, contact information, personally identifying turns of phrase or comments, and any other personally identifying information.

Personal information will be collected, recorded, corrected, accessed, altered, used, disclosed, retained, secured and destroyed as directed by the Student, under direction of the Royal Roads Academic Supervisor.

Inquiry Team Members who are uncertain whether any information they may wish to share about the project they are working on is personal or confidential will verify this with Caroline Conway, the Student.

Statement of Informed Consent:

I have read and understand this agreement.

_____   _____   _____
Name (please print)   Signature   Date

APPENDIX D: ONLINE SURVEY QUESTIONS

Invitation and Informed Consent (refer to Appendix A)

1. Please indicate which location your primary work location by clicking on the appropriate response below:
   a. Edmonton
   b. Vegreville
   c. Calgary
   d. Devon
   e. Other, please specify

2. How long you have worked for AITF (and its predecessor companies) by clicking on the appropriate response below:
   a. Less than 12 months
   b. 1 year to less than 3 years
   c. 3 years to less than 5 years
   d. 5 years to less than 10 years
   e. 10 years to less than 20 years
   f. 20 years+

3. Please indicate your function in the organization by clicking on one of the following options:
   a. Management
   b. Researcher
   c. Technologist
   d. Administrative
   e. Clerical

4. Please indicate which of the following conditions best describes your situation:
   a. Full-time employee
   b. Part-time employee
   c. Term / temporary employee
   d. On contract

5. Do you directly supervise staff:
   a. Yes
   b. No

6. Are you a member of the collective bargaining unit (AUPE Local 060)?
   a. Yes
   b. No

7. Have you previously managed the implementation of change in your area of accountability?
   a. Yes
   b. No

8. Have you received any training in organizational change management (e.g. example in-house learning events, external training, certificate program, post-secondary program, etc.)?
   a. Yes
   b. No

9. Using the categories below, indicate the types of organizational change initiatives you have been involved with? Check all that apply.
   a. Process improvement
   b. Installation and integration of computers or new technology
   c. Quality management system
   d. Creation of a new product or service offering
   e. Merger, acquisition, reorganization
   f. Other, please specify

10. What roles have you played in previous change initiatives? Check all that apply.
    a. Sponsor - Individual or group having the power and resources to sanction the change
    b. Agent - Individual or group facilitating the development and/or execution of implementation plans
    c. Target - Individual or group who must actually change
    d. Advocate - Individual or group who wants a change but does not have sufficient power to sanction it however can influence others

11. Past Change experience: Think about previous changes you have been involved in over the past 2 years that had a major impact on you. Using the scale below, indicate to what extent you agree that your LEADER/MANAGER demonstrated these qualities.

    Rating scale: Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

1) Understood and communicated the issues and reasons why change was necessary
2) Secured management commitment, budget and resources to support the change activities
3) Assessed and managed impacts of change on people and the organization
4) Engaged others in the achievement of change goals
5) Influenced and motivated others through personal advocacy and vision
6) Developed coalitions and relationships with other leaders and teams
7) Articulated and focused on the benefits and desired outcomes of the change
8) Developed change leadership capabilities in others
9) Demonstrated the ability to reflect and learn from situations and others
10) Created situations to develop change leadership capabilities in others
11) Assessed readiness of the organization and people to embrace change
12) Formulated implementation plans with milestones, resources, metrics and review mechanisms
13) Demonstrated personal commitment to achievement of change goals
14) Was resilient and dealt constructively with ambiguity
15) Applied appropriate change concepts, tools, and processes

12. INITIATING CHANGE - Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance the following change leadership competencies.

Rating scale: 1 is the most important and 7 is the least important.

a. Build a Case for Change - Surfaces issues, articulates reasons why change is required, and secures sponsor commitment.
b. Change Impact - Scopes the breadth and depth of change impacts on people, processes, policies, stakeholders, customers, and other organizational components.
c. Stakeholder Engagement and Collaboration - Influences and engages others by building coalitions and effective working relationships through open dialogue.
d. Human Dynamics of Change - Understands and deals with the human dynamics and helps others to understand how people move through change process.
e. Transition Management - Develops and guides the change implementation with realistic timelines and goals; identifies and deals with resistance.
f. Leadership Presence - High personal commitment to change goals and deals with adversity while remaining objective. Deals effectively with ambiguity and is resilient see change through to completion.
g. Change Management Disciplines - Knowledge about different change theories, tools and processes and applies these skilfully to the situation.

13. IMPLEMENTING CHANGE: When you are implementing change, how would you rank the following change leadership competencies in order of importance?

Rating scale: 1 is the most important and 7 is the least important.

a. Build a Case for Change - Surfaces issues, articulates reasons why change is required, and secures sponsor commitment.
b. Change Impact - Scopes the breadth and depth of change impacts on people, processes, policies, stakeholders, customers, and other organizational components.
c. Stakeholder Engagement and Collaboration - Influences and engages others by building coalitions and effective working relationships through open dialogue.
d. Human Dynamics of Change - Understands and deals with the human dynamics and helps others to understand how people move through change process.
e. Transition Management - Develops and guides the change implementation with realistic timelines and goals; identifies and deals with resistance.
f. Leadership Presence - High personal commitment to change goals and deals with adversity while remaining objective. Deals effectively with ambiguity and is resilient see change through to completion.
g. Change Management Disciplines - Knowledge about different change theories, tools and processes and applies these skilfully to the situation.

14. Using the list provided below, identify your TOP 3 leadership actions that would most significantly improve your perception of the way change is implemented. Rank your top three selections with 1, 2, or 3 ranking.

Rating scale: 1=Top priority | 2 = Second priority | 3 = Third priority

a. Having the opportunity to be more involved in the front-end design of the changes being contemplated
b. Taking part in open dialogue sessions with senior leadership to better understand the need and drivers for change
c. Cascading of the change initiatives through briefings and information sessions with leaders and direct managers
d. Being given more lead time to prepare before a change is actually implemented
e. Participating in working sessions to assess the impacts of the change on processes, staff, and technology
f. Using small scale pilots of proposed changes so that wrinkles can be ironed out before they are implemented more broadly
g. Having the opportunity to be more involved in the testing and integration planning of the changes that impact my department / function
h. Receiving more written information about how the change will be implemented
i. Conducting regular lessons learned and follow up sessions to understand what worked and what we could do better
j. Having the opportunity to participant in the design and planning for training and development activities for the change rollout
k. Receiving well designed orientation and training required to successfully implement my part of the change before the change is introduced

APPENDIX E: FOCUS GROUP PROTOCOL AND QUESTIONS

The purpose of the focus group sessions is to delve deeper into the themes and results from the surveys to understand what factors and areas of change leadership AITF needs to enhance to improve organizational adaptability.

Prepared introduction from researcher

    A. Thank you to participants for their time and commitment to the research project.
    B. Overview of the research project.
    C. Introduce the third party facilitator.

Conduct focus group

    1. Introduction of participants to each other
    2. Review summary slides of online survey results
    3. Focus group questions:
        a. How effective is AITF at managing and implementing change?
        b. How well does AITF manage and lead high impact and complex change?
        c. How are the impacts on people and engagement of staff in change typically handled? Who deals with these issues?
        d. Why do you think that these qualities highlighted on slide 19 were the least demonstrated by leaders?
        e. How important are these leadership qualities to the effective implementation of change in the organization? How would you rank them?
        f. If these are important activities for successful change, what actions could leaders take to make improvements in these areas?
        g. To what extent do you agree that AITF leaders demonstrate these qualities when implementing change?
        h. How important are these leadership qualities to the effective implementation of change in the organization?
        i. Are they more important or less important than the qualities LEAST demonstrated?
        j. Why do you think there is a difference between skills demonstrated and what is important in relation to assessing change impact and change readiness?
        k. Who do you think should lead the assessment of change impacts and develop the employee / stakeholder engagement plans? Who should be involved? Why?
        l. If assessing the impacts of change and readying the organization are critical for change success, what actions can AITF leadership take towards being more effective in this area?

APPENDIX F: RESPONSES FROM ONLINE SURVEY

F.1 Demographics

#	Question Topic	Number Respondents
1	Work Location	133
2	Length of service	133
3	Function (role in organization)	133
4	Employee status	133
5	Supervise staff	133
6	Bargaining unit member	133
7	Previously implemented change	125
8	Training in organizational change	125
9	Experience in types of change	124
10	Previous change roles	118
11	Past experience	115
12	Initiating change	106
13	Implementing change	95
14	Top 3 priorities for leader actions	94

Question 1 – Respondent Subgroup by Work Location	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Edmonton	63	84 of 336	25
Vegreville	15	21 of 110	19
Calgary	11	14 of 42	33
Devon	4	5 of 21	24
Other	5	6 of 16	38
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

Question 2 – Respondent Subgroup by Length of Service	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Less than 1 year	15	20 of 53	38
1 year to less than 3 years	20	27 of 95	29
3 years to less than 5 years	2	3 of 32	10
5 years to less than 10 years	35	46 of 131	35
10 years to less than 20 years	16	21 of 116	18
20+ years	10	13 of 100	13
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

Question 3 - Respondent Subgroup by Function	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Management	21	28 of 58	48
Researcher	29	39 of 140	28
Administration/Business Professional	29	39 of 135	29
Technologist	14	18 of 145	12
Clerical	4	5 of 47	11
Unknown	3	3 of 3	100
Totals	100	133 of 525	25

Question 4 - Respondent Subgroup by Employee Status	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Full-time employee	86	115 of 485	24
Part-time employee	4	5 of 15	33
Term / temporary employee	2	3 of 15	20
On contract	5	6 of 6	100
Unknown	3	4 of 4	100
Totals	100	133 of 525	25

Question 5 - Respondent Subgroup by Supervise Staff	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Yes	38	51 of 148	34
No	59	79 of 374	21
Unknown	3	3 of 3	100
Totals	100	133 of 525	25

Question 6 - Respondent Subgroup by Bargaining Unit	Percentage of Respondents	Subgroup Count	Subgroup Response Rate (Percent)
Non-Bargaining staff	72	95 of 286	33
Bargaining unit staff	26	35 of 239	15
Unknown	2	3 of 3	100
Totals	100	133 of 525	25

F.2 Existing Change Capabilities

Question	Percentage answered 'Yes'		
	All Respondents	Management	Non-management
7 - Have you previously managed the implementation of change in your area of accountability?	50	71	45
8 - Have you received any training in organizational change management training?	44	79	37

Question 9 - Indicate the types of organizational change initiatives you have been involved with?			
Statement	Percentage answered 'Yes'		
	All Respondents	Management	Non-management
9-a	Process improvement	65	86	62
9-b	Installation and integration of a computer or application system	49	75	44
9-c	Quality management system	37	64	31
9-d	Creation of a new product or service offering	46	64	42
9-e	Merger, acquisition, reorganization	41	71	34
9-f	Other, please specify	16	18	16
	ITIL, Organization redesign, building high performance teams, continuous improvement, social-technical redesign, ISO implementation, safety, rapid growth into new markets, staff reductions, six sigma, corporate strategy changes			

Note: Question 9 table columns: Statement | All Respondents | Management | Non-management

Question 10 - What roles have you played in previous change initiatives? Click on all that apply.			
Statement	Percentage of Respondents		
	All Respondents	Management	Non-management
10-a	Sponsor - Individual or group who have the power and resources to sanction the change	23	57	14
10-b	Agent - Individual or group facilitating the development and/or execution of implementation plans	62	93	56
10-c	Target - Individual or group who must actually change	66	79	65
10-d	Advocate - Individual or group who wants change but does not have	42	64	37

Question 10 - What roles have you played in previous change initiatives? Click on all that apply.				
Statement		Percentage of Respondents		
		All Respondents	Management	Non-management
	sufficient power to sanction it however can influence others			

F.3 Change Leadership Competencies

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities.								
Statement		Percentage of Respondents					Mean	S.D.
		1	2	3	4	5		
11-a	Understood and communicated the issues and reasons why change was necessary	14	46	17	17	6	2.53	1.11
11-b	Secured management commitment, budget and resources to support the change effort	14	35	29	18	4	2.64	1.06
11-c	Assessed and managed impacts of change on people and organization	11	24	30	25	10	2.98	1.15
11-d	Engaged others in the achievement of change goals	13	32	25	24	6	2.77	1.13
11-e	Influenced and motivated others through personal advocacy and vision	14	30	25	23	8	2.82	1.17
11-f	Developed coalitions and relationships with other leaders and teams	10	30	38	13	9	2.80	1.07
11-g	Articulated and focused on benefits and desired outcomes of the change	12	40	25	19	4	2.62	1.03
11-h	Developed change leadership capabilities in others	10	23	29	28	10	3.07	1.14
11-i	Demonstrated ability to reflect and learn from situations and others	11	29	30	20	10	2.88	1.14
11-j	Assessed the readiness of the organization and people to embrace change	6	31	34	18	11	2.98	1.09
11-k	Formulated implementation plan with milestones, resources, metrics and review mechanisms	11	31	23	24	11	2.93	1.18
11-l	Demonstrated personal commitment to achievement of change goals	18	38	23	16	5	2.53	1.11
11-m	Was resilient and dealt constructively with ambiguity	12	27	36	13	12	2.86	1.16

Question 11 - Past change experience: Indicate to what extent you agree that your leader/manager demonstrated the following qualities.								
Statement		Percentage of Respondents					Mean	S.D.
		1	2	3	4	5		
11-n	Applied appropriate change concepts, tools, and processes	6	28	40	20	6	2.92	0.98
Scale: 1 = Strongly Agree | 2 = Agree | 3 = Neutral | 4 = Disagree | 5 = Strongly Disagree								

Question 12 - Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance the leadership competencies.										
Statement		Percentage of Respondents							Mean	S.D.
		1	2	3	4	5	6	7		
12-a	Build case for change: surfaces issues, articulates reasons why change is required and secures sponsor commitment	46	16	16	6	0	6	10	2.55	1.99
12-b	Change impact: scopes the depth and breadth of change impacts on people, processes, policies, stakeholders, customers and other organizational components	14	31	9	12	11	14	9	3.52	1.95
12-c	Stakeholder engagement and collaboration: influences and engages others by building coalitions and effective working relationships through open dialogue	3	14	15	19	23	14	12	4.36	1.63
12-d	Human dynamics of change: understands and deals with the people dynamics and helps others understand how people move through the change process	8	8	18	19	22	13	12	4.27	1.71
12-e	Transition management: develops and guides the change implementation with realistic timelines and goals; identifies and deals with resistance	4	12	16	24	13	23	8	4.30	1.63
12-f	Leadership presence: high personal commitment to change goals and deals with adversity while remaining objective; deals effectively with ambiguity and is	15	16	16	12	17	15	9	3.79	1.92

Question 12 - Initiating change – Think about when you first become aware of an upcoming change and you want to understand from your leader/manager how the change will impact you and the organization. Rank in order of importance the leadership competencies.										
Statement		Percentage of Respondents							Mean	S.D.
		1	2	3	4	5	6	7		
	resilient to see change through to completion									
12-g	Change management discipline: knowledgeable about different change theories, tools and processes and applies these skillfully to the situation	11	6	10	9	10	13	41	5.03	2.14
Scale: 1 = Most Important | 7 = Least Important										
Note: The lower the Mean for a statement the more important the item was to the respondents. For instance the mean of 2.55 for 12-a versus the mean of 4.30 for 12-e indicates that more respondents ranked 12-a as more important than 12-e.										

Question 13 - Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies										
Statement		Percentage of Respondents							Mean	S.D.
		1	2	3	4	5	6	7		
13-a	Build case for change: surfaces issues, articulates reasons why change is required and secures sponsor commitment	28	15	7	7	6	10	27	3.85	2.46
13-b	Change impact: scopes the depth and breadth of change impacts on people, processes, policies, stakeholders, customers and other organizational components	13	22	13	11	14	22	5	3.80	1.89
13-c	Stakeholder engagement and collaboration: influences and engages others by building coalitions and effective working relationships through open dialogue	1	13	23	14	24	17	8	4.32	1.55
13-d	Human dynamics of change: understands and deals with the people dynamics and helps others understand how people move through the change process	13	15	19	19	13	11	10	3.80	1.84
13-e	Transition management: develops and guides the change implementation with realistic	11	20	18	16	16	12	7	3.74	1.78

Question 13 - Implementing change – when you are implementing a change, how would you rank in order of importance the change leadership competencies									
Statement	Percentage of Respondents							Mean	S.D.
	1	2	3	4	5	6	7		
timelines and goals; identifies and deals with resistance									
13-f Leadership presence: high personal commitment to change goals and deals with adversity while remaining objective; deals effectively with ambiguity and is resilient to see change through to completion	22	13	13	19	16	13	4	3.51	1.85
13-g Change management discipline: knowledgeable about different change theories, tools and processes and applies these skillfully to the situation	13	4	7	14	9	16	37	4.98	2.11
Ranking Scale: 1 = Most Important | 7 = Least Important									
Note: The lower the Mean for a statement the more important the item was to the respondents. For instance the mean of 3.80 for 13-b versus the mean of 4.98 for 13-g indicates that more respondents ranked 13-b as more important than 13-g.									

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented				
Statement	Percentage of Respondents			Total Percentage
	1	2	3	
14-a Having the opportunity to be more involved in the front-end design of the changes being contemplated	25	12	5	42
14-b Taking part in open dialogue sessions with senior leadership to better understand the need and drivers for change	28	12	10	49
14-c Cascading of the change initiatives through briefings and information sessions with leaders and direct managers	6	7	11	25
14-d Being given more lead time to prepare before a change is actually implemented	5	1	2	7
14-e Participating in working sessions to assess the impacts of the change on processes, staff, and technology	13	16	10	38

Question 14 - Identify your top 3 leadership actions that would most significantly improve your perception of the way change is implemented				
Statement	Percentage of Respondents			Total Percentage
	1	2	3	
14-f	Using small scale pilots of proposed changes so that wrinkles can be ironed out before they are implemented more broadly	6	10	14	30
14-g	Having the opportunity to be more involved in the testing and integration planning of the changes that impact my department / function	3	13	7	23
14-h	Receiving more written information about how the change will be implemented	3	6	2	12
14-i	Conducting regular lessons learned and follow up sessions to understand what worked and what we could do better	3	7	10	21
14-j	Having the opportunity to participant in the design and planning for training and development activities for the change rollout	1	4	2	7
14-k	Receiving well designed orientation and training required to successfully implement my part of the change before the change is introduced	6	12	27	45
Scale: 1 = First priority | 2 = Second priority | 3 = Third priority				