Leading changes through adaptive design: Change management practice in one of the universities in a developing nation

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Abstract

Universities are making changes to fulfil their education, research and community service responsibilities. Exacerbated by limited experience of systemic change management approaches, most change initiatives fail to address institutional problems. Therefore, this study has tried to propose adaptive design as a promising approach to create adaptive changes in universities. Guided by a pragmatic philosophical viewpoint, this research followed a practice theory to understand actions and decisions related to changes. Staff members and students were invited to reflect on their perceptions of the principles and tactics extracted from adaptive design and their implementation in the university. Also, the study tried to identify major challenges to create adaptive changes by using a mixed method-sequential explanatory approach. Survey and interviews were made to gather relevant data. The finding reflected that tenets of adaptive design, its principles and tactics are important tools to lead and institutionalise change initiatives. This may affirm the significance of the approach if accepted and scaled up as an alternative change management theory.

Keywords: Adaptive design, adaptive leadership, design thinking, change.

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1. Introduction

Change is an indisputable part of organisational life (Hatch, 2013). Organisations are functioning in unpredictable environments with constant changes (Cullen, Edwards, Casper & Gue,. 2013; Wainaina, Kabare & Mukulu, 2014). Different scholars have tried to explain and classify these changes in different ways. The degree of change, focus, intentionality and response time are among the common methods. Increased globalisation, rapid technological change, competition, changes in cultural values, more social responsibilities and environmental impacts propel the majority of these changes. These changes, in turn, necessitate adaptation and innovation (Sporn, 2001; Yukl & Mahsud, 2010). Therefore, to survive and thrive, organisations and leaders will have to be continuous learners and adaptive (Schein, 2010).

As part of the larger system, higher education institutions (HEIs) are also undergoing a series of changes to guarantee their contribution and societal relevance (Temple, 2011). Including the above-mentioned causes, the pressures for change in HEIs may emanate from different angles. There are internal pressures like the wish to improve the quality of student learning, academic and supportive staffs' development and/or the learning experience as well as external pressures due to governmental policies and programmes. In addition, novel ideas may swap from one institution to another and may trigger changes. Institutional theorists attributed the change to ''exogenous shocks'' like a crisis, technological innovation and/or regulatory change (Hatch, 2013, p, 294). Woldegiorgis (2014) and Gornitzka (1999) reveal the magnitude of governmental pressures—through the perspectives of resource dependency and neo-institutionalism. In developing nations, leaders and change agents adopt taken-for-granted practices mimetically (Woldegiorgis, 2014).

Accordingly, this environmental precariousness requires HEIs to develop their adaptive capability by fostering systemic change management approaches. Adaptability is an essential proficiency of organisations in a rapidly changing environment (Hamtiaux, Houssemand & Vrignaud, 2013). We may find different definitions of adaptability (Ployhart & Bliese, 2006). For example, Cameron (1984) explained adaptation as a process whereby changes are instituted in organisations. It is also understood as the capacity for change in order to manage transitions at work as well as being able to manage effectively change-related stress (Heuvel, Demerouti, Schaufeli & Bakker,2013). However, adaptations require displacing, reregulating and rearranging old structures and cultural practices (Creyton, 2014; Heifetz, Grashow & Linsky, 2009; Sporn, 2001). Such changes may include changes in leadership, strategy, structure, technology, work processes and cultures of organisations.

In the pursuit of understanding and enhancing adaptation, various scholars have developed different perspectives and recommendations. Doz and Kosonen's (2010) fast strategy framework focuses on strategic sensitivity (heightened strategic alertness, high quality information and open strategy process), collective commitment of the leadership (top team renewal, working together as a team, shared agenda and mutual dependency, leadership style and capabilities) and resource fluidity (mobility of capital and people, modularity and resource access). Lehman (2002) also tried to see the motivational readiness, institutional resources, staff attributes and organisational climate. In addition, many scholars focus on individuals adaptability to enhance adaptation (Cullen et al., 2013; Hamtiaux et al., 2013; Sony & Mekoth, 2014; Tariq, Sohail & Muhammad, 2012; Parent, 2015; Ployhart & Bliese, 2015; Wainaina et al., 2014).

Moreover, Heifetz, Grashow and Linsky (2009) and Randall and Coakley (2007) explained that beyond the technical competence of leaders, successful changes require sensitivity to political and human dimensions of organisational life. Related to this, many scholars like Blackwell, (2003), Creyton (2014) and Heifetz, Grashow and Linsky (2009) indicated that leaders' approach to change influences adaptability. According to Sporn (2001), a well-communicated vision by leadership reduces resistance, increases motivation and enhances identification with the change. Furthermore, Parent and Lovelace,

(2015) pointed out that adaptability could be enhanced through positive organisational culture, job engagement and individual adaptability to changes.

Despite this awareness of institutional adaptability, making successful changes in HEIs remains a critical challenge. Usually, it is noted that the ability to deal with change is a critical challenge for university leaders (Drew, 2010). Therefore, testing and introducing clearer, concise, comprehensive and more practical change management approaches like the adaptive design approach of Bernstein & Linsky (2016) was expected to have a significant contribution for HEIs, especially in developing nations. This approach advocates that for successful change initiatives, there must be a clear understanding of the need to change possible impediments, innovation, collaboration and dynamic leadership.

2. Rationale of the study

Initiating, implementing and sustaining changes are the most challenging aspects of change management in developing nations' HEIs (Mehari, 2016; Woldegiorgis, 2014). Many institutions and governments expend huge resource to institutionalise changes; nevertheless, a significant number of these efforts are unsuccessful. In most cases, changes in the study context are adopted from the developed nations although there are occasional glimmers of homemade changes. Mostly, changes introduced in HEIs at different times disappear without making significant impacts (Woldegiyorgis, 2014). It is a huge loss when change initiatives fail while massive investments are made to implement them. In the studied nation HEIs, we can mention many changes like business process re-engineering, balanced scorecard, modularisation etc. which have been introduced as fashions and have produced no significant contribution (Woldegiyorgis, 2014). Unfortunately, as far as the understanding of the researchers, no similar research studies attempt to understand adaptability in-depth contextually.

However, many studies indicate that resistance, incompetent leadership, contextual factors, organisational politics and resource limitation are the dominant factors contributing to the failure of most change initiatives (Oreg, 2006; Wainaina et al., 2014; Woodward & Hendry, 2004). Due to many reasons, HEIs are extraordinarily resistant to changes (Marshall, 2010). The unique nature of HEIs, especially, being loosely coupled systems with professional autonomy and the unique culture of the academy requires a distinct approach to managing changes (Mehari, 2016). Moreover, most changes are introduced typically in a traditional top-down approach, which promotes leader-driven solutions (Woodward & Hendry, 2004). This is usually done in universities without open communication of the issues in a timely fashion with academicians and supporting staff as they are directly linked to or involved in the process. As a result, academicians lose commitment, ownership and attention. They tend to adopt an observational standpoint (Mehari, 2016). Bernstein and Linsky (2016) suggested that adaptive design could potentially contribute to alleviating change-related problems.

Therefore, adaptability may be determined by various factors; however, understanding the institution's adaptability through the lens of adaptive design is helpful to understand the intricacies of change and adaptability. Consequently, using adaptive design as a conceptual framework, this investigation examines the approach that HEIs are using to lead and institutionalise change. Ultimately, this investigation was expected to have a theoretical, practical, contextual and empirical impact on adaptive capacity, particularly in HEIs, which in turn might contribute to improved institutional performance. Finally, yet importantly, this investigation can contribute to organisational development, organisational learning, strategic planning, policymaking, evaluation and associated issues.

Hence, this investigation has tried to study adaptive design in one of the universities in a developing nation with a major purpose of evaluating the contribution of this approach. This study tried to capture staff members' perception of the adaptive design approach, the implementation of adaptive design principles and the challenges of creating adaptive changes. Understanding the case of

the selected university and the common challenges to create an adaptive change was expected to provide practical ground to support or refute the approach. With this intent, the following basic questions were developed to guide the study.

i. How do the university's staff members and students perceive the importance of adaptive design as an approach to lead change initiatives?
ii. To what extent has an adaptive design approach been implemented in the university?
iii. How do adaptive organisational changes happen in the university?
iv. What are the basic challenges to create adaptive changes in the university?

3. Theoretical framework

An adaptive design may be a powerful approach to change management. Recently, Bernstein and Linsky (2016) introduced adaptive design as part of the tools and tactics required to lead changes in complex adaptive systems. In this design, adaptive leadership and design thinking are merged to complement each other. These approaches are well-regarded forms of change management independently but can be more powerful together.

3.1. Adaptive leadership

According to Heifetz, Grashow andLinsky (2009), adaptive changes require adaptive work. According to these scholars, adaptive work includes responding to problems outside of the usual way of operating, identifying adaptive challenges, sharing responsibility regardless of positions, building changes on the past-preserving important assets and progress for the future via learning, encouraging independent judgment and developing leadership capacity. Adaptive problems do not need someone who exerts authority (Creyton, 2014; Heifetz, Grashow & Linsky, 2009;). Such problems require a leader who is willing to frame and ask tough questions, challenge the status quo, confront reality, draw out issues, challenge current procedures and most importantly, transfer responsibility of solving problems to people who have to make the change.

According to Heifetz, Grashow andLinsky (2009), the prevalent weakness of leadership is treating adaptive challenges as technical problems. Technical problems are easy to identify, often can be solved by an authority or expert and solutions can often be implemented quickly. Due to this visible and simple nature of technical problems, leaders usually tend to focus on fixing technical challenges. Whereas, according to these scholars, adaptive challenges are difficult to identify. They require changes in values, beliefs, roles, relationships and approaches to work. Stakeholders with the problem do the work of solving it, and it demands people to change their culture than continue to operate according to current structures, procedures and processes.

Heifetz, Grashow and Linsky (2009) developed a series of principles to accomplish adaptive work by mobilising systems. This involves six stages: identifying adaptive challenges; focusing attention on the problem (to make stakeholders aware of change needs); framing the issues to sustain attention; maintaining stress at a productive level (to ensure continued efforts towards change); securing ownership of both the problem and solution from the stakeholders themselves and creating a safe environment for them.

Even though adaptive leadership is an excellent approach to create sustainable change in an organisation, it is not a flawless approach. Bernstein and Linsky (2016) pointed out that it provides few resources to visualise the elements of an expected future or to devise specific interventions. Besides, adaptive leadership has limitations in enhancing excitement or inspiration. Alongside managing the loss, pain and fear that often come with changes, practitioners need to engage people by providing a sense of fun, a spirit of collaboration and visible signs of progress. However, it is essential to enable members of the organisation to identify and confront the choices that they faced. Thus, adaptive

methods are not enough to help generate innovations. Therefore, design thinking is important to fill such limitations.

3.2. Design thinking

Design thinking is based on the principles of human-centred design to solve problems in the business, social and educational sectors (Bernstein & Linsky, 2016). Human-centred design places people at the centre. This approach begins with a simple principle: if you design a chair, design it for the person who will sit in it for 8 hours a day. More recently, design-thinking practitioners have begun to apply this method to services and to organisational improvements.

Design thinking involves four steps: empathy, definition, ideation and prototyping (Bernstein & Linsky, 2016). Empathy is about understanding the true needs of users. This requires understanding the need and relevance of the change to address organisational challenges. Understanding this will help us to have a clear definition of the problem, which is the second stage 'definition'. Having a clear definition of the problem is important to name the problem correctly and most importantly to generate innovative ideas that frame the problem as an opportunity.

As Bernstein and Linsky (2016) pointed out in the ideation phase, designers produce as many ideas as possible. This is an excellent opportunity to involve all stakeholders. Finally, the agreed-upon solution i.e., process or product is tested in the prototyping phase. Besides, it helps to instill a creative mindset within both individuals and institutions. When people work with a 'design mind', they become more optimistic, more collaborative and more willing to take risks. However, this approach lacks the conceptual and practical tools needed to manage the consequences of perceived threats. Collaboration, creativity, rapid action and comfort with failure can also be significantly counter-cultural. In young institutions, people often celebrate this way of working. In more established institutions, however, it can be threatening. When people in those organisations begin to think and behave like designers, they inevitably disrupt the status quo. Sometimes their efforts are so disruptive that they put their jobs at risk (Bernstein & Linsky, 2016). Therefore, when important lessons of design thinking and adaptive leadership are integrated, we can have a more comprehensive and effective approach to leading change.

3.3. Adaptive design

According to Grogger (2016), making adaptive change is very difficult, especially, if changes work against long-held belief. Design thinking can offer innovative ideas but this approach fails to address the underlying resistance to implementing these ideas. On the other hand, adaptive leadership provides change-makers the tools needed to address challenges in implementing new ideas but fails to provide the right environment for creative thinking. Thus, taking the best features from both approaches can make the change process more successful. The model derived from the combination of these two approaches is known as adaptive design (Bernstein & Linksy, 2016).

Bernstein and Linksy (2016) suggested two ways of blending design thinking and adaptive leadership, including using one after the other sequentially and merging both as an integrated approach. This study advocates the merging of the two methods to form a new model. Therefore, the new model will have four steps, starting with: the first phase, empathetic observation, which involves gathering information about the true needs of users and applying the empathetic understanding. The second phase involves practitioners understanding and determining technical and adaptive challenges. Practitioners should use concrete language when pinpointing challenges and frame each challenge as a creative opportunity. In the third phase of the adaptive design model, practitioners will join in ideation. In this stage, practitioners will be able to generate as many ideas as possible. Finally, in the fourth stage, practitioners will create and test an intervention (process or product) or change initiative.

Grogger (2016) suggested that adaptive design is a promising method that could help organisations create innovative solutions and resolve potential challenges that hinder successful implementation. Therefore, by blending design thinking and adaptive leadership, sustainable and pervasive changes can be achieved in HEIs. Design thinking can help to generate collaborative and innovative solutions. Nevertheless, it is not pertinent to address the underlying challenges or human barriers to implementing changes. Whereas, adaptive leadership provides tools needed to address those challenges but fails to provide opportunities for creative thinking.

Accordingly, principles and procedures elicited from adaptive design were used as a theoretical framework to guide the study. Consequently, the study was made to revolve around issues such as: clear understanding of problems (true needs, open discussion and identifying adaptive challenges), innovative and collaborative solutions, enhancing adaptive changes (via learning and experimentation and changing the status quo working culture), adaptive leadership (empowering everyone to feel as a leader regardless of position and acting politically) and establishing clear communication (type and implication of changes and building clear vision).

4. Research methodology

This research followed a modern perspective that attempts to discover universal principles and laws that govern organisations (Hatch, 2013). However, to understand the assumptions, values and practices of the target university it extends its approach to incorporate individuals' viewpoints and social constructs. To benefit from both perspectives (modern and interpretive), this research was guided by pragmatism. Thus, to achieve the purpose of the study, sequential explanatory mixed methods approach was used. As noted by Creswell (2009, p. 215), 'The purpose of the sequential explanatory design is to use qualitative results to assist in explaining and interpreting the findings of a primarily quantitative study'.

The study participants included academic staff members, administrative staff members and students. However, the participants did not include expatriate staff members, staff members on study leave and contractual staff members. In addition, first-year students and postgraduate students were excluded because these groups were assumed to have little experience and exposure to the changes happening in the university. Mainly, an attempt was made to include around 30% of colleges, faculties and/or institutes. At the target university, the Institute of Textile and Fashion Technology, College of Business and Economics, Faculty of Education and Behavioral Science and School of Law were randomly selected using a lottery system from the 13 academic units (colleges, faculties and institutes). In these units, there were about 279 academic staff members, 3,648 students and 75 administrative staff who fulfilled the inclusion criteria of the research. Thus, a sample of 162 academic staff members, 348 students and 65 administrative staff were selected using the simple random sampling (lottery) method with a 5% margin of error and 95% confidence level.

Accordingly, a questionnaire with close-ended items was prepared based on the study's conceptual framework. While designing the questionnaires and framing each question, necessary efforts were made to maximise the complete and accurate communication of ideas. The survey was piloted on 20 respondents from different groups (academic staff, administrative staff and students) and the reliability was found to be 0.744 at Cronbach's alpha. Necessary corrections were made before administering the questionnaire to the sample population. Then, 219 complete and useful questionnaires were returned from 63 academic staff members, 58 administrative staff members and 98 students, which provided an approximately 40% response rate.

To support questionnaire results, in-depth interviews were made guided by semi-structured questions. The interviews included two academic staff members (both of them in leadership positions), two administrative staff members, one institutional transformation directorate member and one quality assurance directorate staff. These individuals were purposely selected considering

their experience and exposure to obtain sufficient information about the issue. To ensure ethical conduct of the research, permission was asked from higher officials, the sample participants were communicated and the participants for interview were informed about the purpose of the study. In addition, an attempt was made to clarify to participants about the confidentiality of the information they provided.

The data collected through questionnaires and interviews were analysed qualitatively and quantitatively in a way to meet the research purposes. One-sample t-test was used to check respondents' agreement on the theoretical importance, practical implementation and on the challenges of creating adaptive changes. The one-way analysis of variance (ANOVA) was also used to check differences among respondent groups including academic staff, administrative staff and students. On the other hand, in order to analyse the qualitative data, content analysis technique was employed. This analysis was based on data organisation procedures and techniques as recommended by Bogdan and Biklen (1998). Thus, in organising the data, the researcher revisited and listened to each audiotape to ensure the accuracy of data. The interviews were later analysed as follows: first, the answers to each question were separated into meaningful categories, named and coded as R1, R2, R3 and R4 where 'R' refers to the respondent. Second, the conceptualised statements were collected together. The third step, repeated ideas were avoided. Lastly, the identified results were explained and related to each other. In this approach, each set of data collected were reviewed so that key issues, recurrent events or activities in the data became categories of focus.

5. Results and discussion.

In this section, we have tried to present the results of the study and a discussion of key findings. Accordingly, the perceptions of respondents about adaptive design principles, the implementation or the practical manifestation of these principles in the studied university, how the university is creating adaptive changes and finally, challenges to create adaptive changes are presented.

5.1. Perception towards adaptive design principles

Academic staff, Administrative staff and students were asked to indicate their agreement on the theoretical importance of adaptive design principles. The questionnaire offered options for Strongly Agree = 5, Agree = 4, Partially Agree = 3, Disagree = 2, and Strongly Disagree = 1. The results are given in Table 1 below.

Table 1. Respondents perception on major adaptive design principles

Perceived Importance of Adaptive Design Principles:	One-Sample *T*-Test Test Value = 3						
	Group	*N*	Mean	St.D	*t*-value	df	Sig. (2-tailed)
Change need to originate from true needs	Ac. staff	63	4.460	.8766	13.221	62	.001
	Admin staff	58	4.586	.7017	17.215	57	.001
	Students	98	4.591	.6554	24.04	97	.001
Critical investigation of recurrent problems	Ac. staff	63	4.220	1.210	8.012	62	.001
	Admin Staff	58	4.327	1.0984	9.204	57	.001
	Students	98	4.428	.6735	20.99	97	.001
Open discussion of problems/Speaking the elephant in the room	Ac. staff	63	4.460	.9808	11.817	62	.001
	Admin staff	58	4.224	1.0436	8.933	57	.001
	Students	98	4.153	1.0087	11.316	97	.001
Problems should be considered as opportunities	Ac. staff	63	4.160	1.003	9.167	62	.001
	Admin staff	58	4.465	1.1272	9.901	57	.001
	Students	98	4.387	.8327	16.497	97	.001

Problems require collaborative solution	Ac. staff	63	4.290	.7710	13.236	62	.001
	Admin staff	58	4.258	1.1326	8.463	57	.001
	Students	98	3.785	1.2289	6.329	97	.001
Fundamental cultural/status quo change	Ac. staffs	63	4.510	1.029	11.623	62	.001
	Admin staff	58	4.224	1.4393	6.477	57	.001
	Students	98	4.112	1.0141	10.857	97	.001
Everybody is a leader	Ac. staff	63	4.510	.6444	18.574	62	.001
	Admin staff	58	4.517	.9222	12.529	57	.001
	Students	98	4.204	.9411	12.665	97	.001
Change require learning and experimentation	Ac. staff	63	4.220	1.084	8.947	62	.001
	Admin staff	58	4.379	.9143	11.488	57	.001
	Students	98	4.081	.9380	11.415	97	.001
Identifying supporters and opponents	Ac. staffs	63	3.810	1.479	4.343	62	.001
	Admin staff	58	4.327	1.066	9.484	57	.001
	Students	98	4.428	.7864	17.981	97	.001
Clear communication with all stakeholders	Ac. staff	63	4.430	.9790	11.582	62	.001
	Admin Staff	58	4.741	.6087	21.787	57	.001
	Students	98	4.428	.7321	19.315	97	.001

Table 1 above presented the results of survey respondents' perceptions of specific adaptive design principles. For the sake of presentation, the perception of respondents can be synthesised into four major categories expected of adaptive design i.e., problem identification, collaborative solution, enhancing adaptive changes and clear communication.

1. Problem identification: According to the results of the one-sample t-test, the mean value of all the groups' perception of the problem identification mechanisms recommended by adaptive design was found to be significantly higher than the test value, which was 3. The average mean (4.48) of all groups indicated the existence of strong acceptance for problem identification systems i.e., identifying true needs/challenges, critical investigation of reoccurring problems and open discussion of problems. Heifetz, Grashow and Linsky, (2009) indicated that a clear understanding of problems via open discussions and a meticulous investigation is important. Supporting this idea, Creyton (2014) explained that a proper diagnosis of the adaptive challenge is the most challenging aspect of working adaptively. However, too often, we attempt to seek quick or palatable causes rather than working to identify the central underlying issue/challenges.

2. Collaborative Solution: As presented in the above table, respondents reflected strong agreement on the importance of a collaborative solution to institutional problems. The mean results indicated that problems require collaborative solution (m = 4.1) taking them as opportunities (m = 4.33) and empowering everyone to be a leader of changes (m = 4.4). Similarly, once adaptive challenges are identified, it is necessary to encourage stakeholders to collaborate on innovative solutions (Bernstein & Linsky, 2016). This also enhances distributive leadership, which makes everyone responsible and accountable for the change endeavours. Heifetz, Grashow and Linsky (2009) also clearly stated the need to shift responsibility from the shoulders of authority figures and authority structures to stakeholders. One interviewee said, 'People are naturally resistant to order unless they are part of the decision', which is similar to themes in Parry (1999) and Woodward and Hendry (2004) of the need to involve stakeholders in change decisions.

Holman, Devane and Cady (2007) explained the importance of collaborative/group change strategies. Collaboration can accelerate action, bring different people with different knowledge and experiences together and increase shared understanding and dissemination of collective strategy or

direction. Besides, participants bring core needs and concerns into the discussion and the opportunity for cross-fertilisation of ideas helps participants to have a clear understanding of the change issue and dissemination of information. Moreover, group change strategies help participants to develop ownership and commitment by disseminating change and energy throughout the organisation. Oelofse and Cady (2012) indicated that collaborative approaches can improve the commitment and the performance of organisational members. Furthermore, as Holman et al. (2007) suggest, meaningful participation, co-discovery and co-planning with the group of people with different interests and experiences increase the sustainability of results. These arguments are compelling to utilise collaborative/group-oriented change strategies for organisational change.

3. Enhancing Adaptive Changes: The fundamental purpose of focusing on adaptive challenges and enhancing collaborative solutions is to create adaptive change. The aggregate perception of respondents reflected that the changes in institutions ought to be adaptive and pervasive. The mean value of fundamental cultural/status quo change (m = 4.2) and change necessitate learning and experimentation (m = 4.2) indicated the felt importance of enhancing adaptive changes in institutions. According to Heifetz, Grashow and Linsky (2009), the basic assumption of adaptive leadership is about promoting change that enables the capacity to thrive. They indicated that new adaptations have the potential of significantly displacing, reregulating and rearranging old structures. Moreover, adaptive challenges can only be addressed through changes in people's values, beliefs, habits and loyalties; thus, adaptive change takes time. Therefore, theoretically, respondents agreed that changes should be pervasive because there are times in which institutions go back and forth to the new system and old approach, unable to forget the old approach.

4. Clear Communication: Establishing a clear communication system is important for successful changes. The perception of respondents on clear communication with all stakeholders (m = 4.53) and identifying supporters and opponents (m = 4.18) signified the value of clear communication. To ensure proper communication, the level and adequacy of change-related information are vital. Change information as Jimmieson, Terry and Callan (2004) is positively related to an adjustment in terms of 'well-being, job satisfaction and client engagement'. Similarly, it has been found to be predictive of the higher authenticity of change (Wanberg & Banas, 2000) and less resistance to change (Oreg, 2006). Thus, the adequate provision of information regarding the change is an important mechanism that institutions can use to enhance employees' understanding and acceptance.

Following the strong agreements on the principles extracted from the adaptive design, one-way ANOVA was also calculated to see differences among the perception of different groups. No significant differences were observed in most principles at the level of alpha = 0.05 except on the perception towards the need for learning and experimentation during change; on identifying supporters and opponents and on the need to have open discussion of problems ($F_{(2, 210)}$ = 6.99, p < 0.05, $F_{(2, 214)}$ = 5.37, p < 0.05 and $F_{(2, 213)}$ = 13.33, p < 0.05, respectively). To understand where the difference occurred on these issues, post hoc tests were conducted.

Although the mean agreement was positive, in the post hoc analysis, a relatively lower mean was observed in students than among other groups on the perception for the need to make learning and experimentation and on the need to discuss problems openly. Correspondingly, a relatively lower mean was observed among academic staff members for the need to identify supporters and opponents of change. This is in line with interview results; for example, one interviewee said being logical and reasonable is better than acting politically as adaptive design suggests to manage change initiatives. This means academic staff members emphasise the need to stick to rules, regulations and rationality rather than manipulating followers through political actions suggested by principles of adaptive leadership.

However, generally, we can understand the existence of a positive perception of adaptive design principles. Cullen, Edwards, Casper and Gue (2013) indicated the value of a positive perception of change approaches. This suggests that, if the adaptive design is introduced as an adaptive change approach, it can make change initiatives successful. Tariq et al. (2012) also made clear that our perceptions of change initiatives determine adaptability. Therefore, we may say there is a good impression of adaptive design principles, which in turn may indicate the existence of fertile ground to implement these principles of change management.

5.2. The implementation of adaptive design principles

Obviously, because leadership work involves many tacit assumptions, many leaders cannot clearly explain their leadership or change management approach. Especially in developing nations, leaders usually make decisions based on their instincts and we rarely see scientific, organised or explicit leadership approaches. Based on the question 'Can we find a change management approach that resembles adaptive design?', this study was extended to examine the practice of change management. If being implemented, respondents were asked to rate the frequency of major principles explained above in four groups. The responses were rated as Always (A) = 5, Often (O) = 4, Sometimes (S) = 3, Rarely (PA) = 2 and Never (N) = 1. The result of the one-sample *t*-test is presented in Table 2 below.

According to respondents, the practice of adaptive design principles was infrequent. The responses indicated the rare manifestation of adaptive design principles in leadership practice. There were limitations on the practices of identifying adaptive challenges, collaborating to solve problems, providing adaptive leadership and creating clear communication systems. More specifically, there was a limited use of critical investigation to identify reoccurring problems, making adaptive changes, empowering everybody to feel like a leader regardless of position and identifying supporters and opponents of change.

As presented in Table 2, the overall perceptions of the practices of adaptive design were low. The grand average mean (2.39) indicated rare implementation of these principles in the studied university. According to the one-sample t-test, there were differences in the perception of different groups on the level of significance. Respondents of all groups reflected significantly low mean results on open discussion of problems, considering problems as opportunities, the practice of collaborative solution to organisational problems and on the presence of change-related clear communication system with stakeholders.

Table 2. Respondents perception on the implementation of adaptive design principles

The practice of adaptive design principles at the university:	Group	N	Mean	St.D	*t*-value	df	Sig. (2-tailed)
	One-Sample *T*-Test						
	Test Value = 3						
Changes are originated from true needs	Ac. staffs	63	2.507	.93106	.068	62	.946
	Admin staff	58	2.275	.8333	−2.048	57	.045
	Students	98	2.561	1.0751	.564	97	.574
Critical investigation is done to identify reoccurring problems	Ac. staff	63	2.690	.75423	2.088	62	.241
	Admin Staff	58	2.440	1.0009	−1.181	57	.243
	Students	98	2.530	.9654	.314	97	.754
Open discussion of problems/Speaking the elephant in the room	Ac. staff	63	2.238	.8559	−2.429	62	.018
	Admin Staff	58	2.137	1.0165	−2.713	57	.009
	Students	98	2.183	.88919	−3.522	97	.001
Problems are used as opportunities for progress	Ac. staffs	63	2.031	.9994	−3.719	62	.000
	Admin staff	58	2.155	1.1817	−2.222	57	.030
	Students	98	2.265	.85616	−2.714	97	.008

Collaborative solution for organisational problems	Ac. staff	63	2.079	.8289	−4.028	62	.000
	Admin Staff	58	2.080	1.0477	−3.008	57	.004
	Students	98	2.487	.8690	−1.279	97	.204
Changes in the university require fundamental cultural/status quo change	Ac. staff	63	2.440	.7356	−.599	62	.551
	Admin staff	58	2.479	1.1672	−.787	57	.434
	Students	98	2.408	1.1291	−.805	97	.423
Everybody is empowered & feel as leader regardless of position	Ac. staffs	63	2.670	1.0625	1.245	62	.218
	Admin staff	58	2.517	1.1583	.113	57	.910
	Students	98	2.460	.92172	−.329	97	.743
There is learning and experimentation along with changes	Ac. staff	63	2.079	1.0519	−3.174	62	.002
	Admin staff	58	2.293	1.1548	−1.364	57	.178
	Students	98	2.346	.9958	−1.521	97	.131
Identifying supporters and opponents of change	Ac. staff	63	2.428	.6889	−.823	62	.414
	Admin staff	58	2.517	1.1583	.113	57	.910
	Students	98	2.673	1.0231	1.678	97	.197
Clear communication with all stakeholders	Ac. staff	63	2.317	.8766	−1.653	62	.013
	Admin staff	58	2.172	1.1103	−2.247	57	.029
	Students	98	2.316	.91490	−1.987	97	.050

However, the one-way ANOVA result showed significant differences among groups only on the implementation of a collaborative solution to solve organisational problems ($F(2, 214) = 3.064$, $p < 0.05$). The post hoc analysis also showed, while academic and administrative staff have similar perceptions slight differences were observed with students' mean. This may be interpreted as almost all groups have agreed that adaptive design principles are rarely seen in the change management process of the university. Even we may say there are limitations on problem identification, collaboration, changing via adaptive leadership and establishing clear change-oriented communication systems. Congruent with the quantitative data, almost all interviewees indicated the absence of careful observation for a clear understanding of adaptive challenges. One interviewee said, 'We usually spend most of our time fixing the shortage of materials, procedural problems and other inconsistencies, in most discussions we dwell on such issues'. This may be attributed to the visible and simplistic nature of technical problems (Creyton 2014; Heifetz, Grashow & Linsky 2009;). Likewise, vivid gaps were observed in the change management approach of the university.

Therefore, the university has a lot to learn from adaptive design principles of change, because successful and pervasive changes will happen if institutions are able to use similar structured change management approaches.

5.3. How do adaptive organisational changes happen in the university?

According to the questionnaire results, adaptive design principles are rarely implemented in the target university. This kindled a question: are there unique mechanisms the university has been using to lead change? The interview respondents indicated that the government introduces almost all change initiatives in the university. Similarly, Woldegiyorgis (2014) stated that the Ethiopian government is mostly the initiator and ultimate owner of changes, which might be true in other developing nations. Mostly, staff members and higher officials strive to incorporate change initiatives proposed by the government into their plans. Respondents' experiences showed that the university's mission and vision have been guided by the government agenda, which in turn are shared and cascaded among leaders and staff members in different positions. Paradoxically, respondents believed that change is successful when it emanated from the bottom through discussion and collaboration, which was similar to the literature reviewed.

Therefore, the participation of both academic and administrative staff members seems to primarily focus on how to achieve predesigned change agendas from the government. This was almost in line with quantitative results, which suggested that the attempt to initiate changes based on true needs was minimal. One of the interviewees said, 'It is not common to create change ideas and even subordinates are perceived as incompetent'. Encouraging innovation and collaboration are important aspects of adaptive design (Bernstein & Linsky, 2016) but it seems uncommon in the interviewee's perceptions. This was quite similar to quantitative results where collaboration to solve institutional challenges was rated as significantly low.

Nevertheless, most interviewees agreed that, regardless of the source of change initiatives, as long as ideas are important for the university's progress, it was good to implement them. One interviewee said, 'Look! Kaizen, it was an important change idea, but since it has been introduced by the government, people tend to resist it'. Despite the value of changes, most people understand reforms as burdens or tools of the government to control people according to interviewees. Here, we can appreciate the value of adaptive design to clear up misunderstandings. Besides, public universities face enormous pressures from academics to maintain their identities while responding to the government reform agendas (Mehari, 2016). Moreover, one interviewee said, 'Most changes in the university have been implemented as fashions and to satisfy bosses' contradictory to the principles of challenging the status quo and 'thriving' through adaptive leadership, as advocated by Heifetz, Grashow andLinsky (2009).

Consequently, we may say that the approach that the university has been using was not sufficient to bring adaptive changes because most change ideas were prescribed by the government (rather than being identified by ground-level users), the absence of collaborative solutions and limited attempts to convince and make implementers part of the change. Rather, changes were initiated top-down by the government, often meeting resistance from staff members. This might be a common incidence in HEIs of developing nations, thus, the researchers were interested in identifying frequent challenges in making adaptive changes.

5.4. Challenges to carryout adaptive changes

Various causes hamper change initiatives in HEIs. Many kinds of the literature indicated that resistance, incompetent leadership, contextual factors, organisational politics and resource limitations are among the dominant factors (Oreg, 2006; Wainaina et al., 2014; Woodward & Hendry, 2004). Besides, the unique nature of HEIs i.e., being loosely coupled systems, professional autonomy, the unique culture of the academy and other features may be potential challenges (Mehari, 2016). However, for the sake of manageability, participants were asked to rate the most common challenges of change based on reviewed literature. Responses were rated from very high (5), high (4), medium (3), low (2) to very low (1). The results are presented below in Table 3.

Table 3. Respondents perception of challenges to adaptive change

Challenges of Adaptive Change in the university:	Group	N	Mean	St.D	t-value	df	Sig. (2-tailed)
	One-Sample T-Test Test Value = 3						
Unwillingness to accept changes	Ac. staff	63	3.317	1.16155	2.169	62	.034
	Admin staff	58	2.735	1.38884	−1.385	57	.172
	Students	96	3.479	1.16961	4.014	95	.001
Poor readiness & commitment of leaders	Ac. staff	63	3.682	1.02902	5.265	62	.001
	Admin staff	58	3.094	1.54751	.444	57	.659
	Students	96	3.260	1.23327	2.069	95	.041
Poor communication strategy to introduce changes	Ac. staff	63	3.587	.90936	5.126	62	.001
	Admin staff	58	3.471	1.03038	3.333	57	.002

	Students	96	3.385	1.30883	2.885	95	.005
Lack of planning and preparation for change	Ac. staff	63	3.603	.99255	4.823	62	.001
	Admin staff	58	3.358	1.33149	1.960	57	.055
	Students	96	3.166	1.21106	1.348	95	.181
Lack of clear vision in changes	Ac. staff	63	3.365	1.29890	2.231	62	.029
	Admin staff	58	2.849	1.43307	−.767	57	.447
	Students	96	2.906	1.28209	−.716	95	.475
Failure legacy of previous changes	Ac. staff	63	3.285	1.05385	2.152	62	.035
	Admin staff	58	3.490	1.28036	2.789	57	.007
	Students	96	3.145	1.43622	.995	95	.322
Problems related to facilitating change/proper training	Ac. staff	63	3.444	1.14691	3.076	62	.003
	Admin staffs	58	3.660	1.42698	3.369	57	.001
	Students	96	3.552	1.18650	4.559	95	.001
Using coercion and unilateral action	Ac. staff	63	2.888	1.30892	−.674	62	.503
	Admin staff	58	3.018	1.57493	.087	57	.931
	Students	96	3.562	1.41282	3.901	95	.001
Resource limitation	Ac. staff	63	2.873	1.27624	−.790	62	.433
	Admin staff	58	2.981	1.30812	−.105	57	.917
	Students	96	3.312	1.39407	2.196	95	.031
Lack of followers involvement in decisions	Ac. staff	63	3.619	.83141	5.910	62	.001
	Admin staff	58	3.811	1.12757	5.238	57	.001
	Students	96	3.291	1.32122	2.163	95	.033

The grand average mean (3.3) indicated that almost all challenges were moderately reflected as challenges although their intensity varies. The mean values of the one-sample t-test in all groups showed the significant result of poor communication strategies; problems related to facilitating changes and lack of followers' involvement in decisions. This indicated the university has to work on these areas as a high priority. Next to these problems, comparatively, unwillingness to accept changes, poor readiness and commitment of leaders and a failure legacy of previous changes were also perceived as significant bottlenecks. Yet, other stated challenges, which were part of the survey included in Table 3, require attention though not as urgently as the other issues identified above.

A further statistical analysis was also made to examine perception differences among groups. The one-way ANOVA revealed significant differences on: unwillingness to accept changes, poor readiness and commitment of leaders, resource limitation and lack of followers involvement in decisions ($F_{(2, 207)} = 6.441$, $p < 0.05$, $F_{(2, 207)} = 3.413$, $p < 0.05$, $F_{(2, 207)} = 5.108$, $p < 0.05$ and $F_{(2, 207)} = 3.903$, $p < 0.05$, respectively). The post hoc test result showed that students had significantly higher mean on perception towards unwillingness to accept changes and resource limitation than other groups, which means these are the most pressing challenges in students' perception. Whereas, academic staff mean score was higher in poor readiness and commitment of leaders. Similarly, administrative staff mean score was significantly higher on lack of followers' involvement in decisions.

Consequently, a poor communication strategy, problems related to facilitating changes and lack of followers' involvement in decisions were found to be outstanding challenges of change management in the university. Parry (1999), Drew (2010) and Cullen et al. (2013) pointed out that communication is an effective adaptive leadership capacity. They appreciate the importance of change-related communication for the success of workplace change by influencing how employees perceive organisational actions. Similarly, the unwillingness to accept changes, poor readiness and commitment of leaders and failure legacy of previous changes were also significant challenges. Cullen et al. (2013), Judge and Douglas (2009), Parry (1999), Ployhart and Bliese (2015), Sony and Mekoth (2014) and Woodward and Hendry (2004) in one way or other indicated willingness, readiness and

leaders commitment as key factors for successful change adaptation. Thus, failure to address these issues will likely cause failure to create adaptive changes that are pervasive and long-lasting.

Therefore, the presence of these challenges strengthens the need to adapt and use adaptive design, since a lot can be learned from this approach about how to create adaptive changes in HEIs.

6. Reflections and recommendations

Based on the work of diverse organisational scholars, the researchers have tried to show the absence of a single comprehensive approach to introduce and manage changes. However, it is important for leaders and institutions to update their understanding of new theories and practices of change management. As explained in the conceptual framework, adaptive design is the most recent change management approach believed to have a significant impact on the change management endeavours of HEIs. Based on practice theory, in this investigation, we empirically tested a conceptual model of adaptive change in an HEI in a developing nation. Below, our key findings and how these findings can be addressed in practice are discussed.

First, the university community perceived adaptive design principles and tactics as important tools to institutionalise changes in HEIs. This may affirm the significance of adaptive design if accepted and scaled up as an alternative change management theory in HEIs. Especially in a context where the key change initiatives are dominated by the government's top-down approach, adaptive design is an important approach. Top-down approaches are vulnerable to leader driven solutions (Woodward & Hendry, 2004). In this way, fundamental problems may not be clearly understood and the university community is not a part of the solution. Besides, change management is usually done in universities without open communication of the issues in a timely fashion with academicians and supporting staff as they are directly linked to or to be affected in the process. As a result, academicians lose devotion, ownership and attention. Staff members tend to adopt an observational standpoint (Mehari, 2016). Notably, as can be learned from the target university discussed next, which is dominated by a top-down change management approach, problems identified require an intervention of adaptive design principles and tactics.

Second, the study has tried to assess the practical manifestation of adaptive design principles and tactics of change management in the university. This provided us the opportunity to test the approach in practice. However, in the target university, leaders and change agents rarely used a change management approach that resembles adaptive design, which in turn may be the reason for the failure to bring adaptive changes (i.e., deep and pervasive changes) in the university. The research found that the principles and tactics derived from this approach were weak. The primary problem identified was related to identifying adaptive challenges/problems. As the approach indicated, successful adaptive changes require a clear understanding of organisational problems/challenges, which could be possible by focusing on true needs, holding an open discussion with stakeholders and by identifying reoccurring deep-rooted adaptive problems. Next, there were gaps in innovation and collaboration to tackle institutional problems. Adaptive design strongly advocates that a change should originate from the system itself. According to the known inspirational quote, 'When the egg is broken from the inside, life starts…..'. Likewise, when people are part of the solution and perceive themselves to be creators of changes they will be more likely to implement the changes. This also signals the significance of participatory decision-making. The other implementation problem pointed in the study findings is that adaptive leadership was not observed in the university's change management. As explained in the framework, adaptive leadership is vital to managing problems related to the human element of change, especially resistance to changes. Finally, problems related to establishing clear communication systems to facilitate changes were observed in the target university.

Third, in this investigation, an attempt was made to envisage challenges related to creating adaptive changes/deep and pervasive. Although challenges are many, poor change-related

communication system, problems related to facilitating changes and lack of followers' involvement in decisions were found significant causes that hamper adaptive changes. Similarly, unwillingness to accept changes, poor readiness and commitment of leaders and failure legacy of previous changes were found pressing challenges. Therefore, the implementation gaps discussed above and challenges identified might be a signal of how far the university lags behind to be a change the adaptive institution. Even we may question the presence of deep and persistent changes in the university's change process. Accordingly, we may conclude that the change management of the university was not in such a way to bring deep, pervasive and sustainable changes as adaptive design tools and tactics for organisational change suggests.

Consequently, the identified gaps and challenges in the studied university strengthen our argument, as an adaptive design is an important approach to foster adaptive changes in HEIs. To create adaptive changes, business, as usual, does not suffice. Hence, special emphasis should be given to understand institutional challenges through deep investigation and open discussion of problems. Understanding adaptive challenges require thinking out of the box. The reoccurrence of problems, the need to have deep behavioural changes and the absence of a quick solution to existing problems may be common indicators of adaptive challenges. Thus, HEIs needs to refrain from finding quick fixes and easy answers to technical problems, instead, they need to focus on a participatory approach to solving deep adaptive challenges.

Besides, problems should be used as a motive to initiate changes rather than threats; collaborative thinking and innovation has to be encouraged. The change ideas or solutions to problems should emanate from collective thinking. In this regard, leaders and change agents can promote and use group change strategies. For example, open space technology, which is a self-organising practice of inner discipline and collective activity, helps to release the inherent creativity and leadership in people. World Café also creates a safe space where participants can contribute to the process of knowledge sharing through dialogue and act decisively in pursuit of common aims. In addition, it is useful to use appreciative inquiry, which is a group change strategy to create a holistic picture, energy, momentum and ownership for a change. If used properly, these group strategies are noteworthy to mobilise systems and gather shared thinking through mass discussions (see Nauheimer, 2005; Oelofse & Cady, 2012; Schieffer, Isaacs & Gyllenpalm, 2004; Willoughby & Tosey, 2007)

Moreover, a clear change-oriented communication system has to be established. All stakeholders' need to be clear about the type and impacts of changes being introduced into the system. Apparent communication minimises resistance and enhances the change implementation process. Leaders and change agents may use formal and informal mechanisms to construct the picture of change ideas. Here, it is necessary to make sure that staff members are well informed about the true picture of changes. Establishing an efficient communication system is a profound way to influence positively how staff understand the change initiatives. The communication system should not be restricted to building a positive attitude and willingness among stakeholders; it should also arm frontline workers with the necessary skill to do adaptive work through change-oriented training.

Overall, the findings of this study are expected to help us envisage the extent to which adaptive design is valuable in the change management of HEIs. Building an adaptive university capable of deep and pervasive change is not a matter of choice rather it is a necessity to survive and thrive in our ever-changing dynamic environment. Thus, the researchers encourage leaders and change agents to focus on building adaptive universities.

7. Limitations and future study

The basic limitation of this study is the problem of supporting literature from other similar local research findings, conducted to see the practical linkages and other scholars' perception of the approach. Besides, this research might probably have a limited transferability to other organisations

because the sample of this study was focused on the university setting. Future studies should attempt to collect more precise, longitudinal data to test the approach. More quantitative and qualitative data on how and when exactly adaptive design principles and tactics should be implemented in HEIs will make the approach more useful. Obviously, taking account of other aspects of adaptability, for example, contextual resources such as participation, transformational leadership but also different personal resources such as (change) self-efficacy and organisation-based self-esteem, will further increase understanding of change management. Finally, the researchers feel that this research should be further strengthened to answer specific factors related to adaptive design and its role to foster adaptive change. However, though not sufficient, this study can provide insight into the intricacies of change, change management and the contribution of adaptive design.

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Appendix A

Questionnaire for academic leaders and academic staff

(This questionnaire was transcribed into local language-Amharic for administrative staff and students)

Dear Respondents,

The objective of this questionnaire is to assess the practice of organisational change and change management in the university. The information you provide is valuable for the successes of this research project. Therefore, your genuine response is highly appreciated. Please be honest and objective while filling the questionnaire. The information you give is used only for academic purpose and will be kept strictly confidential.

Thank You in Advance for Your Cooperation!

General Directions:

This questionnaire has two parts: Part I includes your personal information and Part II is about the practice of adaptive change and change management in the university.

N.B

Do not write your name

Part I: Personal Information (Put 'X' in the appropriate box)

1. Sex: Male …………… Female ……………

2. Age: $\leq$ 25………… 26–35 …………… 36–45…………… 46–55 …………… $\geq$56……………

3. Academic Qualification/Highest Formal Education Attended:

Diploma …………… First Degree …………… Second Degree …………… PhD and Above ……………

4. Present Post/position: _____

5. Number of Years of Service at Bahir Dar University:

$\leq$5………… 6–10…………… 11–15…………… 16–20…………… 21–25…………… $\geq$26……………

6. College/ Faculty/ School you belongs to:

Social Science and Humanities…………… Dry land Agriculture ……………

Natural and Computational Science…………… Veterinary Medicine……………

Engineering and Technology…………… Business and Economics……………

Health Science …………… Law……………

Others (please specify) _____

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Part II: The following statements are about the change and change management in your university. Read each of the following items carefully and put 'X' mark under the alternative that best expresses your feeling about the statement.

No	Description	Alternatives				
		Strongly agree	Agree	Partially agree	Disagree	Strongly disagree
1	How far do you agree with the following ideas of change and change management?					
	1.1 Changes/reforms have to originate from the true needs of users/customers					
	1.2 Changes/reforms have to be based on critical investigation of deep-rooted & reoccurring problems					
	1.3 Problems should be seen as opportunities for change					
	1.4 Staff need to collaborate to find solutions to problems					
	1.5 Change/reform has to challenge the status quo & change working culture fundamentally in a new way					
	1.6 Everyone should be leader of change regardless of position/sharing responsibility for change					
	1.7 Learning and experimentation are important in change					
	1.8 It is important to identify supporters and opponents of change/reform process to manage resistance					
	1.9 The character of the proposed changes and their implications must be understood by all participants					

		Always	Sometimes	Rarely	Never
1.10	It is necessary to discuss institutional problems openly regardless of their sensitivity				
2	**How often have the following ideas been practiced in change/reform process of the university?**	**Always**	**Sometimes**	**Rarely**	**Never**
2.1	Changes/reforms are originated from the true needs of users and customers				
2.2	Changes in the university are made after critical investigation of deep-rooted and reoccurring problems in the university				
2.3	Organizational challenges/problems are discussed openly regardless of their sensitivity				
2.4	Organisational problems in the university are used as opportunities for future progress or change				
2.5	Staffs work collaboratively to find creative solutions to organisational problems				
2.6	Changes/reforms implemented in the university require a fundamental change in peoples working culture/need learning new ways				
2.7	Everyone in the university is empowered to be a leader of change regardless of position				
2.8	There is learning and experimentation along with changes				

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2.9	Change agents in the university review current value, supporters & opponents of the proposed change initiative						
2.10	There is clear communication with all stakeholders about the change						
3	**How high are the following challenges in the change/reform initiatives of the university?**	**Very high**	**High**		**Medium**	**Low**	**Very low**
4.1	Staffs unwillingness to accept changes that can change the fundamental working culture						
4.2	Poor readiness & commitment of leaders for institutional change						
4.3	Poor communication strategy to introduce all stakeholders about the institutional change						
4.4	Lack of planning and preparation for change						
4.5	Lack of clear vision in change programmes						
4.6	The failure legacy of previous change effort						
4.7	Problems related to facilitation and training support to build staffs confidence and competence						
4.8	Using coercion and unilateral action to facilitate change						
4.9	Resource limitation to facilitate institutional changes						
4.10	Lack of followers involvement in decision making						

Appendix B

Interview guide for academic leaders and academic staffs

(This guide was transcribed into local language-Amharic for administrative staffs and students)

**This interview questions are prepared to find out practices regarding
change and change management in the university**

Dear Interviewee, I really appreciate your willingness to give me this interviewee. In our dialogue, I would like you to share me the institutional change and change management practices in your university. Please be free to forward your feelings about the issue. I affirm you that the information you are providing will be used for academic purpose only and will be kept strictly confidential.

1. Do you think your university is being changed? In what way? How are changes being made?
2. In your opinion who initiate change in your institution?
3. How far are change initiatives successful in the university? If yes, why? If no, why?
4. What are the problems/challenges in the institutional change process?
5. How do you and other staffs perceive problems and the need to create change in the university? Are there mechanisms to understand the fundamental problems of the institution? If yes, how? If no, why?
6. Are there practices in the institution to collaborate and generate ideas to solve the root problems of the institution? If yes, how? If no, why?
7. What do you think are the role of leaders at different positions in leading systemic changes in the university?
8. What ideas do you recommend in relation to facilitating effective organisational changes in the university?
   I am happy by the time we have together. I thank you very much for the interview we had.