



## INVESTIGATING READINESS FOR ACCEPTANCE OF CHANGE FOR THE ADOPTION OF BLACKBOARD LMS AT PRINCE SATTAM BIN ABDULAZIZ UNIVERSITY, SAUDI ARABIA

Mohammed Ilyas<sup>1</sup>

<sup>1</sup>Prince Sattam Bin Abdulaziz University, Alkharj, Saudi Arabia



### ABSTRACT

#### Article History

Received: 27 September 2018

Revised: 5 November 2018

Accepted: 7 December 2018

Published: 14 January 2019

#### Keywords

Attitude

Behavioral patterns

Models of organizational change

Readiness for change.

This study applies the theory of Readiness for Organizational Change (Holt *et al.*, 2007) with respect to the Learning Management System (LMS) such as Blackboard. Widely adopted in organizational environments, this theory discusses four types of antecedents: content, process, context and individual differences in order to determine behavioral patterns in change recipients. Based on prior studies, and modifying Holt et al's model, this paper created a Model for Readiness for Acceptance of Change (MRAC) to meet the requirements of implementing the Blackboard LMS at Prince Sattam bin Abdulaziz University (PSAU), Saudi Arabia. This paper studied three variables: readiness for acceptance for change, change beliefs and resistance to change. 340 respondents, male and female, comprising Faculty and students PSAU from all schools and levels, participated in this study. A questionnaire was prepared to collect data. SPSS software was used to analyze the data. The results suggested that readiness or acceptance for change is a multidimensional variable influenced by factors such as context, change beliefs, individual differences and resistance to change. The results also suggested that respondents were aware of the usefulness of a change, their beliefs were stronger but they lacked readiness for that change.

**Contribution/Originality:** This study shall contribute towards motivating Faculty and Students for adoption of Blackboard LMS. It will also provide useful insights to policy makers and university management to take initiatives for developing positive beliefs in Faculty and learners in order to develop Readiness for Change.

### 1. INTRODUCTION

A radical change has been felt in the use and application of Learning Management Systems (LMSs) in education (Demetrev and Höner, 2015; Nuangchalerm, 2017). Most universities have incorporated online learning mechanisms with their face to face classroom teaching via the use of a LMS. It is challenge for both the faculty and students who are used to traditional face-to-face learning environments to show a spontaneous readiness for the adoption of an online LMS as an integral component and a supplement to face to face learning methods. One such online LMS is Blackboard, online interactive educational management software designed to enhance teaching and learning activities with the support of ERP tools (Woods, 2004; Karia and Mohamed, 2017).

The use of Blackboard ever since it was introduced in Saudi universities about six years ago, has been a subject of empirical and theoretical studies (Al-Khalifa, 2012; Choudhury, 2015; Ja'ashan, 2015; Alturki *et al.*, 2016; Hussein,

2016). The management of these universities has made several attempts to streamline the use of Blackboard LMS in teaching and learning activities but could not achieve the desirable results. The real problem lies in the readiness for accepting this change, as it was felt when this research study was conceived. Several behavioral patterns among both faculty and students hinted at the lack of willingness to accept Blackboard LMS. This study attempted to find out factors that inhibited the readiness and adaptability to change as well as implementation of the Blackboard LMS in Prince Sattam Bin Abdulaziz University (PSAU).

Adaptability to change is a pre-requisite for the success of any institution. An institution which faces rapid changes has the choice of adapting to change or opposing the change. For implementation of change successfully, readiness for change helps to avoid inter personal conflicts and issues of governance in the organization (Armenakis *et al.*, 1993; Garrison *et al.*, 2006; Andersen, 2008; Widaryanti *et al.*, 2016; Yanga and Yenb, 2016). A major challenge in the implementation of change is also felt when a few individuals categorize change as positive or negative. Positive change is something that will provide them benefits, so they readily accept it while a negative view about change is likely to develop resistance in these individuals (Holt *et al.*, 2007; Jayakumar, 2016; Make and Yonas, 2018).

Holt *et al.* (2007) recommend that in order to implement the Model of Readiness for Organizational Change (MROC), there ought to be change agents in every institution. Their study finds that readiness for change was a “multidimensional construct” having four dimensions: the first element ‘context’ refers to the circumstances under which the change would occur; the second element ‘content’ deals with what is being changed; thirdly, ‘process’ explains how the change would be implemented; and finally the antecedent of ‘individual attributes’ stands for things undergoing change. Holt *et al.* (2007) thus believed that change does not happen in a vacuum but always in a context, which is combined with the content and they call such a change “appropriate.” The dimension of “process” depends much on leaders' commitment to the change, so they call it “management support” and finally, the individual attributes are beliefs about individuals' capability to implement the proposed change and that the proposed change would be beneficial to both the individual and the institution.

## 2. LITERATURE REVIEW

Holt *et al.*'s theory of organizational change can be studied in combination with Technology Acceptance Model (TAM) (Davis *et al.*, 1989). The TAM theory postulates that the success or acceptability of any information system depends much on attitude, beliefs and resistance to change as reflected in the “behavioral intention” of users who must be convinced of its utility and appropriateness. Davis *et al.* (1989) also add that the acceptability of any technology or Information system (Blackboard or any LMS is not an exception) also depends upon the impact that it can make on individual performance. Hence, though an employee will not accept an information system, but if he believes that it can improve his performance at work, he is likely to accept it eventually, which Davis *et al.* (1989) called as “pro-change behavior.” Other studies related to Readiness for Change have also demonstrated a need for change (Armenakis *et al.*, 1993; Prochaska *et al.*, 2001) for the individuals to accept and commit to change and express their readiness (Susanto, 2008; Rafferty *et al.*, 2012) and for the organization to imitate a change process and facilitate the implementation of change (Weiner *et al.*, 2008).

Other studies that suggested the use of measuring scales included Conner (2005) who developed an “organizational change readiness scale” (OCRS) to diagnose the “overall acceptance level of the organizational change”; Armenakis *et al.* (2007) who developed the Organizational Change Recipients' Belief Scale (OCRBS); and Giangreco (2002) who designed the resistance to change scale. Conner (2005) scale assisted to evaluate employees' perceptions through forces like “opportunity forces” that facilitated the change or “threat forces” that inhibited the change process. The scale determined that if there existed any change situation, both “opportunity” and “threat forces can be seen in the organization. For bringing a successful organizational change intended, it was necessary to bring a balance between all such situations. The second scale (ORCBS) suggested by Armenakis and his colleagues

(Armenakis *et al.*, 2007) included five beliefs to be present in the employees: Discrepancy, believing the change to be necessary ; Appropriateness, suggesting that the change is required; Efficacy, recommending implementation of change; Principal Support, hoping to get top management support and Valence, believing that change was beneficial to individuals. The third scale designed by Giangreco (2002) assessed two types of behavior in the case of resistance to change: Pro-Change Behavior, expressing agreement for the change; and Anti-Change Behavior, reflecting disagreement with change. This scale thus also studied change in the behavioral patterns in employees.

Amidst these critical debate, Fuad and Sharifah (2013) in a comparative, empirical study discussed the perceived ease of use and perceived usefulness of LMS in university education and recommended the use of LMS uniformly in all types of education including distance learning and blended learning. Alghamdi (2016) study attempted to find linkages between the actual usage and attitude of university faculty towards LMS and observed how the application of an LMS could bring pedagogical changes and change in the attitude of Faculty towards LMS. The findings also revealed that the attitude of faculty that used LMS differed from that of those who did not use the LMS. In the context of Saudi Arabia, there are several studies that have investigated Blackboard LMS. Alqurashi (2005) for instance, in his unpublished doctoral dissertation, investigates the impact of Blackboard in Saudi universities, particularly where it was adopted as a collaborative learning technique. This study discovered that learners taught through traditional, face to face mode did not show any significant difference when compared with the learners taught through web-based mode. According to the author, this could be because of Blackboard being a newly-introduced technique and also there was a lack of adequate computer labs and resource with full access to the Internet.

Similarly, Alturki *et al.* (2016) analyzed the usability and accessibility of LMS “JUSUR”, developed by National Center for E-learning at King Saud University, Saudi Arabia and found that the LMS was fully equipped with such design and navigation features that users, Faculty and students, would not face any accessibility issue. Ja'ashan (2015) conducted a case study of EFL students' perceptions and attitudes for online learning systems in University of Bisha, Saudi Arabia. The findings of this study revealed positive attitude of the learners towards online Learning methods but recommended the need for the learners to take the responsibility of their learning by developing self-learning strategies and independent thinking. Both these studies have given evidence of a positive attitude held by the Saudi Faculty and the students towards the Blackboard LMS. Besides, there are also other studies (Hussein, 2011; Al-Khalifa, 2012; Choudhury, 2015; Hussein, 2016) which have examined various other variables with respect to Blackboard and online LMSs in Saudi Arabia universities.

Hence prior studies have ample evidence that Blackboard LMS has contributed greatly in transforming the beliefs, attitude and perception of both Faculty and students, despite individual differences and resistance to change from a few places. This study was therefore designed to investigate the level of readiness of the PSAU faculty and the students to adopt a new LMS, Blackboard and change the existing manually controlled, traditional learning management practices.

### 3. PROBLEM STATEMENT

Organizational change is a process that each educational institution and university has to undergo in order to transform itself for not only to meet quality standards but also to reach benchmarks and meet expectations of its stakeholders. Change also allows the organizations to survive and stay competitive. In order to manage organizational change and achieve the desired change, the first pre-requisite is to manage people, the Faculty and the students, in the current context. Initially, a lack of readiness for change was felt in the Faculty and the students, in spite of Blackboard App on the mobile device and other accessibility options. A resistance was also felt from the non-Arabic speakers among the Faculty who felt a problem in responding and understanding the feedback as those were in Arabic. Subsequently, the English translation was also improved to ensure easy accessibility for the bilinguals. Another problem faced was about beliefs and attitude of both Faculty and Students about its significance

and purpose. Most of them were so accustomed to the traditional, face-to-face classroom teaching method that it was difficult for them to adapt to or accept any online learning methods that supplemented the traditional learning system or became one of its components.

Hence a need was felt to study the Readiness for Change, Change Beliefs and Resistance to Change towards Blackboard, LMS among the users of PSAU, Saudi Arabia. The study was also based on the premise that the Readiness to Accept the Change or adapt to Blackboard must be very smooth which could be possible only by transforming first their beliefs about change, their attitude and subsequently breaking their Resistance to Change. The study is also built on the premise that in order to develop a Readiness for Change, it is essential to modify beliefs of users too toward the intended change because such beliefs develop out of factors that they perceive are required for organizational change. The success or failure of a change initiative also depends much on the readiness and acceptability of that change by the employees of that organization (Hendrickson and Gray, 2012).

The objective of this study was to identify factors that determine the readiness of Faculty, students and other staff for change and acceptance of Blackboard LMS. This study also aimed to study both individual and organizational levels of readiness towards this change and to assess whether there existed differences in their levels of readiness and commitment.

#### 4. RESEARCH METHODOLOGY

The Model of Readiness for Change (MROC) (Holt *et al.*, 2007) and the Organizational Change Recipients' Belief Scale (OCRBS) (Armenakis *et al.*, 2007) were modified to suit the requirements of the PSAU users. Unlike the original models, this model was simple and expressed a sequential relationship between the constructs of the model. This modified template also acted as a theoretical framework which was used to judge and experiment the relationship between the variables of the study. A questionnaire was also distributed among the Faculty and the students of the PSAU with items related to the usability, accessibility, usefulness, and management support for the Blackboard LMS. The response format was a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

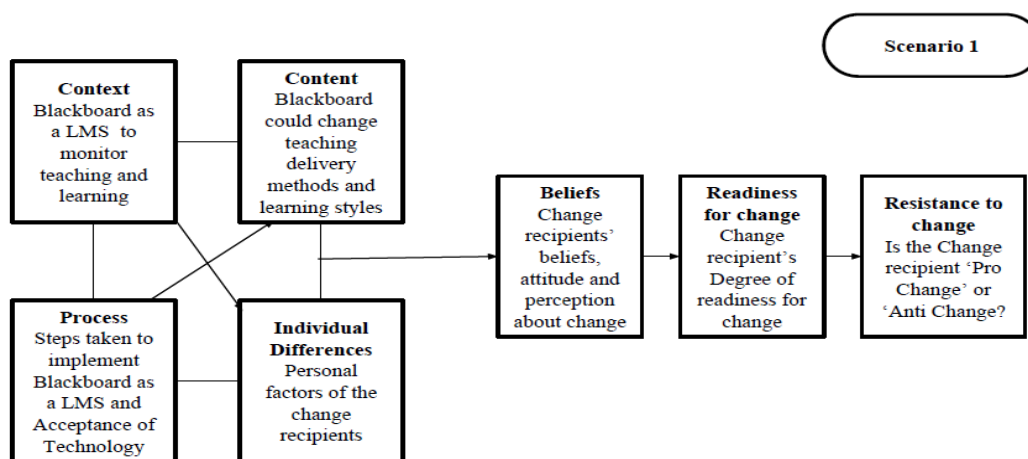
The focus in the questionnaire was to find factors that led to Readiness for Change as well as Resistance to it. The scale was based on the Holt *et al.* (2007) theoretical framework and reflected both Readiness for Change and Resistance to Change in the multi-dimensional constructs suggested by them like Content, Context, Process and Individual Differences. The original scale (Holt *et al.*, 2007) consisted of 25 items; however, for this scale in the current study, 21 items were chosen and modified to fit the current sample of this study. The responses were collected on a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree). For the sake of validity, the items of questionnaire were verified by university experts.

The data was collected during the period from September to December 2017, a period when a great emphasis was being made to implement the Blackboard LMS. There were 340 respondents comprising Faculty and students of PSAU belonging to all schools and levels of male and female sections. The purpose of making the instrument open to all was to avoid gender bias or any possible bias to appear in the responses of Faculty and students of the same school. Data analysis was carried out using SPSS (version 15) to record frequencies, percentages and mean scores. The reliability of the questionnaire was estimated by Cronbach alpha; reliability coefficients were 0.94 for readiness for change, 0.96 for change beliefs, and 0.91 for resistance to change.

#### 5. THEORETICAL FRAMEWORK OF THE STUDY

Since the primary objective of this study was to investigate a change phenomenon (e.g. adoption and implementation of Blackboard LMS), circumstances (e.g. change beliefs), or experience of participants (e.g. resistance to change), a theoretical framework (Figure 1) was designed to identify a predictor for such a change. This theoretical framework for this study was modeled upon the findings of Holt *et al.* (2007) and models and scales

suggested by Conner (2005); Armenakis *et al.* (2007) and Giangreco (2002). Based on these models, a template was customized for this study in order to assess the situation at PSAU Saudi Arabia and to investigate the Readiness for Change and Adoption of LMS Blackboard by its Faculty and students. This proposed model (Figure1) also aims to identify how these three issues: Readiness for Change, Change Beliefs and Resistance to Change exist between the Faculty and students of PSAU and what measures should be taken to institutionalize this change despite resistance to change, if any.



**Figure-1.** Model for Readiness for Acceptance of Change for Blackboard LMS based on Holt *et al.* (2007) framework of Organizational Change  
Source: Holt *et al.* (2007) Scenario 1

This framework also served as a template to evaluate the relationship between the three variables of the study: Readiness for Change, Change Beliefs and Resistance to Change. For instance it shows all the four constructs of Holt *et al.* (2007) framework: Context, Content, Process and Individual Differences and the relationship between them and also such variables like Readiness to Change And Resistance To Change borrowed from Technology Acceptance Model (TAM) (Davis *et al.*, 1989).

Figure 1 also exhibits the initial framework of this study where four constructs viz., Context, Content, Process and Individual Differences (Holt *et al.*, 2007) are shown in correlation with each other. It also shows that Change Beliefs and Readiness for Change are antecedents to Resistance to Change (Armenakis *et al.*, 1993; Armenakis *et al.*, 2007). This framework is consistent with Armenakis *et al.* (2007) and Holt *et al.* (2007) who postulated that Change Beliefs affect the Change Readiness and therefore determine the Change Resistance. Therefore, this study proposed to initiate the study with the same antecedence as a simulating model, which showed Change Beliefs preceding Change Readiness and Change Resistance (Figure 1). In other words, this model can be viewed as a proposition of this study stating that Change Beliefs predict Readiness for Change and therefore both are antecedent to Resistance to Change.

## 6. RESULTS AND DISCUSSION

The questionnaire for this study was prepared in the same sequence as variables and constructs are shown in MARC (Figure 1). Among the respondents, 49% were female and 51% male and the average age combined for both genders was 20.5 years. The educational level of respondents was dispersed: 42% were Freshmen (Level 1 and 2), 41% were from mid-levels and remaining 17% were in their graduating semesters. Out of the total respondents, 10% were Faculty members, and among students, 29% were majoring in English Language and Literature, 21% in Business Management, and the rest equally belonged to Engineering, Medicine, Pharmacy and Computer Science.

It was discovered that a majority of respondents (87%) found Blackboard application very useful, worthwhile and an assistive tool in enhancing their knowledge about courses which they studied. Even almost an equal number



of respondents understood its objectives (83%), thought that Blackboard would make their learning easier and more comfortable (73%); it would require less time and energy to acquire learning (69%); and that it was very much accessible on any device (79%). However, despite such a wide awareness about Blackboard, the study found that many of these respondents failed to distinguish between Readiness for Change and Change Beliefs about adoption of Blackboard as a learning tool.

A majority showed a doubt over Blackboard to become an effective tool in getting a more accurate information (65%) or prove a supplement to face to face classroom teaching methods (71%) or offer satisfaction and confidence to learners (53%). A majority (69%) thought that it was not a good decision to use Blackboard LMS for students course work, assignments and assessment and should only be limited to act as a communication tool between faculty and students. Not too many (21%) liked and enjoyed using Blackboard and thought it was a pleasant experience; very few (19%) respondents were fully confident and satisfied with Blackboard as a learning tool; a big number of respondents (55%) thought they would fail to acquire technical skills required to operate Blackboard LMS and that they would get stuck in the middle of some operation; finally a large number (61%) rejected it offering an attractive learning environment. Among the respondents, 39% mentioned that their teachers and 23% reported that their peers and other classmates encouraged them to use Blackboard. This is a clear indication of a lack of readiness among both Faculty and the students. One of the reasons for this lack of readiness could also be attributed to the belief held by 59% respondents that after the total adoption of Blackboard, students need not attend classes which would disrupt their routine studies including the personal relationships with their teachers.

Given to understand that there is a good awareness about the usability and significance of Blackboard, there is also a lack of motivation, readiness to accept and lack of peer followership at PSAU which appears to give the impression of a resistance to implementation of Blackboard LMS. However, this is not true nor can it be termed as resistance to the change that Blackboard promised to bring in the learning practices. The researcher feels that it is the issue of beliefs and individual readiness. If Faculty and students are able to develop a positive belief about Blackboard LMS and also show a pro-change behavior, it is possible to achieve fast acceptance and also more positive Change Beliefs about it. The students particularly will be happier and more satisfied with it and would not mind if there were less interaction with the Faculty or fewer opportunities of personal interaction. Instead, they would readily accept it as a supplement to face to face classroom teaching. They would also overcome the technical difficulties, if any, regarding its usability or accessibility. A positive inertia would make them understand that if they changed their beliefs about Blackboard and if they were determined, they could learn everything required to master Blackboard LMS. In other words, they believed in the 'content' and the 'context' of Blackboard application in the PSAU learning environment but raised their doubts over 'process' and 'individual' efforts. The inter-relationships and linkages suggested by Holt *et al.* (2007) and also shown through double arrows in the MRAC (Figure 1) seems not to be working with the current sample of this study.

This model thus helped in studying Readiness for Adoption and implementation of Blackboard LMS, however; on the contrary, it is not consistent with a few critics who have opposed this framework, particularly due to the sequence of items followed in this framework. For instance, Bernerth (2004); Brown (2009) and Madsen *et al.* (2005) hold different opinions and assert that Change Beliefs should be seen as antecedents of Change Readiness and Change Resistance since Change Beliefs are influenced by internal and external factors in an organization as well as individual differences that determine a pro change or anti-change behavior. Figure 2 illustrates this contrary view as scenario 2.

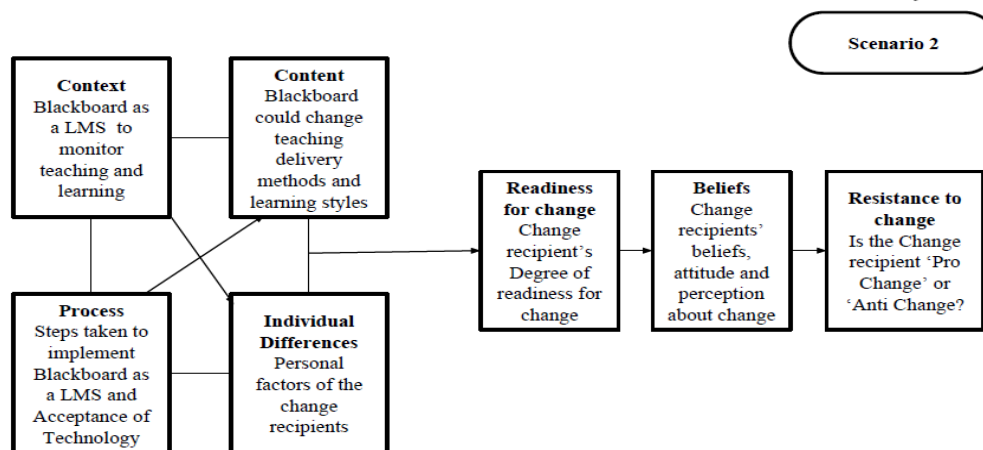


Figure-2. Change Readiness shown as predicting Change Beliefs and Resistance to Change (Scenario 2)  
Source: Researcher

This debate about what antecedes the other exhibited in Figure 2 attempts to understand the causal relationship between Change Readiness, Change Beliefs and Resistance to Change. Figure 2, unlike Armenakis *et al.* (2007) and Holt *et al.* (2007) proposes a different causal relationship in which Change Readiness predicts Change Beliefs which are antecedent to (and cause) Resistance to Change (Figure 2). This means that priority should be given to Readiness for Change in order to modulate and develop the required Change Beliefs. The Resistance to Change in this scenario is expected to result in a 'Pro Change' Behavior.

Having felt the need to include this alternative model (Figure 2) the researcher tried to study the dichotomy in both the models (Figure1 and Figure 2) with respect to educational management and the three variables of this study: readiness for change, change beliefs and resistance to change.

Table 1 presents respondents' readiness for change when it comes to adoption and implementation of Blackboard LMS. Data reveals that a very high frequency (61%) was seen in respondents supporting change and expressing pro-change attitude discarding the anti-change behavior. Respondents indifferent to change were very few (11%) showing low frequency in both pro and anti-change behavior. Their indifference was felt from their documents stating that they would not facilitate the change nor would openly show resentment or reveal disagreement about the change. A very small number of respondents 5% express clear resistance to change and therefore showed low frequency of pro change and high frequency of anti-change. They admitted that they would never engage in pro-change behavior and if given an opportunity would frequently engage in anti-change behavior. A moderate number of respondents (23%) said they were confused about the change and therefore reported a high frequency of pro change and low frequency of anti-change behaviors.

Table-1. Respondents' Behavior to Readiness of Change

Responses	Behavior	Frequency
Support change	High frequency of pro change;	61% -59%
	Low frequency of anti-change	
Indifferent to change	Low frequency of pro change;	11 -9%
	Low frequency of anti-change	
Resistors to change	Low frequency of pro change;	5 -4%
	High frequency of anti-change	
Confused about change	High frequency of pro change;	23 -19%
	Low frequency of anti-change	

Based on Findings of the current study

Practically, Readiness for Change in a university or an educational institution can be summed up as beliefs and attitudes held by Faculty, staff and students. These beliefs and attitudes depend much on factors such as learning

objectives, learning outcomes, Faculty-student relationships, orientation with curriculum under study, and like. If these factors are not affected by adoption of Blackboard LMS, and if the Faculty and students are convinced of these beliefs, there would be no Resistance to Change.

Table 2 exhibits mean scores for each of the change beliefs viz. content, process, context and individual differences. The total score for the respondents' overall change beliefs is 119.25 which is almost 80% of the maximum score (150). This indicates a high significance given to change beliefs of the respondents. Table 2 also exhibits mean scores for the two factors of the resistance to change scale with pro-change mean score is 27.87 which is 90.4% of its maximum score (30) while the anti-change mean score is 7.78 which is about 40% of its maximum score (20). This is evidence of respondents' preference for pro-change behavior and strong rejection of the anti-change behaviors.

**Table-2.** Means of the respondents' change beliefs

Variables	Mean score	Maximum Score
<i>Change beliefs</i>		
Content	36.53	50
Process	34.67	40
Context	19.07	25
Individual differences	28.98	35
	119.25	150
<i>Resistance to Change</i>		
Pro-change	27.87	30
Anti-change	7.78	20

based on Findings of the current study

At the same time, Resistance to Change is understood as two dimensional: "pro-change" and "anti-change." A "pro-change" behavior would show a positive inclination towards change and adoption of change would be a smooth process, whereas an "anti-change" behavior would hint at non-acceptance and a great resistance to change, as it is most common in technology related changes where human users do not readily accept technology replacing anything that they are accustomed to practice for a long time.

To sum up, both scenarios (Figure 1 and Figure 2) can be two possible models to show a causal relationship between variables of the study: readiness for change, change beliefs and resistance to change. The difference between two models lies in first change beliefs predicts readiness for change and readiness for change appearing antecedent to resistance to change (Figure1); and second, readiness for change predicting change beliefs and change beliefs to appear antecedent to resistance to change (Figure 2).

## 7. CONCLUSION

To conclude, the findings of this study are consistent with Holt *et al.* (2007) analysis which also revealed an overlap between 'content' and 'context' and which led to a greater resistance to change in the organizational. However, these findings contradict (Holt *et al.*, 2007) findings that respondents would develop a positive attitude if the 'appropriateness' of the change was proved. In this study, the respondents were found to be well aware of its appropriateness and usefulness, and their beliefs stronger but lacking in the readiness for that change. This study however did find results in line with those of Bernerth (2004); Brown (2009); Madsen *et al.* (2005) and Abdel-Ghany (2014) who recommended to build up positive Change Beliefs by first developing Readiness for Change and expect a pro-change behavior instead of following the reverse method of putting Change Beliefs first and Readiness for Change later and expecting an 'anti change' behavior.

Findings also indicate that students perceive a higher degree of readiness for change, if they find the change appropriate, pleasant and satisfying. Hence such best practices should be introduced that motivate learners towards adoption of Blackboard LMS. Such initiatives should be taken that would develop positive beliefs in learners and



improve upon their Readiness for Change. For instance, opportunities should be created to make them more capable and technically equipped with skills so that they can willingly and readily accept the implementation of change. Readiness for Change or a 'pro-change' behavior is also developed if learners show greater self-efficacy and personal valence by gaining more experience of Blackboard LMS by making a frequent use of it.

The theories used in this research study refer to Readiness for Change more as a psychological and individual attribute rather than technical and organizational. Hence, this study was built upon the premise that individual felt committed to change only if they were confident of their abilities to do so and such commitments reflected in their collective behavior. A Readiness for Change occurs at the organizational level only when individuals' readiness transforms into organizational readiness through a collective will and into a belief that the anticipated change would happen. In order to prepare a Readiness for Change and adoption of Blackboard LMS theretofore such measures should be adopted where change in individual beliefs end up with a collective behavior to implement the desired change. Future studies may be carried out to test this psychological and cognitive aspect of Readiness for Change preferable to reconcile both psychological and structural views on organizational Readiness for Change. These theories could also be tested and further measured with different sampling decisions. There are also possibilities to test these theories on other Readiness for Change initiatives and change management practices like individual as well as organizational preparedness for Accreditation and Quality Assurance, Automation and Computerization of organizational practices using ERP operations, university as a corporate model and adoption of business process reengineering techniques for organizational change, to name only a few.

**Funding:** This study received no specific financial support.

**Competing Interests:** The author declares that there are no conflicts of interests regarding the publication of this paper.

## REFERENCES

- Abdel-Ghany, M.M.M., 2014. Readiness for change, change beliefs and resistance to change of extension personnel in the New Valley Governorate about mobile extension. *Annals of Agricultural Sciences*, 59(2): 297-303. Available at: <https://doi.org/10.1016/j.aosas.2014.11.019>.
- Al-Khalifa, H.S., 2012. A first step in evaluating the usability of JUSUR learning management system. Saud University Manual quoted in Uthman Alturki, Ahmed Aldraiweesh and Dr Kinshuk, Evaluating The Usability And Accessibility Of LMS "Blackboard" At King Saud University, *Contemporary Issues in Education Research – First Quarter 2016*, Volume 9, Number 1 January 2016. pp: 33-44.
- Alghamdi, S.R., 2016. Use and attitude towards learning management systems (LMS) in Saudi Arabian universities. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(9): 2309-2330. Available at: <https://doi.org/10.12973/eurasia.2016.1281a>.
- Alqurashi, F., 2005. Computer supported collaborative learning in composition classrooms in Saudi Arabia. Doctoral Dissertation, Ball State University.
- Alturki, U., A. Aldraiweesh and Kinshuk, 2016. Evaluating the usability and accessibility of LMS "blackboard" at King Saud university. *Contemporary Issues in Education Research*, 9(1): 33-44. Available at: <https://doi.org/10.19030/cier.v9i1.9548>.
- Andersen, L.S., 2008. Readiness for change: Can readiness be primed? Master's Theses.
- Armenakis, A.A., J.B. Bernerth, J.P. Pitts and H.J. Walker, 2007. Organizational change recipients' beliefs scale: Development of an assessment instrument. *The Journal of Applied Behavioral Science*, 43(4): 481-505. Available at: <https://doi.org/10.1177/0021886307303654>.
- Armenakis, A.A., S.G. Harris and K.W. Mossholder, 1993. Creating readiness for organizational change. *Human Relations*, 46(6): 681-703.

- Bernerth, J., 2004. Expanding our understanding of the change message. *Human Resource Development Review*, 3(1): 36-52. Available at: <https://doi.org/10.1177/1534484303261230>.
- Brown, S., 2009. Technology acceptance and organizational change: An integration of theory. PhD Thesis. Auburn University.
- Choudhury, M., 2015. Texts, contexts and motivational strategies in teaching literature to Saudi students. *International Journal of English Language Teaching*, 3(8): 19-35.
- Conner, D., 2005. Organizational change readiness scale. In: *The Change Management Toolkit*, 3rd Edn., USA: WinHope Press.
- Davis, F.D., R.P. Bagozzi and P.R. Warshaw, 1989. User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8): 982-1003. Available at: <https://doi.org/10.1287/mnsc.35.8.982>.
- Demetrev, O. and P. Höner, 2015. On the training students to carry out researches. *International Journal of Advanced and Applied Sciences*, 2(4): 21-25.
- Fuad, T. and S.S.H. Sharifah, 2013. Attitude towards the use of learning management system among university students: A case study. *Turkish Online Journal of Distance Education*, 14(3): 91-103.
- Garrison, R.H., E.W. Noreen and P.C. Brewer, 2006. *Managerial accounting*. 11th Edn., New York: McGraw-Hill/Irwin.
- Giangreco, A., 2002. Conceptualisation and operationalisation of resistance to change. *Libero Istituto Universitario Carlo Cattaneo*.
- Hendrickson, S. and E. Gray, 2012. Legitimizing resistance to organizational change: A social work social justice perspective. *International Journal of Humanities and Social Science*, 2(5): 50-59.
- Holt, D.T., A.A. Armenakis, S.G. Harris and H.S. Feild, 2007. Toward a comprehensive definition of readiness for change: A review of research and instrumentation in research in organizational change and development. (Research in Organizational Change and Development). Emerald Group Publishing Limited, 16: 289 - 336.
- Hussein, E., 2016. The effectiveness of using blackboard in improving the English listening and speaking skills of the female students at the university of Hail. *Advances in Social Sciences Research Journal*, 3(12): 81-93. Available at: <https://doi.org/10.14738/assrj.312.2379>.
- Hussein, H.B., 2011. Attitudes of Saudi universities faculty members towards using learning management system (JUSUR). *Turkish Online Journal of Educational Technology*, 10(2): 43-53.
- Ja'ashan, M.M.N.H., 2015. Perceptions and attitudes towards blended learning for English courses: A case study of students at University of Bisha. *English Language Teaching*, 8(9): 40-50. Available at: <https://doi.org/10.5539/elt.v8n9p40>.
- Jayakumar, R., 2016. Opinion of the university teachers towards educational television programmes. *American Journal of Education and Learning*, 1(1): 45-52.
- Karia, N. and S. Mohamed, 2017. Factors affecting enterprise resource planning (ERP) systems adoption among higher education institutions in Egypt. *International Journal of Advanced and Applied Sciences*, 4(5): 144-151. Available at: <https://doi.org/10.21833/ijaas.2017.05.025>.
- Madsen, S.R., D. Miller and C.R. John, 2005. Readiness for organizational change: Do organizational commitment and social relationships in the workplace make a difference? *Human Resource Development Quarterly*, 16(2): 213-234. Available at: <https://doi.org/10.1002/hrdq.1134>.
- Make, M. and A. Yonas, 2018. Teachers perception on the use of audiovisual materials to teach english speaking skill: Abba pascal girls school in focus. *International Journal of English Language and Literature Studies*, 7(1): 1-6. Available at: <https://doi.org/10.18488/journal.23.2018.71.1.6>.
- Nuangchalerm, P., 2017. Pre-service teachers' twenty first century learning skills: Three different majors of study. *International Journal of Advanced and Applied Sciences*, 4(7): 124-128. Available at: <https://doi.org/10.21833/ijaas.2017.07.018>.
- Prochaska, J.M., J.O. Prochaska and D.A. Levesque, 2001. A transtheoretical approach to changing organizations. *Administration and Policy in Mental Health and Mental Health Services Research*, 28(4): 247-261.
- Rafferty, A., N. Jimmieson and A. Armenakis, 2012. Change readiness: A multilevel review. *Journal of Management*, 2(1): 1-26.
- Susanto, A., 2008. Organizational readiness for change: a case study on change readiness in a manufacturing company in Indonesia. *International Journal of Management Perspect*, 2(1): 50-62.

- Weiner, B.J., H. Amick and S.-Y.D. Lee, 2008. Conceptualization and measurement of organizational readiness for change: A review of the literature in health services research and other fields. *Medical Care Research and Review*, 65(4): 379-436. Available at: <https://doi.org/10.1177/1077558708317802>.
- Widaryanti, W., A. Daryanto and A.M. Fauzi, 2016. The students satisfaction oriented: Academic service improvement strategy, department of aquatic resources management, Bogor Agricultural University, Indonesia. *Journal of Education and e-Learning Research*, 3(3): 98-105. Available at: <https://doi.org/10.20448/journal.509/2016.3.3/509.3.98.105>.
- Woods, G., 2004. Students perceptions of webbased technologies, principles of good practice, and multiple intelligences. Unpublished Doctoral Dissertation, Alliant International University at San Diego.
- Yanga, J.-Y. and Y.-C. Yenb, 2016. College students' perspectives of E-learning system use in high education. *Asian Journal of Education and Training*, 2(2): 53-62. Available at: <https://doi.org/10.20448/journal.522/2016.2.2/522.2.53.62>.

*Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.*