

## Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2012 Proceedings

Pacific Asia Conference on Information Systems  
(PACIS)

7-15-2012

# Assessing The Role Of Transactional And Transformational Leadership In Continuance Intentions Of Enterprise Resource Planning

Azadeh Rezvani

*Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, razadeh2@live.utm.my*

Pouria Khosravi

*Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, kpouria2@live.utm.my*

Mohammad Nazir Ahmad

*Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, mnazir@utm.my*

Follow this and additional works at: <http://aisel.aisnet.org/pacis2012>

### Recommended Citation

Rezvani, Azadeh; Khosravi, Pouria; and Nazir Ahmad, Mohammad, "Assessing The Role Of Transactional And Transformational Leadership In Continuance Intentions Of Enterprise Resource Planning" (2012). *PACIS 2012 Proceedings*. 75.  
<http://aisel.aisnet.org/pacis2012/75>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# ASSESSING THE ROLE OF TRANSACTIONAL AND TRANSFORMATIONAL LEADERSHIP IN CONTINUANCE INTENTIONS OF ENTERPRISE RESOURCE PLANNING

Azadeh Rezvani, Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, razadeh2@live.utm.my

Pouria Khosravi, Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, kpouria2@live.utm.my

Mohammad Nazir Ahmad, Faculty of Computer Science & Information Systems, Universiti Teknologi Malaysia, mnazir@utm.my

## Abstract

*This study aims to investigate whether leadership style affects enterprise resource planning (ERP) users' continuance intention. Continuance intention in ERP at the individual user level is a key attitude for survival in many businesses. The long-term feasibility of an ERP implementation in an organization depends on its continued use rather than its initial use. This paper describes research in progress that proposes an evaluation of the effects of transformational and transactional leadership styles via psychological mechanisms of organizational commitment on continuance intention in ERP in an organization. In this study, continuance intention of ERP is mainly recognized by user satisfaction.*

*Keywords: ERP, continuance intention, Transformational leadership, Transactional leadership, organizational commitment*

# 1 INTRODUCTION

While initial use is a significant element of enterprise resource planning system (ERP) success, it does not have a direct effect on the anticipated managerial outcomes unless the use continues. However, compared to the great amount of work done on ERP adoption (Law & Ngai 2007), little systematic effort has gone into exploring ERP users' continuance intention over time. ERP plays a crucial role in firms' effectiveness and its ultimate success will be determined by its continued use rather than its initial use (Chou & Chen 2009). Chou and Chen (2009) argued that ERP continuance at the individual user level serves as an antecedent to the survival of many businesses. Leadership is one factor at the individual and organizational level that is considered to be a key element in promoting continued ERP usage. There is a rich body of literature regarding the impact of leadership style on organisational and individual performance (Piccolo & Colquitt 2006; Wu et al., 2010). Moreover, leadership is positively associated with work attitudes and behaviours at both an individual and organizational level (Dumdum et al., 2002). Ke and Wei (2008) emphasized the significant role of transformational leadership in ERP implementation success and Neufeld et al. (2007) observed the impact of charismatic leadership on IT adoption. Although these are very important, the mechanisms and processes by which leaders put into practice their influence related to working attitudes such as ERP users' commitment in order to promote continued ERP usage has not been addressed in the literature. In addition, no attention has been directed at examining the influence of leadership styles on ERP users' continuance intention; therefore, the nature of this phenomenon needs to be considered in further detail in order to enrich our understanding and draw useful implications for research and practice.

Bass and his colleague (2003) categorized leadership style into two types, namely, transactional and transformational leadership. They observed the transactional/ transformational leadership models are composed of complementary rather than polar paradigms. Further, they argued that both styles may be connected to the success of anticipated aims and objectives. In line with this reasoning, we attempt to integrate two significant domains by assuming that transformational and transactional leadership is positively related to ERP continuance intention. To date, no theoretical or empirical study has compared the two models of transformational and transactional leadership in influencing ERP users' continuance intention.

The purpose of the present article is twofold. First, we examine the impact of transactional and transformational leadership perceptions on ERP users' continuance intention. Second, we broaden our framework to examine organizational commitment as a possible mediator of the relation between leadership style and ERP users' continuance intention.

## 2 THEORETICAL BACKGROUND AND RESEARCH MODEL

The theoretical model supporting this study is presented in Figure 1. The model proposes that leadership style positively affects ERP user satisfaction and ERP users' continuance intention. Further, we provide insight into the relationships among organizational commitment factors in the context of ERP continuance intention. The following sections elaborate on the constructs in the model and the proposed relationships among them.

### 2.1 ERP users' Continuance Intention

Bhattacharjee (2001a) proposed the post acceptance model (PAM) of IS continuance based on expectation confirmation theory to clarify a system user's intention to continue using an IS. Bhattacharjee's model positively relates intention to satisfaction and perceived usefulness. This body of research has largely recognized user satisfaction as a significant reason underlying the continuance usage decision (Bhattacharjee 2001a, b). In the marketing literature, satisfaction is considered to be integral to constructing and holding a loyal base of long-term customers. Bhattacharjee (2001a) argued that, in the context of IS continuance, satisfaction with an IS tended to reinforce a user's intention to continue using the system. A comparable rationale can be made in the context of ERP continuance where satisfaction with an ERP would reinforce a user's intention to continue using the system (Chou & Chen 2009). ERP continuance has been explored both at the organizational and individual level of

analysis. ERP continuance at the individual user level is crucial to the endurance of many businesses and the ability to produce continuous profits and sustain long-term productivity for the corporations. The actual profits of these businesses are determined by the number of continued ERP users.

In this study, we focus on satisfaction (viewed as a pleasurable fulfilment response resulting from an evaluation) and ERP users' continuance intention (viewed as behavioural patterns reflecting continued use of a particular ERP). Satisfaction and continuance intention is directly derived from Bhattacharjee's (2001a) model, which is grounded on a concrete theoretical basis that places emphasis on an individual's psychological reasons during post-adoption, and which has been positively adapted to the IS environment.

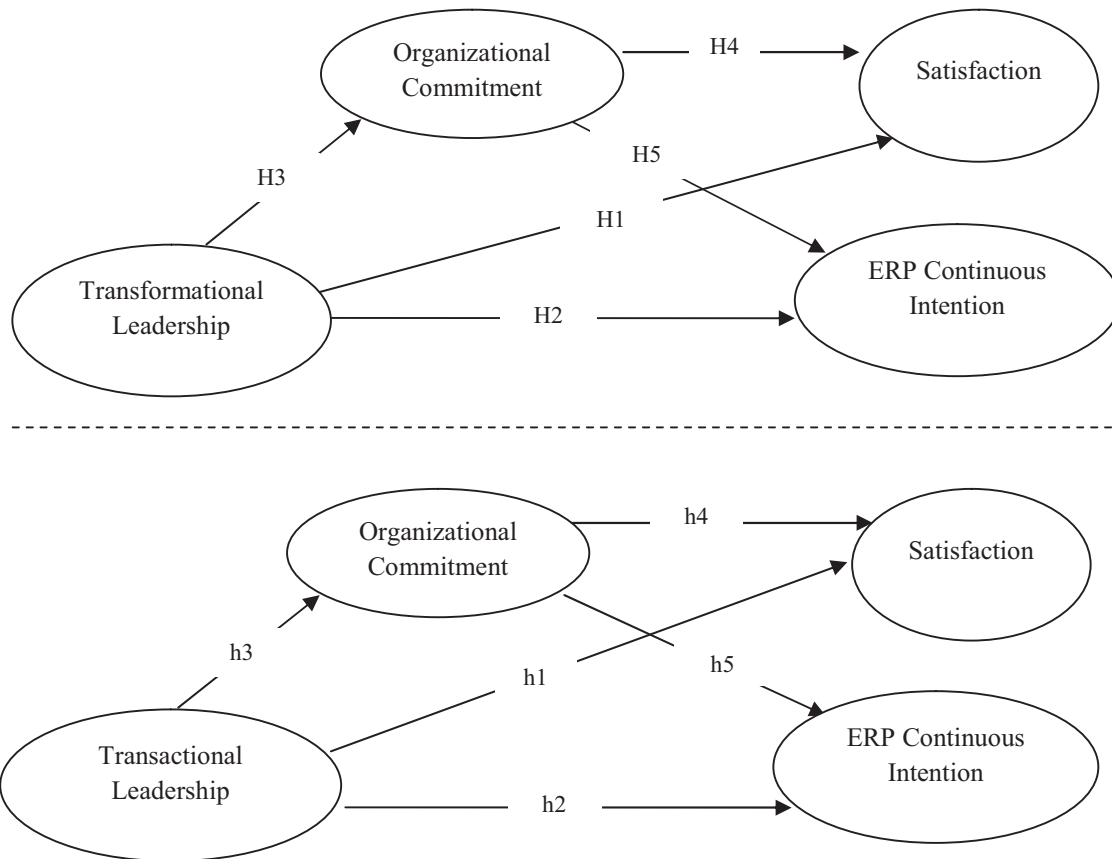


Figure 1. The effect of transactional and transformational leadership in ERP continuance intention

## 2.2 Transformational/Transactional Leadership

Transformational leaders inspire followers to perform beyond expectation (Bass et al. 2003). Based on Bass et al.' theory (2003), leaders act as mentors and focus on the individual needs of each subordinate. They provide a sense of mission and vision, create trust, and act as role models for their employees. Thus, they foster a trusting environment and motivate followers to transcend self-interest for the sake of the organization.

According to Bass et al. (2003), transformational leadership includes four behavioural elements. Firstly, idealized influence is the degree to which the leader performs in ways that cause followers to identify with the leader. Secondly, inspirational motivation is the degree to which the leader communicates a vision that is pleasing and motivating to followers. Thirdly, intellectual stimulation is the degree to which the leader meets with expectations, takes risks and examines followers' thoughts. Fourthly, individualized consideration or individualized attention is the degree to which the leader acts as a coach to the follower and attends to the follower's concerns and requirements.

Another style of leadership considered to be complementary to transformational leadership is transactional leadership (Bass et al., 2003). A transactional leader is one who explains to their followers their tasks, the performance objectives, the responsibilities that must be performed and the benefits to the followers for acquiescence. This kind of leadership has a priority for risk prevention and pays consideration to efficiency and time limitations. Transactional leadership is described in terms of two characteristics: the use of contingent rewards and management by exception (Bass et al., 2003). We adopt the classification and definition of Bass et al. (2003) for analysing the effectiveness of leadership styles in ERP continuance intention.

### 2.3 Transformational/Transactional Leadership and ERP Continuance Intention

ERP users' continuance intention plays a crucial role in the effectiveness of a firm (Chou & Chen 2009), so understanding how leadership can affect ERP users to promote continuance usage behavior becomes important. Leadership faces the need to encourage ERP users to continue using a newly implemented ERP system. Leaders may have to synergize and coordinate the users' morale and loyalty, and stimulate them to continue system usage. However, little empirical research has sought to generally explore how to inspire users to continue using an ERP system. According to Bass et al. (2003), transformational leaders pursue innovative ways of working, try to find occasions in the face of risk, favour actual reactions to effective responses, and are less expected to maintain the status quo. Transformational leaders do not only respond to environmental circumstances, they make effort to design and produce them.

We believe that transformational leadership can influence ERP users through:

- **Idealized influence** – Transformational leaders who have high standards of moral and ethical conduct can influence an ERP users' intention to adopt or continue to use an ERP system by producing loyalty from followers and more personal regard.
- **Inspirational motivation** – Leaders with a clear vision for the future based on organizational values can inspire ERP users to continue using the system by building confidence and using symbolic actions and persuasive language.
- **Intellectual stimulation** – Leaders can encourage divergent thinking in ERP users, challenge organizational norms and push ERP users to develop innovative strategies for the promotion of continuance intention.
- **Individualized consideration** – Leader behaviours can be aimed at recognising the unique growth and developmental needs of ERP users as well as coaching and consulting with them to continue using ERP. Such leaders promote continuous intention by providing feedback and linking users' current needs to the organisation's mission.

Transactional leadership behaviours (Bass et al., 2003) control and monitor employees through reward and punishment. We believe that transactional leadership encourages frequent usage through:

- **Contingent reward** – Transactional leadership focuses on the exchange of resources. In other words, contingent rewards will tend to provide tangible or intangible support and create an attractive incentive framework to reward system usage to avoid disconfirmation in continued ERP use. For example, leaders provide appropriate rewards when ERP users meet expected levels of ERP system use.
- **Management by exception** – Transactional leadership takes corrective action and monitors ERP users' performance as needed to avert users from being discouraged to use the system due to usage problems. This kind of leadership is focused on setting standards and monitoring users from the perspective of these standards to continue promoting individuals' behaviour towards achievement of the goal. This includes encouraging the reporting of problems to avoid an increase in dissatisfactory usage experiences.

Consequently, leadership is positively associated with work attitudes and behaviours at both the organisational and individual level (Dumdum et al., 2002). Accordingly, transactional and

transformational leadership is positively related to organizational commitment, organization performance, job satisfaction, organizational identification, leader effectiveness and employee motivation (Avolio et al., 1999; Bono & Judge 2003; Podsakoff et al., 1996; Mowday et al., 1982; Shamir et al., 1993; Pillai et al., 1999). Therefore we hypothesize:

Hypothesis H1. Transformational leadership is positively related to ERP user satisfaction.

Hypothesis H2. Transformational leadership is positively related to continuous intention in ERP.

Hypothesis h1. Transactional leadership is positively related to ERP user satisfaction.

Hypothesis h2. Transactional leadership is positively related to continuous intention in ERP.

## **2.4 Leadership and Organizational Commitment**

Organizational commitment is defined as the relative strength of belonging and an individual's assimilation with and involvement in an organization (Meyer & Allen 1991). Former research proposes that personal and organizational factors serve as antecedents to organizational commitment (Meyer & Allen 1997). Leadership is one such personal and organizational factor that is considered to be a key element of organizational commitment (Mowday et al. 1982; Yukl 2008).

The behaviour related to leadership style is considered to be a strong determinant of organizational success (Laohavichien et al. 2009). Unfortunately, success in promoting users to continue to use an ERP system can be more difficult than it sounds, and it requires effective leadership to promote continued ERP usage behaviour. Leadership's typical approach to inspiring usage or continuance involves developing rational arguments and inducement policies to influence the users' behaviour. Transactional and transformational leaders can influence the organizational commitment through the use of specific leadership behaviours in interactions with ERP users. The two types of leader behaviour each have a different primary objective. Transformational leaders are positively associated with organizational commitment in a variety of organizational settings and cultures (Bono & Judge 2003), and are capable of influencing ERP users' organizational commitment by fostering higher levels of intrinsic value connected with goal accomplishment, highlighting the associations between users' effort and goal accomplishment, and by generating an advanced level of personal commitment on the part of the leader and ERP users to a shared vision, mission, and organisational goals. Thereby, those users feel committed to their organization, and they are more aware about their ERP usage.

Prior investigation has shown the transactional leadership style to be positively associated with followers' commitment, performance and satisfaction (Bycio et al. 1995; Podsakoff et al. 1984). Transactional leaders affect users' organizational commitment by setting user expectations appropriately to avoid unnecessary dissatisfaction when using the ERP. The individual's organizational commitment can be influenced by his or her perceived equilibrium of incentive: the more beneficial the exchange of resources from the participants' viewpoint, the greater his or her commitment to the system (McElroy 2001; Gaertner & Nollen 1989). Dissatisfaction with organizational reward policies could therefore lead to a fragile commitment to do their tasks. This approach highlights the role of transactional leadership in relations between individuals and organizations. Transactional leadership inspires frequent usage through incentives (e.g., tangible rewards such as promotions and pay increases) as well as assisting employees to address the task and by monitoring operations and role requirements. Therefore we hypothesize:

Hypothesis H3. Transformational leadership is positively related to organizational commitment.

Hypothesis h3. Transactional leadership is positively related to organizational commitment.

## **2.5 Organizational Commitment and Satisfaction**

Recent research showed that ERP continuance intention is positively affected by satisfaction (Chou & Chen 2009). Holsapple et al. (2005) argued that the main reason behind ERP system implementation failures is users resisting rather than embracing the new ERP systems. Thereby, user satisfaction has received significant attention at the individual user level from scholars in the IS field (Whitten 2005; Au et al. 2008). These areas of attention include ERP continuance intention (Chou & Chen 2009).

However, there are few studies that have examined the ERP users' perspective, particularly the key factors that contribute to user satisfaction. A study by Bateman and Strasser (1984) indicated that commitment is causally the precursor to satisfaction. Research has considered organizational commitment to be an important attitudinal forecaster of employee behaviour and intention (Mowday et al. 1979). The rationale that organizational commitment is related to continued usage intention is grounded in social exchange theory (Thibaut & Kelley 1959; Cropanzano & Mitchell 2005). Commitment in social exchange theory is described as a participant's inclination to sustain a relationship and to feel psychologically and emotionally involved in it (Wayne et al. 1997). Feelings or emotions can definitely be symbolized as a direct precedent of behavioural intention (Ortiz de Guinea & Markus 2009). Therefore, emotional reactions guide proper attitude or behavioural intention (Kim et al. 2007) where behaviour is measured as continued ERP intention. ERP users who are committed to the organization can be involved in favourable behaviours, such as ERP continuance usage, that are assumed to be valuable to the firm's effectiveness and reflect the important investment in ERP.

According to Ajzen and Fishbein's theory (1983) of reasoned action, satisfaction reveals favourable attitudes, the consequence of which are augmented positive behavioural intentions or actions. In a similar manner, it is anticipated that satisfied ERP users are more likely to continue their use of a newly implemented ERP system (Chou & Chen 2009). Therefore we hypothesize:

Hypothesis H4. Organizational commitment mediates the relationship between transformational leadership and ERP user satisfaction.

Hypothesis H5. Organizational commitment mediates the relationship between transformational leadership and ERP user's continuous intention.

Hypothesis h4. Organizational commitment mediates the relationship between transactional leadership and ERP user's satisfaction.

Hypothesis h5. Organisational commitment mediates the relationship between transactional leadership and ERP user's continuous intention.

### **3 CURRENT RESEARCH DIRECTION**

This research in progress will be carried out in an industrial organization that has implemented an ERP package. Industrial areas are very information technology-driven. Additionally, the sector is seeing a high increase in the implementation of ERP packages. This study will apply a quantitative approach and survey to collect data. ERP users from two industries are the target of this study. Responses are transferred from the survey to SPSS. The structural equation modelling tool of SPSS and partial least square are the main analysis methods used to test the hypotheses and to identify the direct and indirect effects between the constructs of the proposed model. Furthermore, the reliability of each factor is calculated by using confirmatory factor analysis.

### **4 RESEARCH CONTRIBUTION**

Our study proposes three major contributions to the research into IT innovation. First, we investigate the extent to which leadership styles affect ERP users' continuation intention. Although numerous studies have previously examined the effect of leadership on ERP success, less consideration has been devoted to understanding the role of transactional and transformational leadership styles in the ERP continuance context. Second, we compare the two models of transformational and transactional leadership in influencing ERP continuance intention. In the literature, these two constructs have not been compared in the context of ERP continuous intention. The two types of leader behaviour each have a different primary objective. Transactional and transformational leaders can influence the continuance intention in ERP usage through the use of particular management conduct in interactions with ERP users. Third, we extend the prior research on commitment and leadership style to the ERP continuance phase. Our study suggests that organizational commitment, as an operation for the social exchange perspective, is an important way for ERP users who are working with transactional/transformational leaders to form continuous intention in the ERP system.

## 5 CONCLUSION

Recognizing the need for knowledge in ERP usage, scholars have recently begun to revise the subject in more detail. Clearly, understanding how to stimulate continued ERP usage is crucial for most organizations to consider. Since ERP continuance intention at the individual user level is a key attitude for survival in many businesses, we applied transformational and transactional leadership constructs to the ERP continuance context and explored how organizational commitment could act as a mediator in the relationship between transformational and transactional leadership and ERP continuance intention. Our study can provide enterprise system managers with a better comprehension of how they can use transactional/transformational leadership behaviours and approaches to inspire users to form the intention to continuously use the ERP.

## References

- Ajzen, I., & Fishbein, M. (1983). Ajzen and Fishbein's "Theory of Reasoned Action": A Critical Assessment. *Journal for the Theory of Social Behaviour*, 13(2), 155–164.
- Au, N., Ngai, E. W. T., & Cheng, T. C. E. (2008). Extending the Understanding of End User Information Systems Satisfaction Formation: An Equitable Needs Fulfillment Model Approach. *MIS Quarterly*, 32(1), 43-66.
- Avolio, B. J., Bass, B. M., & Jung, D. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72(4), 441–462.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Y, B. (2003). Predicting unit performance by assessing transformational and transactional leadership *Journal of Applied Psychology*, 88(2), 207-218.
- Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. *Academy of Management Journal*, 27(1), 95-112.
- Bhattacharjee, A. (2001). An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance. *Decision Support Systems*, 32(2), 201-214.
- Bhattacharjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, 25(3), 351-370.
- Bono, J., & Judge, T. (2003). Self-concordance at work: toward understanding the motivational effects of transformational leadership. *Academy of Management Journal*, 46(5), 554-571.
- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80(4), 468-478.
- Chou, S., & Chen, P. (2009). The influence of individual differences on continuance intentions of enterprise resource planning (ERP). *International Journal of Human-Computer Studies*, 67(6), 484-496.
- Churchill, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(November), 491-504.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: an interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Dumdum, U. R., Lowe K. B., & Avolio, B. J. (2003). *A Meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension*. In B.J. Avolio & F.J. Yammarino (Eds.). *Transformational leadership: The road ahead*. Oxford: Elsevier Press.
- Gaertner, K. N., & Nollen, S. D. (1989). Career experiences, perceptions of employment practice and psychological commitment to the organization. *Human Relations*, 42, 975-991.
- Holsapple, C., Wang, Y., & Wu, J. (2005). Empirically testing user characteristics and fitness factors in ERP. *International journal of human-computer interaction*, 19(3), 323-342.
- Hrebiniak, L. G., & J.A. Alutto. (1972). Personal and Role-Related Factors in the Development of Organizational Commitment. *Administrative Science Quarterly*, 17(4), 563-573.



- Ke, W., & Wei, K. K. (2008). Organizational culture and leadership in ERP implementation. *Decision Support Systems*, 45(2), 208-218.
- Kim, H. W., Chan, H. C., & Chan, Y. P. (2007). A Balanced Thinking-Feeling Model of Information Systems Continuance. *International Journal of Human-Computer Studies*, 65(6), 511-525.
- Laohavichien, T., Fredendall, L., & Cantrell, R. (2009). The effects of transformational and transactional leadership on quality improvement. *The Quality Management Journal*, 16(2), 7-24.
- Law, C. H., & Ngai, E. W. T. (2007). ERP systems adoption: An exploratory study of the organizational factors and impacts of ERP success. *Information & Management*, 44(4), 418-432.
- Lawler, E., Thye, S., & Yoon, J. (2006). Commitment in Structurally Enabled and Induced Exchange Relations. *Social Psychology Quarterly*, 69(2), 183-200.
- McElroy, J. C. (2001). Managing workplace commitment by putting people first. *Human Resource Management Review*, 11, 327-335.
- Meyer, J., & Allen, N. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Meyer, J., & Allen, N. J. (1997). Commitment in the workplace: Theory, research and application: Evaluation of measures and analysis of concurrent and time-lag relations. *Journal of Applied Psychology*, 75(6), 710-720.
- Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Neufeld, D. J., Dong, L., & Chris, H. (2007). Charismatic leadership and user acceptance of information technology *European Journal of Information Systems*, 16(4), 494-510.
- Ortiz de Guinea, & Markus, M. L. (2009). Why Break the Habit of a Lifetime? Rethinking the Roles of Intention, Habit, and Emotion in Continuing Information Technology Use. *MIS Quarterly*, 33(3), 433-444.
- Parthasarathy, M., & Bhattacharjee, A. (1998). Understanding Post- Adoption Behavior in the Context of Online Services. *Information Systems Research*, 9(4), 362-379.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49(2), 327-340.
- Pillai, R., Schriesheim, C. A., & Williams, E. S. (1999). Fairness perceptions and trust as mediators for transformational and transactional leadership : A two-sample study. *Journal of Management*, 25(6), 897-933.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22(2), 259-298.
- Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward behavior and punishment behaviors: Fact or fiction? . *Organizational Behavior and Human Performance*, 34(1), 21-63.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership. *Organizational Science*, 4(4), 577-594.
- Thibaut, J. W. and Kelley, H. H. (1959). *The social Psychology of Groups*, New York: Wiley.
- Thomas, K., & Velthouse, B. (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of Management Review*, 15(4), 666-681.
- Udo, G., Guimaraes, T., Khosrowpour, M., & Hershey, P. (1994). Improving Organization Absorption of Emerging Technologies: A Socio-technical Approach,” in *Information Technology and Organizations: Challenges of New Technologies*. Idea Group Publishing, 1-30.
- Wayne, S., Shore, L., & Liden, R. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- Whitten, D. (2005). User Information Satisfaction Scale Reduction: Application in an IT Outsourcing Environment. *Journal of Computer Information Systems*, 45(2), 17-26.
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. *Academy of Management Journal*, 53(1), 90-106.
- Yukl. (2008). How leaders influence organizational effectiveness. *The Leadership Quarterly*, 19(6), 708-722.