Abstract
This study proposes a conceptual model of interaction among leadership behavior and team effectiveness in the construction industry. In particular, literature has been reviewed to develop a conceptual and relationship model between transformational leadership style, team behavior and team performance. The study emphasizes the construction industry as it has unique features among other industries. Several variables including contextual and environmental factors were reviewed and discussed the probability effects on the relationship between leadership and teamwork behavior. In addition, this study found that transformational leaders by attracting their emotional behavior tends to be better suited in the construction industry.

The twenty-first century has placed a higher premium on dynamic and effective leadership which is one major feature that separates successful organizations from unsuccessful ones (Drucker, 1999). Dealing with rapid, complex, and often discontinuous change of work in different industries, it seems necessary to acquire effective leadership attempts for the leaders (Hesselbein and Goldsmith, 2006). Accordingly, many organizations sequentially seeking for powerful leaders because of a significant leadership role may facilitate the jobs to be performed effectively (Hersey et al, 2001). Although there are the great number of works and research on leadership in management literature, still a definite vision of leadership has not been emerged to fulfill adequately all business organizations. However, Bryman and Parry (2006) concede five stages for leadership approaches namely trait, style, contingency, new leadership, post-charismatic and post-transformational leadership approaches. Although these stages may differ in view and time period of research but they are concurred in a remarkable definition. On the other hand, some scholars define leadership as the process of influencing people of an organized group to pursue toward the attainment of specific goal in a given situation (Terry, 1960; Tannenbaum et al., 1959; Koontz and O’Donnell, 1959; Stogdill, 1950). Accordingly, four elements can be extracted from this definition. First, “leaders” as others impacted by their behavior, second, “group” as leadership process taking place in a group context, third, “goal” as achievement of whole efforts and fourth, “situation” as leaders and group are faced with it (Hersey et al., 2001; Bryman and Parry, 2006).
Consequently, leadership as a process is a function of four components including leader, group, goal and situational variable (Tabassi et al., 2012).

On the other hand, a strong interest has been appeared in organizational transformation toward team working for coping with rapid change, complexity and competitive environment (Drew and Thomas, 1997). Structuring the works in a team basis shapes an important success factor in an organization, within which many organizations trust the project works to robust teams of professionals (Guttman, 2004). By the rise of teams within organizations, a large number of studies have begun to find the antecedents, processes, and emergent states which facilitate effective team outcomes (Burke et al, 2006). One emerging area is a focus on the role of leader in fostering team success (Morgeson et al, 2010). Among five leaderships’ school of thought defined by Bryman (2006), the transformational leadership has been found to have especially powerful effects on team effectiveness (Dionne et al., 2004; Zhang et al, 2011).

While teamwork has been addressed as revolutionary change in global business, it has become more important in project-oriented organization and team–based environment such as the construction industry (Loosemore, 2003). Latham (1994) considered teamwork as main cause of problems in the construction industry. The problems are mostly rooted in some unique state of affairs of construction work such as socio-cultural, economical and traditional challenges (Toor and Ofori, 2008) that compel construction teams primarily be different from teams in other industries (Cornick and Mather, 1999). Therefore, it necessitates significant attention toward teamwork approach in the industry, particularly by the leaders of the industry in order to facilitate teamwork effectively (Uher and Loosemore, 2004). This study aims to explore the literature in order to find out how leaders by adapting a particular behavior may improve teamwork activities, particularly in the context of construction industry, and to study the interaction among team members in order to enhance the performance. More specifically, the study sought to contribute to a better understanding of the mechanisms through transformational leadership behavior of leaders that influence team effectiveness.

Leadership Behavior and Teamwork in the Context of the Construction Industry
While the importance of leadership has long been recognized as a success factor for organizations, still there are not enough empirical studies to support the association between leadership behavior and overall success in project-oriented context and related teamwork environments (Kissi et al., 2012; Muller et al., 2012; Yang et al., 2011). In this regard, McDonough (2000) stated that little efforts have been assigned in seeking the relationship between team effectiveness and leadership behavior in project-based environment. More particularly, in the construction context manager faces major leadership challenges such as those relating to the workforce and dealing with issues such as transition team works (Toor & Ofori, 2008). Surprisingly, a review on leadership literature showed that leadership behavior has no impact on project success due to unique, novel, and transient nature of projects’ working environment (Turner and Muller, 2005). The issue can impose an indisputable need for more research on leadership behavior as well as the context and condition that possibly affect the teams in the construction works.

Although Turner and Muller’s argument about the leadership inefficiency in project-based works is in direct contrast to the general management literature, but later they discuss that success outcome depends on some contextual and environmental factors such as project type and leadership behavior (Muller & Turner, 2007). In relation with this notion, Yang and other (2011) indicated that project performance depends on the manager leadership style while intermediated by teamwork dimension. Therefore, a concept in construction field effectiveness can be drawn towards a relationship between contextual factors, leadership style and team effectiveness (Naoum, 2001).
Yet, many researchers have been defined a number of contextual factors that affecting the relationship between the leadership behavior and effective outcomes of the teams in the construction workplace. Yang (2011) demonstrated that the effect of leadership style on project success depends on some factors like industry sector and the project type. Muller & Turner (2007) defined some aspects of a project such as complexity, culture, life-cycle, contract, and application that influence the relationship between leadership behavior and project success. In line with Muller and Turner's study, Pheng and Chuan (2006) explained how different environmental variables influence work performance in the construction projects. They defined three categories of variable namely project type, organizational context and job condition. Each of them consists a number of elements such as project size and complexity, team relation, availability of information, company size and type. Further, Keller (2006) introduced three substitutes for leadership namely ability, intrinsic satisfaction, and organizational formalization that are mattered for influencing leadership behavior and project team performance. Organizational structure is also a variable that affects the relation between a leader and subordinate (Avolio et al, 2004). For example, the relationship between leader and the project team members in strong matrix and projectized organizational structure is likely to be different from those in functional structure (Keegan and Hartog, 2004).

In addition, design information flow was ranked as one of the most important variables that affecting leadership behavior and teamwork in construction works by Naoum (2001). Pheng and Chuan (2006) also ranked team relation and availability of information as other significant factors that leaders pursue in affecting teamwork effectiveness in construction projects. The complex nature of the industry mostly caused some degree of complicated relationships between project members, which induced most of information required by employees to perform the task has not transmitted or shared effectively (O’Dell and Grayson, 1998; Zhang et al., 2011). Therefore, the importance of distributing information may be more evident for team collectivism as well as leader-employee or employee-employee relations. In the construction workplace due to a fragmented working process, high turnover and frequent job rotation would also be very important issues (Lindebaum and Jordan, 2012). Emphasize on information sharing and knowledge distribution system could refer to composition and compatibility, so that improvement in abilities and personal characteristics of team members will be achieved (Uher and Loosemore, 2004). Construction of share information and knowledge plans, create a conscious among team members and coordinate their activities that directly affect their problem solving abilities (Roschelle and Teasley, 1995). In such environment the leader can better hear the voice of subordinate. Moreover, information blockage has shape conflict to become continual inhabitant in construction works (Jaffar et al, 2011) and inherent repugnance to interaction among team members (Jehn and Bendersky, 2003). It in turn eliminates union, coordination and cohesion among team members and group as a whole. Therefore, good problem solving and facilitating information among team member’s interaction in all aspect of construction works seem to be two obligatory factors. Promoting these factors lead project workspace to create a shared vision and commitment in team members (Tuuli, 2009).

Leadership behaviors are also important in communicating the identity-relevant information to individual team members (Restubog et al, 2008). The importance of communication and information for team effectiveness further emphasized by Yang et al (2011), when team communication and collaboration would be influenced by leadership behavior through effective distributing of information. Haas & Hansen (2007) mentioned that in more complex environment and interdependent tasks, proper communication system and knowledge sharing among team members are vital for maintaining overall organization productivity. It helps team members easily understand and deduce the project goal and the context as well as to assist in transferring of lessons learned from each other and from the past. Odusami and others (2003) found that consultative autocrat leadership style (where leader absorbs the information
input from the team members but makes the ultimate decision) of Pinto and Slevin (1988) model has the most effective on team performance. Therefore, perfect leadership behavior in project context is pursued by encouraging teams toward moving across boundaries to build their relationships and support one another, scouting necessary information for task accomplishment and innovation to achieve success (Murphy & Ensher, 2008).

Team leaders must be sensitive to the needs of their subordinates, who may stay out of touch, especially in organizationally fragmented industries such as the construction industry that worker or employees may feel neglected (Loosemore et al, 2003). Moreover, the probable physical separation of members of construction teams may elevate difficulty in the sense of identity, cohesion and team relationship. Based on the notion of exchange theory, leadership behavior that employed by managers, can play a significant role in relationship with employees where some members may be separated by numerous organizational interfaces from managers and other group members. Exchange theory claim that leaders treat their subordinate with different types of relationships whereby create a feeling among employees that they are belonging to an in-group or out-group (Dansereau et al, 1995). Employees who are a member of in-group will enjoy greater latitude, more access to information, involvment, and confidence and concern from their managers than employees belonging to an out-group. Such an activation of in-group identity provides team members with team-oriented motivation and fosters them to be committed to the cooperative team goals (Zhang et al, 2011). Leaders then establish high-quality of the manager–employee as well as employee-employee relationship with in-group members (Gomez and Rosen 2001; Liden et al., 2000). In line with this theory, Odusami and others (2003), in the construction project field found that in-house consultants reflected the best form of team composition from a category of three namely “In-house consultants”, “External” and “Consortium”. It means that the project team member perform well when they are close to one another obviously due to easy flow of information.

Viewed in this light, the treatment of in-groups may be likened to person-orientated leadership while out-group treatment is consistent with task-orientated leadership behaviors (Tuuli, 2012). In the construction industry, a pressure from contractual cost constraints and time restriction has yielded leadership styles towards a greater degree of task-orientation (Andi et al., 2004). In fact, most of the managers in a project context prefer task-oriented style (Mäkilouko, 2004). Therefore, base on exchange theory and Tuuli’s (2012) findings, the leaders of the industry are more likely to lose link and relation with their subordinate. Given the rise of these problems, solution rests with the leaders who adopt a proper leadership behavior that fit into the project environment and enhance team communication, collaboration and cohesiveness.

**Transformational Leadership Behavior and Teamwork**

In seeking of specific features of leadership style that affecting team performance, a school of thought has been developed around transformational and transactional leadership behaviors (Ayoko & Callan, 2010; McColl-Kennedy and Anderson 2002; Gardian & Stough, 2002; Ozaralli, 2003). Most recently, transformational leadership behavior has been suggested as possible source of new alternative to traditional project management in the construction industry for promoting team effectiveness (Kissi et al, 2012). Transformational leaders are those who exhibit individualized consideration behavior and are able to influence employee’s constructive reaction which accordingly resulted in employee’s high performance levels (McColl-Kennedy and Anderson, 2002). Transformational leaders are also aimed at transforming individuals, teams, and firms to exceed beyond the status quo with purpose that improve ability of innovation and adaption (Ling et al, 2008). The base of transformational leadership rests on Bass (1999) and Avolio et al (1999) and consists of four dimensions: (1) charisma: creating and presenting an attractive vision of the future; (2) inspirational motivation: energizing followers to go beyond self-interest; (3) intellectual stimulation: stimulating followers to challenge assumptions and
view problems from new perspectives; and (4) individualized consideration: focusing on follower development by providing support, encouragement, and coaching.

In line with teamwork process, specific dimensions of transformational leadership style may develop some aspects such as team communication, conflict resolution and cohesion (Dionne et al., 2004). For example, leader with consideration behavior promote both official and non-official communication channel between themselves and team member while leader with initiating structure advances only official communication (Kyoungjo et al., 1991). Therefore, transformational leaders are able to motivate followers toward appreciating and sharing the internal experience or information. Transformational leadership has also been noted as the most influential effects on team members’ knowledge sharing intention in such workplace which is characterized by workgroup climate through a mediation effect on team identity and subsequently team innovativeness (Liu & Phillips, 2011).

Lee et al. (2011) examined the effect of different dimensions of leadership style such as “attributed”, “behavior”, “intellectual stimulation”, “inspirational motivation” and “individual consideration” on teams and service quality performance in operational banking team setting. However, they arguably found that only “intellectual stimulation” from transformational leadership positively influences team performance with respect to team cohesion, team leader job satisfaction and team competence that in turn influence the service quality dimensions of reliability and responsiveness. Furthermore, individual consideration promote effective team empowerment and communication as it concerned about listening, spending time, addressing individual needs, coaching and teaching to team members (Kark et al., 2003; Yammarino et al., 1998).

According to Keegan and Hartog (2004), most of the previous findings about transformational leadership style have been obtained in non-project-based-organizations. The question here is “will this style be adaptable in a project based industry such as the construction industry?” Keegan and Hartog (2004) also found that the impact of transformational leadership on employee motivation and commitment in temporary project arrangement is not the same as permanent one. They discovered that project managers with the same transformational behavior with those managers in functional organizations, have less impact on motivation and commitment of their followers. It may be due to multiple project leaders and limited periods of time in temporary project context, while team members in permanent environment are involved with only one manager for an unlimited period of time (Keegan and Hartog, 2004).

In recent years, many studies surveyed a fundamental element of human emotional state in the domain of leadership behavior (Hur Young, et al., 2011; Leban & Zulauf, 2004; Gardner & Stough, 2002; Mandell & Pherwani, 2003). Accordingly, more focus assigned on the role of managerial emotional intelligence in relation with leadership style. It is the abilities of leaders to interpret the emotions of themselves and of their followers, and behave intelligently in their relation with others. It is also suggested as anticipant of effective transformational leadership behavior. Young et al, (2011) posed a direct relationship between emotional intelligence and transformational leadership. In fact, they speculated that transformational leadership plays a mediating role between the emotional intelligence and leadership outcome. The importance of emotional intelligence may hark back to influential affect of contextual and environmental factors on leadership behavior and teamwork performance as discussed earlier. According to the Affective Events Theory (AET), person’s cognitive state, emotion or mood affects the behavior or performance while those emotions themselves are reaction to their work environments such as event, nature or context. For example, a stressful and complicated job environment reflects on negative effect on employee’s behavior.
In a project context, particularly a complex project, due to stressful and unexpected events the transformational behavior is more preferred style for leadership (Muller et al, 2012). But, it seems the role of a transformational leader on subordinate being more effective through his/her emotional state in such work context. Moreover, Lindebaum and Jordan (2012), found that project manager with high emotional intelligence (EQ) had the most impact on providing opportunities for all members of the project team to learn and develop their job skills. In line with this idea, Muller et al. (2012) suggested that improvement in leadership skills of project manager such as emotional intelligence (EQ) will also affect team and project success positively through moderating role of project complexity. Turner and Muller (2007) also showed that a project managers’ success depended on their leadership style comprising emotional intelligence. In fact, emotional resilience is important in project with high complexity which is associated more with transformational leadership behavior. However, in aforementioned studies the authors nominated contextual factors such as project type and nature of the tasks as those have influenced leadership behavior and relationship between the project manager leadership competency and project team performances.

A Proposed Model
In order to help to establish an interesting intention in future research, a model of relationship between contextual effects, leadership behavior, team working and team performance is proposed base on the review of the literature (Figure 1). Each of the stages consists of several elements that most statistically are investigated in previous related area (Table 1). The model proposes that team performance is indirectly affected by leadership behaviors via mediating role of team behaviors while contextual factors play a moderating throughout the way of the team effectiveness process. Indeed, the model highlights the importance and contiguity of contextual factors that affect the relationship among these stages.

![Figure 1- Proposed model of interactions among leadership behavior, team behavior and team performance by moderating the contextual effects](image-url)
Table 1- Influential elements of proposed model

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<tr>
<th>Contextual Effects</th>
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<tr>
<td><strong>Environment</strong></td>
<td><strong>Substitutes</strong></td>
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<tr>
<td>- Organizational factors: maturity, structure.</td>
<td>- Training</td>
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<tr>
<td>- Project type: complexity, size,</td>
<td>- Internal motivation</td>
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<tr>
<td>- Task nature: interdependency</td>
<td>- Interesting task</td>
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<tr>
<td>- Events</td>
<td>- experience</td>
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<td></td>
<td>- personal characteristic (cognitive ability)</td>
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<tr>
<th>Leadership Behavior</th>
<th>Team Behavior &amp; Team Process</th>
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<tr>
<td><strong>Transformational Leadership</strong></td>
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<tr>
<td>- Idealized influence(Charisma)</td>
<td>- Knowledge and information sharing</td>
</tr>
<tr>
<td>- Individualized consideration</td>
<td>- Conflict resolution</td>
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<tr>
<td>- Inspirational motivation</td>
<td>- Commitment</td>
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<tr>
<td>- Intellectual stimulation</td>
<td>- Communication</td>
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<td></td>
<td>- Cohesion</td>
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To sum up, the overall scope of the leadership behavior in this study is transformational leadership, which the components are likely exhibiting a significant impact on team behavior. The model also proposes that leadership behavior will indirectly influence on team performance by affecting team behavior. Finally, it seems the model is more applicable in project-based environments such as construction projects where nature of the work solely is formed by reliance on teamwork. Although it is suggested some effective variable in the given model, clearly additional research is required to find more elements in order to fully understand the relationship between leadership and teamwork behavior especially in different contextual factors.

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About the Authors
Dr. Amin Akhavan Tabassi (PMP) is a Ph.D. in Project management from Universiti Sains Malaysia, and working as a senior lecturer at the School of Housing, Building and Planning, Universiti Sains Malaysia.
Professor Ir. Dr. Mahyuddin Ramli is a Ph.D from Sheffield University, United Kingdom, and working as a professor engineer at the School of Housing, Building and Planning, Universiti Sains Malaysia.
Kambiz Fereidonian Dashti, is a Ph.D. candidate in Project Management at the School of Housing, Building & Planning, Universiti Sains Malaysia.

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