

A Practical Framework for Implementing Distributed Leadership by Abu Dhabi Police

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Abstract

Abu Dhabi Police (ADP) is as a major client in the United Arab Emirates (UAE). ADP undertakes several capital projects every year; and uses two project managers (PMs) i.e., distributed leadership on their construction schemes. These dual PMs are chosen during the design stages of upcoming project schemes. A research did investigate the efficacy of this approach where 145 potential respondents were asked to complete a questionnaire survey and 90 (62%) responded. The data collected were analysed by descriptive and inferential statistics to reveal that more of the PMs perceived themselves to have more leadership than management characteristics. They also supported the use of distributed leadership which informed the development of a new practical framework for its implementation. This framework was validated with 10 top managers of ADP who supported its recommendation for adoption.

Keywords: Leadership; Management; Self-evaluation; Project management; Skills; Traits

Introduction

Abu Dhabi is one of the seven emirates that constitute the United Arab Emirates (UAE). Abu Dhabi Police (ADP) undertakes lots of construction projects and in fact is a leading client in the emirate. A research to explore how to improve ADP's construction practice was carried out and this focused mainly on its use of distributed leadership (DL) in its construction projects. ADP uses two project managers (as co-leaders) in the delivery of new projects and this duo work side by side in the course of a project. The rationale of this joint-leadership approach is to increase effectiveness and efficiency and reduce errors in the course of project delivery. This approach to project leadership has been very effective; but its adeptness has neither been documented nor studied empirically. Hence a research was carried out to assess the workability of this DL approach; as well as its impacts on project characteristics and outcomes and the feasibility of implementing it in a better way. The research culminated in the design and recommendation of a practical framework for implementing DL by ADP which is the main subject matter of this article.

The next section provides a review of literature on distributed leadership after which the research methodology employed is described. The practical framework developed is the presented and its validation discussed before summing up.

Distributed leadership

Leadership can be administered by one person; known as a focussed or vertical approach. Leadership can also be administered jointly by several individuals; known as: 'shared' or 'distributed' leadership [1]. Other terms by which distributed leadership is described are 'self-management' [2] and 'complementary-leadership' [3]. According to Spillane "shared leadership; team leadership; and democratic leadership are not synonyms for distributed leadership. Depending on the situation; a distributed perspective allows for shared leadership". However; the phrases shared leadership; distributed leadership and especially joint leadership are often used interchangeably in literature to refer to a situation where more than one person is steering the course of e.g. a construction project. Therefore distributed leadership (DL) is henceforth used in this article to refer to the concept which is depicted in Figure 1. While vertical leadership operates as a top-down individualistic approach DL on the other hand is pluralistic and is related to but distinct from a simple cooperation between individuals.

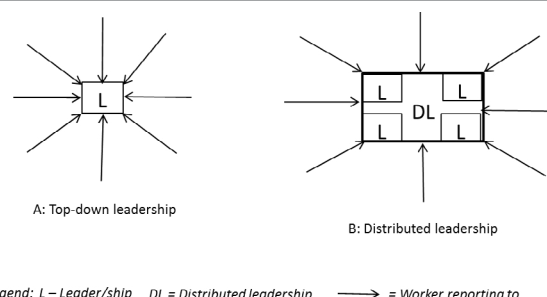


Figure 1: A contrast between top-down and distributed leadership [14].

DL is relatively a recent phenomenon within the leadership discourse and concerns leadership-practice primarily rather than leaders or their roles; functions; routines; and structures [4]. The people involved in DL often complement each other in terms of strengths; contributions and roles. DL teams work conjointly by synchronising their actions [5]. Knowledge from anyone in the DL team is allowed to thrive. DL is ideal for individual skills or strengths to show forth as needs arise or demands are placed on the team. Thus DL teams can evolve [6] more organically and can work separately but inter-dependently [7].

The two elements of DL are: 1) the leadership is provided by members of a team collectively and often simultaneously; and 2) members rely on each other [1]. However the right roles or skills need to be present at the right time for DL to operate effectively [2]. Also; synchronisation amongst members is crucial [8]. A good DL team must be cohesive and all members should work together willingly. The balance in the dynamics of a DL team can be disrupted detrimentally when people move up or out of a DL team [4].

DL can be used in sub-groups within an organization and in projects as well. In DL, one individual is often needed to be the visibility

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or representation of the group so the concept is implemented such that advocacy or the exercise of power shifts to different members over time i.e., shared. However, the focus of DL is on conjoint actions rather than role or position [9]. Albeit, DL may still involve the vertical and lateral dimensions as well as formal and the informal forms [10].

DL has much potential including the harnessing of cognitive abilities [11] and sharing of administrative duties [12]. Calls for the greater use of DL have been made by e.g. [13]. Some of these calls are premised on a realisation that leadership abilities reside in many people and the emergence of heroic charismatic and visionary individual-leaders like Mahatma Gandhi and Martin Luther King Jr are no longer the norm. There is thus a push to share or distribute leadership tasks nowadays especially when capable people are available.

DL quickly gained prominence probably due to dissatisfactions with the individual-leader model. The education sector is reckoned to have used DL extensively and often makes an effort to indicate so (Thorpe DL features largely in the educational literature. Indeed the volume of research articles on DL in the education sector is relatively large in comparison to other sectors. Since the turn of this century; the discourse of DL in especially the educational sector has grown massively and its theory and practice are both depicted as being more inclusive and effective.

In DL it is crucial that the right roles or skills are present at the right time for efficacy. Thus; DL can face a setback when one leader departs as his/her unique strengths may be missed before a replacement is found. Synchronisation amongst joint-leaders is very important too. The process of decision making in DL can take longer; as a group usually listens to its many voices prior to a resolution. In contrast an individual leader can make a quicker decision even when he/she has to take on board the suggestions of others. However the benefits of DL can be harnessed to overshadow these potential drawbacks.

There are variants of DL e.g. using of two or more leaders and; coordinated versus fragmented [14] but the common theme between these is that DL emphasizes inclusivity; collectiveness and collaboration [15]. DL structures which align with the transformational perspective of leadership are common nowadays; and are even institutionalized in some cases. Some are formal and some evolve informally. However empirical studies of DL are rather more recent and considerable work remains in this regard. Fewer people are studying DL. Also fewer studies have linked DL with organizational outcomes. In construction particularly; studies of DL are few and far between.

There was some anecdotal evidence of the use of DL in UAE construction at the project manager level. The researchers had witnessed this practice. The research team was able to visit a few project sites to actually observe two project managers operating simultaneously. This was an inspection visit and not the main research itself. During this inspection visit; the team discussed the efficacy of DL with a few project managers who were actually involved in the joint management of construction projects. Meanwhile; the general acceptability; performance and impact of DL at construction project manager level were unreported in literature. Thus building on the work of [16] who studied leadership styles in the UAE; the research team decided to explore the impacts of DL on project outcomes. In this regard; the team inquired from the few project managers whom they had met during the inspection visit if they were aware of the impacts of their organization's approach to the use of DL in construction project management. They answered affirmatively. They also indicated their willingness to answer further questions in a full-fledged study. The team was thus encouraged to pursue this line of empirical enquiry further; and DL was investigated

empirically where a practical framework was subsequently developed for ADP. Empirical studies can inform the development of a framework [17] as demonstrated in this article.

A number of authors have developed taxonomies of DL [18] e.g. the type of DL falling within the two continuums of 'planned to emergent' and 'aligned to mis-aligned'. In the context of the research reported here; the type of DL observed and studied was both: 1) institutional practice – where organizational structures are specifically put in place to facilitate the implementation of DL and 2) collaborated distribution – where two or more individuals exercise leadership simultaneously at the same place [19]. The unit of analysis concerned two project managers; co-located on the same project site; and managing the same project simultaneously. Dual-leadership; a type of DL; is not uncommon. The umpiring of sports events like basket-ball and recently rugby uses dual-leadership. Some (construction) consultancy organizations use dual-leadership. However; the use of dual leaders at project manager level on construction sites is very rare. Hence studies of any such instances of its implementation would provide informed insights and benefit for subsequent uptake. Therefore a research of the dual use of project managers in the UAE was carried.

Research Method

The study was conducted in the UAE and based around projects executed by a very big client in Abu Dhabi; which is the Abu Dhabi Police (ADP). This client undertakes several construction projects regularly and uses DL in the management of its new-build schemes. Projects undertaken by ADP thus provided a target and focus for the research and especially its data collection.

The study used mixed-methods where a quantitative study was initially carried out to establish the leadership features and opinions of the project managers. A mostly structured questionnaire for the first phase was developed and used as a basis of the study. The elaborate questionnaire concerned: the demographic information about the respondents; the leadership styles of the respondents; the characteristics of the respondents (i.e. their leadership versus management traits); their perceived impacts of DL on project features; outcomes and success; and the perceived impacts of culture on leadership style and characteristics in the UAE. In this regard non-probability convenience sampling was used. Project managers and perceived leaders who have either had previous involvement or are having current involvement with ADP projects were asked to fill the questionnaire.

A total of 145 potential respondents were sent the questionnaire and follow-up emails and phone calls were made to try and get all the recipients to respond. Ultimately; data was collected from 90 people; which are a 62% response rate. The responses collected were analyzed by means of descriptive and inferential statistics. The descriptive statistics concentrated on the mean values of the respondents' attributes as well as their assessments of the impacts of DL and culture on project outcomes while the inferential statistics included the use of the interclass correlation coefficient to check the responses for harmony and the Pearson chi-square test to link responses with demographic information.

Following the quantitative study; focus group discussions were used in a qualitative phase to validate the findings of the first phase survey. The focus group discussions were audio-recorded; transcribed and probed by content analysis. The project managers who participated in the research perceived themselves to have more leadership than management characteristics. They also supported the use of distributed leadership where most respondents felt that the concept: leads to

increase in the quality of products; improves and enhances customer satisfaction with the project handover; provides a learning opportunity for new and inexperienced project managers; provides project stability when one manager is absent; contributes to project success and does not necessarily lead to delays; etc. Other findings of the survey; which are outside the scope of the current article; have been disseminated elsewhere [20,21].

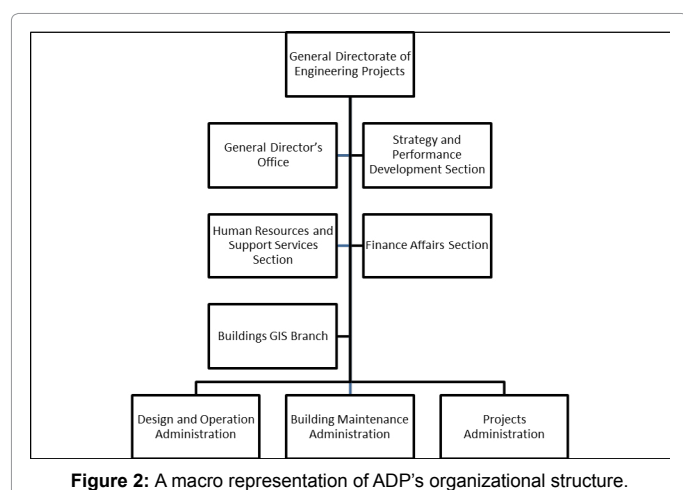
In a later part of the research; a practice framework for ADP to embed DL in its practices was developed. This framework was validated by means of a questionnaire survey. This framework which is the main subject matter of this article was sent to ten purposively sampled key personnel working with ADP and involved in their project development procedures. These personnel are usually involved in the approvals of a project as it goes through its various stages. Hence they are conversant with the procedures and are in a position to understand the framework easily as well as; assess its workability and ultimately recommend its acceptance.

Development of a Practical Framework

A framework could represent a structure; an overview; an outline; a system or a plan [22]. There are different types of frameworks: a conceptual framework; a practical framework; a theoretical framework; etc. A conceptual framework may show factors; variables; key agents and how they relate while a theoretical framework may offer a general representation of relationships between things in a particular phenomenon [23]. Frameworks often have a descriptive element which may indicate a relationship between independent on dependent variables.

A macro version of ADP's organizational structure is shown in Figure 2. It consists of key sections that contribute to the project development process as briefly highlighted below:

- The Human Resource and Support Services section is primarily responsible for creating contracts and obtaining approvals from contractors and consultants. This department also designs training and development plans for ADP employees for continuous professional development purposes.
- The Design and Operation Administration section produces initial designs for all capital projects. They thus help to develop the client's brief and provide a basis for contract documents to be fully prepared.
- The Projects Administration section manages the projects right from the design stage till the handover stage i.e., after the building construction is completed.



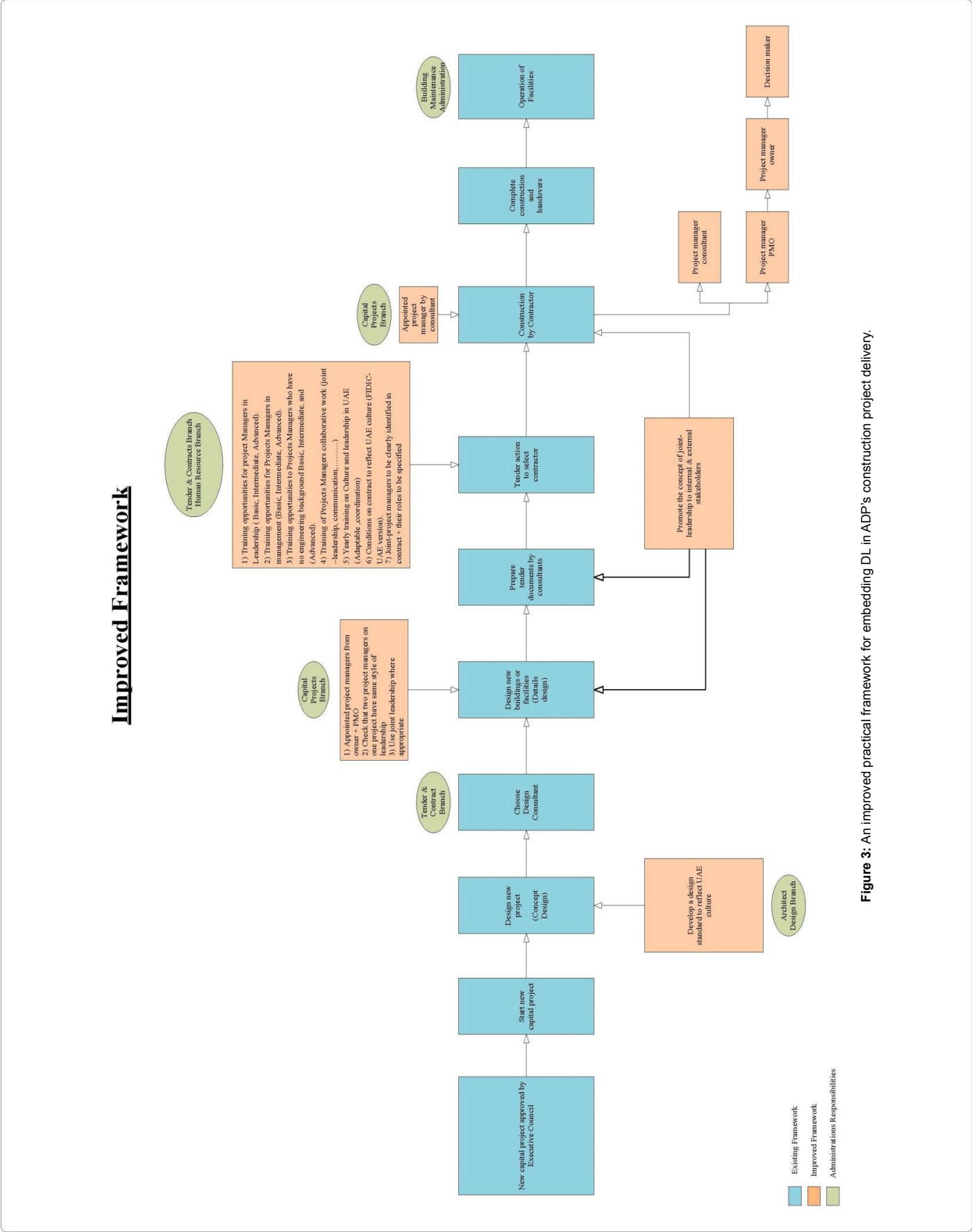
- The Building Maintenance Administration section is responsible for all types of maintenance (general maintenance; urgent maintenance; and temporary maintenance) and their work commences when construction is finished and especially when a facility is put to use.

A sequential project delivery process is followed in the successful delivery of ADP's projects. This process is shown in blue boxes in Figure 2. Although the current project delivery process is effective and yields successful project completions; the research carried out suggested that there was scope for improvement; especially in terms of embedding DL in what ADP is doing. Hence a framework was developed to guide ADP in utilizing DL more effectively in the future development and accomplishment of their projects [24-28].

Results

As ADP's projects were seen to be effective and successful; the current project development procedures were thus utilized to propose a practical framework which is shown in Figure 3. The framework builds on current practice and embellishes the processes to be undertaken in the course of a construction project to enhance a more effective implementation of DL. The process and steps of the new and improved (practical) framework can be summarized as:

1. A new capital project is approved by the Executive Council.
2. Start of new capital project procedures.
3. Design of new project (concept design).
4. Architect design branch produces a new project design concept. Their initial design standard must significantly reflect UAE Culture.
5. Design Consultants are chosen by the Tender & Contract Branch. These consultants then design the new buildings or facilities.
- Other preparations and all necessary agreements and plans are put in place in readiness for the construction phase. The concept of DL is promoted at this stage to all internal and external stakeholders.
6. The Capital Projects Branch then:
 - Appoints project managers from owner and PMO to jointly manage projects;
 - Checks that any two project managers proposed for a project are compatible in terms of style of leadership;
 - Proceeds with using DL where appropriate.
7. The consultant prepares the tender documents for the project.
8. The Tender and Contracts Branch / Human Resource Branch will then:
 - Prepare and/or train project managers for the impending project;
 - Prepare project-specific Conditions of Contract that reflect UAE culture (FIDIC - UAE version);
 - Identify joint-project managers clearly in the contract and their roles.
9. Tender action is then undertaken to select a contractor.
10. Once the contractor is chosen; the Capital Projects Branch appoints another project manager who is selected by the consultant.
11. Construction begins by the chosen Contractor.
12. During the construction phase both project managers are jointly involved in the process of overseeing all aspects per the joint leadership agreement. A large project would have three project managers:



Question	Attributes	Responses
Your knowledge of AD Police projects and procedures is	Low	0%
	Moderate	0%
	High	60%
	Very high	40%
The improved framework is?	Easy to understand	100%
	Difficult to understand	0%
	Neither easy nor difficult to understand	0%
The improved framework will?	Reduce communication time	90%
	Not reduce communication time	0%
	Not impact on communication time	10%
The improved framework will?	Improve the choice of joint leaders (two Project Managers) for the same project.	100%
	Not improve the choice of joint leaders (two Project Managers) for the same project.	0%
	Have little impact on improving the choice of joint leaders (two Project Managers) for the same project.	0%
The improved framework will?	Help UAE culture to be communicated better in project designs	80%
	Not help UAE culture to be communicated better in project designs	0%
	Reflect only some aspects of UAE culture in project designs	20%
The improved framework will?	Help project managers with no engineering background through training	100%
	Not help project managers with no engineering background through training	0%
	Not impact on project managers that have no engineering background	0%
The improved framework will?	Increase internal stakeholders understanding of joint- leadership in AD police projects	100%
	Decrease internal stakeholders understanding of joint- leadership in AD police projects	0%
	Not affect internal stakeholders understanding of joint- leadership in AD police projects	0%
The improved framework will?	Increase external stakeholders' understanding of joint- leadership in AD police projects	90%
	Decrease external stakeholders' understanding of joint- leadership in AD police projects	0%
	Not affect external stakeholders' understanding of joint- leadership in AD police projects	10%
The improved framework will?	Increase the understanding of the FIDIC contract in AD police projects	90%
	Decrease the understanding of the FIDIC contract in AD police projects	0%
	Not affect the understanding of the FIDIC contract in AD police projects.	10%
The improved framework will?	Make AD police project managers' training to address effective and efficient leadership	100%
	Not make AD police project managers' training to address effective and efficient leadership	0%
	Not affect the effectiveness and efficiency of AD police project managers' training.	0%
The improved framework will make the contracts for ADP projects to reflect UAE culture?	Agree	90%
	Not agree	0%
	No comments	10%
The improved framework will?	Help in improving quality due to the appointment of some project managers by consultants	100%
	Not help in improving quality due to the appointment of project managers by consultants	0%
	Not affect quality associated with the appointment of project managers	0%

Table 1: An improved framework for more effective joint-leadership in construction projects by Abu Dhabi.

- Project manager consultant
- Project manager PMO
- Project manager owner

13. Once handover is initiated at the end of the construction phase; the Building Maintenance Administration office takes over the project for the administration of the facility.

14. After handover; the constructed facilities are put into effective operation.

Figure 3 thus embeds DL in ADP's current procedures by identifying gate points and checks to be carried out to ensure that appropriate joint project managers are selected for each scheme. Figure 3 is thus a practical framework for project delivery and especially implementing DL by ADP. The development of this practical framework went through several iterations and discussions with three selected project managers who provided input. This trio did participate in the original questionnaire survey and focus group discussions and made themselves available for further contributions [29-33]. They therefore provided an initial check of the framework and contributed to its refinement. However; when the framework was ultimately finalised; it was further validated.

Validation of the framework

After development; the framework was sent to some purposively selected key personnel using a cover letter which asked them to study the framework and answer questions on it using the questionnaire attached [34-36]. These were 10 project managers and leaders who were all involved in the original survey and were part of the 90 people who fully completed the first questionnaire on DL. All the 10 people approached responded; as they felt the subject matter was beneficial to them and ADP. Also; this second questionnaire was shorter than the first one and did not demand too much time to complete.

Twelve questions were posed and these are shown in the first two columns of Table 1. An Excel spreadsheet was used to collate the answers as the number of respondents was low and the data were nominal and/or ordinal. The breakdown of responses to the 12 questions is summarized in Table 1. 60% of the respondents had very high knowledge of ADP projects and procedures and the remaining 40% had high knowledge. On face value therefore; the respondents are familiar with the subject matter and have provided reliable answers. Also; most of the responses were either unanimous or near-unanimous; hence a further probing of the answers was not carried out as the pattern that emerged was adequate to make a conclusion on the framework developed [36-40].

Discussion of opinions about the framework

The statistics showed that all the respondents agreed that the improved framework was easy to understand. Thus the framework is not over complicated; suggesting that its implementation should be straightforward. By extension also; explaining the framework to current and new employees should not be difficult.

90% of the respondents agreed that the improved framework will reduce communication time while 10% felt that the status quo will remain. By delineating things to be done and indicating the project stages when some of these should be done; the framework is inadvertently an enabler of communication. The framework for instance; suggests when decisions pertaining DL should be communicated with some internal and external stakeholders.

By embellishing existing practice to embed the use of DL; all respondents agreed that it would improve the choice of joint leaders (two Project Managers) for the same project. The implementation of the framework would warrant that more scrutiny is applied to the decision making process which supports the choice of joint project managers. What could be helpful to ADP in this regard is a 'Strength-Weakness' analysis where the pairing of project managers would maximise the balance between their strengths. For example; one project manager could be an excellent aural communicator while the other is stronger in written communication. They could thus be paired-up to balance each other in communicating issues concerning the project.

When respondents were asked if the new improved framework would help UAE culture to be communicated better in project designs; all agreed; but 20% of them indicated that the improvements would concern only some and not all aspects. In the ADP approach; as shown in Figure 3, project managers are often appointed to manage an already designed scheme; hence their input into the design is restrictive. However; the construction process can support the achievement of UAE culture in the ways operatives are treated and supported on site and in the approval of the final quality of the different elements of construction. Unsurprisingly therefore; all respondents consented that the framework would help in improving the quality of built facilities. Also; majority of the respondents (80%) agreed that the practical framework will make the contracts for ADP projects to reflect UAE culture.

All respondents agreed that the new framework would increase internal stakeholders' understanding of DL in ADP projects. The implementation of the framework will make the use of DL much more formal and thus make the concept to feature more prominently in bulletins and other publications of ADP. That way; internal stakeholders will know the concept much more deeply. Again, this point builds on the aspect of communication i.e. the framework has the potential to increase the volume; frequency and impact of communication concerning DL to make it much more understandable. The harnessing of the strength of communication by using DL feeds into another aspect which was rated by the respondents; i.e., 90% of them opined that the framework would increase the understanding and use of the FIDIC standard form of contract in ADP projects. When two people are fronting for something; and explaining it in alternative ways; it can reach more hearers more effectively as they might have different preferred leaning styles.

Another suggestion of the framework is that more emphasise should be given to DL within ADP's training agenda. Everyone agreed that the improved framework would help project managers through training. They also felt that the framework would assist ADP's training of project managers to address effective and efficient leadership. As ADP is at the forefront of using DL in the UAE; its training on the subject matter can be opened-up to those outside their organization.

In some way; the constructs considered in the validation of the framework seem to complement each other. Overall the framework has the potential to improve the quality of work; the time and efficiency of performance in the course of projects; the process and procedure used in projects will be much clearer; and it can also reduce communication time. These benefits will all contribute to greater effectiveness and efficiency in ADP's construction projects. The majority of project managers and leaders who participated in the survey acknowledged that they preferred the new and improved version of the framework because of the many potential advantages that it provides over the status quo. On the basis of these positive views; the framework was recommended to ADP by the researchers.

If ADP adopts the framework; its implementation should be monitored for efficacy and assessment of the gains to be derived. The potential gains to look out for will include:

- Time i.e. if projects are completed on time; delays are minimised; communication times are reduced; procurement process is fluid and shortened; etc.
- Cost i.e. the impact of DL on overhead costs versus the minimisation of claims and cost escalations; etc.
- Dispute avoidance i.e. how DL reduces/increases disputes.
- Feel-good factor i.e. how ADP's project managers and internal/external stakeholders feel about DL and project outcomes; the later including the quality of finished buildings and; adherence to UAE culture.

A post-project or yearly review can be utilised for the monitoring of the implementation of the new framework. Any gains realised can be shared as dividends of good practice.

Conclusion

A new practical framework for implementing DL in construction projects by ADP was developed and discussed. An underpinning survey to gauge the acceptability of the new framework established its greater potentials over the status-quo in terms of offering improved

communication; quality of products; time and efficiency. The framework will also make the construction procurement process and procedure of ADP clearer. As the verifiers of this framework are ADP insiders; its chances of gaining official approval are quite high. Thus, the new framework has been recommended to ADP for adoption and it is undergoing a probationary trial.

DL can work in construction as demonstrated by ADP's practice. DL also offers potential benefits. Thus; construction companies within and beyond the UAE should not be afraid to try DL in the running of their projects if the circumstances warrant it. A practical framework can always be utilized for implementing DL by any organization.

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