

The Relationship between Financial Reporting System and Project Success: A Case of Construction Projects in UAE

Shatha Mustafa Hussain, Faisal Khan, Muhamad M. S. Jumaa

City University College of Ajman, Ajman, United Arab Emirates (UAE)

Sharif Ullah Jan

Federally Administered Tribal Areas (FATA) University, Darra Adam Khel, Pakistan

The purpose of this paper is to deliver a better perception of the project success, and how reporting system might increase the probability of project success in construction projects in UAE. Further, it aims at exploring the relationship between effective reporting system in terms of the characteristic of its outputs (mainly effectiveness of financial reporting system) and project success. Semi-structured interviews with a number of interior auditors, accountants, and chief financial officers (CFOs) from different corporations in construction sector in UAE in order to recognize how effective reporting system in terms of the characteristic of its outputs (broad scope, timeliness, aggregation, and integration) might contribute to increase the probability of project success. There are several success factors in construction projects in UAE, thus it is very hard to capture all these factors in one paper. Hence, this paper is not considering all project success factors rather it focuses on the characteristic of outputs of the reporting system generally and the financial reporting system particularly (broad scope, timeliness, aggregation, and integration), as most of the studies in the literature considered the reporting system as a key factor of project success. This paper adds to both project management and accounting research by evidencing results from an exploration how effective reporting might impact the project success, with valuable implications for standard officials, customers, investors, stakeholders, sponsors, shareholders, CFOs, project developer, consultants, internal auditors, and accounting academics. The effective reporting system in United Arab Emirates (UAE) construction projects enables possessors, customers, and contractors of projects to get timely information about the progress of project in a brief and significant format which in turn improve the decision-making process and contribute to project success. This paper implies a contribution for both project management literature and accounting research by investigative the effectiveness of reporting system in project successes from historical point of view and contemporary point of view.

Keywords: effective reporting system, construction projects in UAE, project success, qualitative study

Shatha Mustafa Hussain, MBA, lecturer, City University College of Ajman, Ajman, United Arab Emirates (UAE).

Faisal Khan, Ph.D., associate professor, Department of Finance & Accounting, City University College of Ajman, Ajman, United Arab Emirates (UAE).

Muhamad M. S. Jumaa, Ph.D., associate professor, Department of Finance & Accounting, City University College of Ajman, Ajman, United Arab Emirates (UAE).

Sharif Ullah Jan, Ph.D., Department of Management Sciences, FATA University, TSD Dara, NMD Kohat.

Introduction

This paper contributes to the both project management and accounting literature by giving evidence from an investigation of the characteristic of the reporting system outputs (mainly effectiveness of financial reporting system) and how these outcomes can impact the project success in construction projects in United Arab Emirates (UAE).

The reporting system in construction projects is built-up of different sub-systems that are required to produce and distribute timely, aggregated, and integrated reports, such as project dashboard, safety reports, budget and cost reports, work progress reports, schedule, risks reports, quality reports, contract status, and other reports needed for enabling the project team to achieve their tasks successfully. However, the financial reporting in construction projects is a cross system which mixes together managerial and financial accounting and other disciplines, as financial reporting in construction projects is not totally distinctive in its framework and needs a specific practice; job order costing and the rate of accomplishment reporting are the two specified components of financial reporting for construction projects that should be reported correctly so as to give a trustworthy image of a project's profit or loss (Weygandt et al., 2010).

A large and expanding body of literature has explored and underlined elements of project success (Lindner & Wald, 2011; Todorović, Petrović, Mihić, Obradović, & Bushuyev, 2015, etc.), while other studies have assumed altered viewpoints to disclose obstacles and challenges and how they might contribute to failure of projects (Polyaninova, 2011; Ahern, Leavy, & Byrne, 2014). Most theories explain the project success by collaborative factors influencing project success embodied by top management participation and competition as human resources, organizational structure, environment, learning between projects (Hartmann & Dorée, 2015; Bartsch, Ebers, & Maurer, 2013), tangible resources and technologies of knowledge management (Pee & Kankanhalli, 2016), culture (Polyaninova, 2011), knowledge management strategies, project management practices in a normal lifecycle of a project (Reich, Gemino, & Sauer, 2012), constant feedback, project associated necessities and distinctiveness, administrative appropriation, technological assets, coaching means, project management channels, probable advantages, and ability to learn (Lin, 2013). Thus, the diverse factors that affect the success of projects (organizational or administrative factors, facilities and resources factors, and the environmental factors) have always been considered as contemporary matter that preserved by many scholars, such as Abdul Rahman and Shukor (2011), Taheri and Abdullah (2012), Yeong and Lim (2010), and Todorović et al. (2015) (Ramlee et al., 2016).

However, many papers have studied financial reporting in terms of the effectiveness consequences of the managerial and financial reporting system, such as Stocken and Verrecchia (2004), while other researchers have studied the reporting systems in terms of the characteristics of its output (broad scope, timeliness, aggregation, and integration), such as the paper of Saganuwan, Ismail, and Ahmad (2015), Irawati and Ardiansyah (2018).

There is no study has examined the relationship between the effective reporting systems as a key factor of project success. The purpose of this study is to examine the effectiveness of the reporting system (in terms of the characteristics of its outputs [broad scope, timeliness, aggregation, and integration]), this has been amended from earlier research delivered by Hussain et al. (2012), Saganuwan et al. (2015), and Irawati and Ardiansyah (2018) and how these effective information impact the project success in construction projects in UAE, through the gathering of rich and detailed data collected within qualitative research. Further, it seeks at increase

investors, stakeholders, sponsors, shareholders, chief financial officers (CFOs), project developer, internal auditors, and accountants' awareness about the impact of effectiveness of the reporting system on project success. It attempts to suggest a new model that interested parties of the project can consider when evaluating the reporting system. The research questions explored are:

RQ1: How can broad scope information provided by the reporting system affect the project success in construction sector projects in UAE?

RQ2: How can real time information provided by the reporting system affect the project success in construction sector projects in UAE?

RQ3: How can aggregated information provided by the reporting system affect the project success in construction sector projects in UAE?

RQ4: How can integrated information provided by the reporting system affect the project success in construction sector projects in UAE?

This paper is organized as follows: First, the research problem statement is shown. Second, the literature related to reporting systems and project success is reviewed. Third, research methodology as a qualitative research interviews with interior auditors, accountants, and CFOs from different corporations in construction sector in UAE is described. Fourth, finding analysis and discussion through emerging themes around the reporting systems and project success are debated. Finally, the conclusion that outlining contributions of the study and suggesting areas for further research is given.

Problem Statement

Several causes might lead to project defeat (Polyaninova, 2011; Ahern et al., 2014); ineffectual reporting system in project might be one of the most causative elements. However, it is not easy to adopt effective reporting system in project, as it necessitates timely, integrated, aggregated, and wide scope information from different phases of project and construction activities in addition to the other elements influencing the associations between the contextual factors and the characteristics of reporting systems (Choe & Lee, 1993).

Some construction projects fail to interact and meet the reporting requirements of governing boards, stakeholders, and officials who set up a really high standard for project success. Hence, project-based organizations are to develop project reporting system personalized to their needs (Gigler, Kanodia, Sapra, & Venugopalan, 2014); as a new challenge related to massive quantity of statistics existing, complication of software applied in producing reports about the projects lessened the opportunities and enforced managements and construction sectors to use instruments involved physical settlements and repeat recording of data.

This paper debates how application of effective project reporting system might enhance the probability of project success. It investigates the factors or features of effectual reporting systems, detects in what way to define relevant reports, and suggests producing beneficial comprehensible reports and how that quality of reports contributes to project success.

Research Justification/Theoretical Background

Themes Related to Reporting System

The financial scandals of 2008 swelled the demand for financial officials to analysis the efficiency of financial reporting. Previous research works outline the quality of financial reporting as the degree of which

financial reports deliver beneficial facts for stakeholders and lenders in making decisions (Schipper, 2003; Schipper & Vincent, 2003; Nielsen & Roslender, 2015; Hairston & Brooks, 2019) have afforded an empirical proof about the efficiency of reporting system in accomplishing the identified goals and highlighted to the gap for development in the quality of reporting system, they commended after their review of collected works that the Financial Accounting Standards Board (FASB) necessitates executives to deliver additional comprehensive, translucent information (Hairston & Brooks, 2019).

During the past 30 years, much more information has become available on reporting system, such as the paper of Stocken and Verrecchia (2004) that studied the effectiveness consequences of financial and managerial and reporting system select and revelation administration. Once an administrator has certain reserved figures, they are not acquired by the financial reporting system of the organization, and possibly will tamper the financial statement at certain cost. Stocken and Verrecchia (2004) showed that the executive might not select the best accurate system of financial reporting. They also investigated in what manner reportage system select differs by the accuracy of the executive's reserved data recognized by the notifying system, accuracy of data and figures which is not acquired by that system, and the executive's cost of tampering the report. We consider the effect of reporting discretion on the efficiency with which investors allocate resources; however, this paper is not adopting the methodology of Stocken and Verrecchia (2004).

There is a large volume of published studies describing the role of reporting systems in terms of the timeliness, such as Clatworthy and Peel (2016) who had studied the degree of which the timeliness of financial reports in the British private sector reveals governing and financial effects through investigating the influence of 30 days dereliction of the legitimate regulative meeting finishing date. By the interval of financial reporting and tendency to expurgate overdue as indicators of timeliness, Clatworthy and Peel (2016) had concluded that though reportage performance is mainly determined by governing due dates, corporations supposed to be generating financial reports to external stakeholders meaningfully and betimes, and are considerably less probably to deliver after the legitimate time limit (overdue), than their parallel without comparable motive. Through the gap reporting interval, the modification in rules possessed a similar influence. Clatworthy and Peel (2016) stated an important decline in the average time to get ready reports, however, a growth of 46% in the percentage of businesses filing overdue in the next year of modification of the rules. Thus, this paper is adopting the timeliness as a factor or characteristic of effective financial reporting.

The study of Gigler et al. (2014) has developed a cost-benefit balance that delivers novel visions into the rate by which organizations ought to be needed to provide reports about the outcomes of their operating activities to the financial market. The advantage to raising the rate of delivering financial reports is that it affects market prices to enhanced ban investing in minus net present value projects. The price of higher rate is that it rises the likelihood of making administrative short-term. Gigler et al. (2014) examined the balance between the frequency costs and advantages and improved circumstances need a higher rate of reporting and situations that does not require a higher rate of reporting. This paper is not focusing on the setting and circumstances rather it focus on the impact of frequent reporting in project success.

The paper of Irawati and Ardiansyah (2018) empirically targeted to demonstrate the effect of the characteristics of reporting system comprising of wide-ranging scope, timeliness, aggregation, and integration on administrative performance by a moderating variable of decentralization, they adopted a quantitative research design to collect primary data in Sumatra with 35 participants of middle and operational executives.

Their findings showed that the timeliness and aggregation influence managerial performance, whereas the broad scope and integration have no influence on managerial performance. However, with the moderated variable, the relations between reporting system characteristics and performance are insignificant. This paper is adopting the subthemes of Irawati and Ardiansyah (2018) in terms of the characteristics of financial reporting; however, this study is not empirically investigating the effect of the effective reporting system and managerial performance.

Themes Related to Project Success

Yeong and Lim (2010) had suggested a model that consolidates knowledge management (KM) and project management (PM) in order to enhance project success and consequently to reflect the field of knowledge management and processes as a significant elements that have a positive impact on project's affordability and sustainability. Figure 1 illustrates the model suggested by Yeong and Lim (2010) for linking between KM and PM.

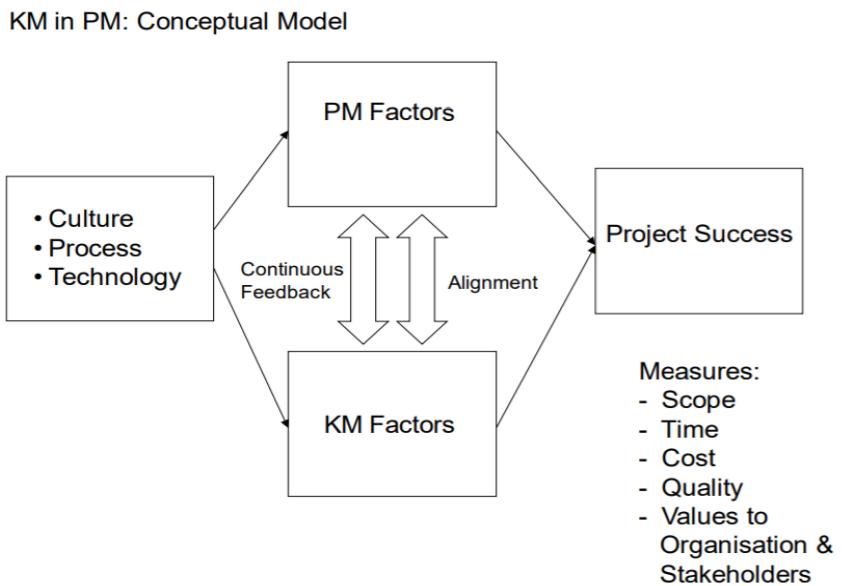


Figure 1. Theoretical framework of Yeong and Lim (2010) for linking KM and PM.

Figure 1 characterizes the elements studied by Yeong and Lim (2010) that interact together (organizational culture, KM procedures and IT) and could have an influence on both KM and PM which successively influence project's fulfillment and success.

In 2011, Polyaninova's study has delivered numerous theoretic results on several features of KM in project situation, and highlighted a number of structural components in addition to project associated requirements and characteristics that influence the implementation of KM in projects. Polyaninova has also mentioned that the importance of efficacious KM in benefiting from earlier lessons in earlier projects (dud or achievements) for sustainability and affordability in project-based organizations, though Polyaninova has exposed that immeasurable firms lean not to utilize it due to the hitches and complications included in its practices. However, the interests of efficacious KM (decrease time spent to deliver the project, less project costs, pleasing customers by supremacy in service and products, prevention errors, etc.) surpass its difficulties. In spite of Polyaninova's hard work in investigating numerous studies in endeavors to recognize KM processes in several companies,

revising and reviewing clarifications related to KM in projects (its significance, KM paybacks, KM difficulties, and KM policies), no work has been prepared to measure the connection between elements impacting the use of KM in projects.

In IT segment, Reich, Gemono, and Sauer's experimental studies have been accompanied in 2012 and 2014, to inspect the role of projects empowered by IT in affixing value to the organization. Therefore, three elements (knowledge storage, environs, and practices) have been acknowledged as a promoter of creativeness and configuration in IT projects. While, in 2016, Pee and Kankanhalli's paper in public sector has demonstrated the interrelating results of elements (such as tangible resources or IT, structural resources, or human factor) that have an impact on KM skillfulness of the organization. Pee and Kankanhalli's results exposed that the human factors (embodied in management, public capital, and the dexterity of personnel) improve the efficiency of physical resources of KM, while organizational resources have an ordering impact. That conclusion surges the general viewpoint that augmenting an efficient KM competency intensifies organization's productivity and effectiveness.

Results of Wei and Miraglia's research in 2017 back the conclusions of Yeong and Lim (2010), Pee and Kankanhalli (2016), and Polyaninova (2011) that the culture impacts the application of KM in projects. Equally, the study of Wei and Miraglia (2017) has tested the influence of culture (in terms of different major components) on knowledge sharing all over the projects in China. Wei and Miraglia assembled data from largish construction corporation's documents stores, and organized meetings and interviews with highly expert managers of the project, the main proof inflate the consciousness of the unobtrusive limitations that influence workers' selections, performances, and interacting in terms of spreading, distribution, and recycling knowledge.

More than a few papers have revealed the importance of the knowledge management strategies in the project success, such as the paper of Kim et al. (2014) that discovered the effects of KM strategies on the implementation of knowledge management by using a contingency configuration. KM strategies are also suggested by Yeong and Lim (2010) as an element that influenced the project success; Kim et al. (2014) also had attempted to present how the relationship between the KM strategies and project success is influenced by the environments (exterior or interior) in Korea. Thus, data were gathered from 141 corporations using KM initiative. Results of Kim et al.'s (2014) paper match their hypothesis on the assertive links between great reliability of reporting system, great ability of environmental knowledge, exterior strategy of the business, and enhanced performance of project. Findings also agrees with the hypothesis about the affirmative link between great reliability of reporting system, weakly ability of environmental knowledge, internal strategy of the business, and enhanced performance of project. The hypothesis of the positive connection between frail reliability of reporting system, great ability of environmental knowledge, exterior strategy of the business, and enhanced performance of project is evidenced, while the hypothesis of the positive connection between frail reliability of reporting system, frail ability of environmental knowledge, internal strategy of the business, and enhanced performance of project is not evidenced. The outcome of Kim et al.'s (2014) paper confirms the significance of bearing in mind the contextual factors (exterior and interior) in improving KM strategies and their advantages in achieving project success.

There has been a significant body of literature that considers the factors of project success, such as the paper of Todorović et al. (2015) that offered an integrated framework to realize the connection between critical success aspects, key performance indicators, performance-evaluating methods, and project success. Todorović et al. (2015) had gathered their data from 103 Serbian project managers in altered businesses in 2013.

Todorović et al.'s results agree with the predicted framework and highlighted the positive association between critical success factors, key performance indicators, performance-measuring process, and project success (knowledge attainment and distribution). According to Rahman and Shukor's (2011) case study, KA is the detection to estimate the prominence of knowledge management's system, prior starter the application of knowledge management procedures and practices. Furthermore, Rahman and Shukor (2011) exposed in what way, in real life, two Malaysian corporations accomplished the use of KA, and discovered the significance of KA in enhancing the project performance. Then, Rahman and Shukor (2011) encouraged the IT application in knowledge audit as they encourage mutual sharing of knowledge among people. Rahman and Shukor's (2011) findings agree with Pa, Taheri, and Abdullah's (2012) paper and the majority of academics that KA is considered as the key phase of KM, and the successful implementation of KM is highly correlated to project success.

It is essential to point to the companies' ability to learn from another project or even from previous projects' lessons is counted as an element and influences the project success. As it is perplexing to afford an reachable knowledge platform that let everybody to get knowledge through the project boundaries, Bartsch et al. (2013) had disputed that societal capital of projects' teams (public relationships amidst project team members and their fellow workers elsewhere the project) is useful to overcome the problems of gaining knowledge in project based organizations and achieving project success (Bartsch et al., 2013)..

Themes Related to Reporting System and Project Success in Construction Projects in UAE

The paper of Trabelsi (2018) has examined the impact of IFRS 15¹ early implemented by real estate companies (REC) on the financial reporting system (in terms of the quality of accounting earnings and owner's equity) in real estate firms in Dubai, and highlighted that IFRS 15 offer organizations with a model that will stratify to profits grossed from a agreement with a client. IFRS 15 has been the outcome of a concourse project with Financial Accounting Standards Board (FASB) that launched in 2002. IFRS 15 represents a combination between IAS 18 "Revenue" and IAS 11 "Construction Contracts" that produced a novel paradigm for recognizing revenues which is constructed on the allocation of monitoring. It implements to revenues gained nevertheless of the sort of income deal or the business (with partial exclusions). Even though the active time for the novel standard is the start of a company's first fiscal year starting afterward of 1st of January 2018, the fresh standard authorizes quick implementation for eras starting previous to the active time with no terms. IFRS 15, as a novel standard of revenue recognition, is accomplished in a way which gauges the volume signifying the concern to which the firm gained or is supposing to gain due to merchandises and facilities transmitted to clients. Thus, the implementation of the innovative standard might probably impact meaningfully all units in all sectors. Trabelsi (2018) had studied REC listed in Dubai Financial Market (DFM) that chosen to implement IFRS 15 in producing their combined financial reports for 2015. The implementation of new model defines at what time and in what way revenue that must be documented and is anticipated to cause a physical influence on earnings value for REC. Actually, the time of revenue and profit acknowledgement and the classification of contract costs as capital or expenditure might meaningfully impact and consequently result in to a factual variation in the amount of revenue and profit. Findings revealed that early implementation of IFRS 15 by REC have an important affirmative impact on the quality of financial reporting in terms of earnings and owner's

¹In May 2014, the International Accounting Standards Board (IASB) issued the International Financial Reporting Standard 15 "Revenue from Contracts with Customers".

equity for all companies examined. The novel standard involves a dual positive consequence: Revenue might be recognized during the period and not only at the phase of which nearly all agreements with clients and contract costs are more possibly capitalized instead of substituted as an expense. The time of implementation IFRS 15 and other accounting standard by executives is one of the stimulation of affirmative accounting theory (Amir & Ziv, 1997; Titman & Trueman, 1986).

After preceding a systematic review of project success and effective reporting, Tables 1 and 2 recap themes acquired to carry out this paper.

Table 1

Effective Reporting System Themes

Variable 1	Effective reporting system			
Themes	Timeliness	Integration	Aggregation	Broad scope
Research justification	Saganuwan et al. (2015), Irawati and Ardiansyah (2018), Stocken and Verrecchia (2004), Hussain (2012), Clatworthy and Peel (2016)	Hussain (2012), Saganuwan et al. (2015), Irawati and Ardiansyah (2018)	Hussain (2012), Saganuwan et al. (2015), Irawati and Ardiansyah (2018)	Hussain (2012), Saganuwan et al. (2015), Irawati and Ardiansyah (2018)

Table 2

Project Success Themes

Variable 2	Project success		
Themes	Scope	Cost	Time of delivery
Research justification	Lindner and Wald (2011), Todorović et al. (2015)	Lindner and Wald (2011), Todorović et al. (2015), Polyaninova (2011), Trabelsi (2018)	Lindner and Wald (2011), Todorović et al. (2015), Trabelsi (2018)

Research Methodology and Research Questions**Research Design**

The nature of the research questions to be examined, the practical quality of financial reporting system and project success, and the essential to additional strongly grasp of this occurrence, anticipated a qualitative research design (Edmondson & McManus, 2007). Qualitative approaches follow to further deeply apprehend the suggested framework of project success and the logic inspectors express it (Denzin & Lincoln, 2005). The framework for the research is a UAE, project-based organizations, in construction sector. The selection criteria for the paper were founded on academic election instead of arithmetical election (Glaser & Strauss, 1967). Therefore, the paper's status should have the capability to extent the comprehension of developing theory instead of its statistical features (Eisenhardt, 1989).

Data Collection

Data collection procedures comprised interviews to get secondary document analysis about some organizations. Multiple methods of data collection support data triangulation (Guba, 1981). To answer this paper's questions, one vital basis of information is 15 semi-structured interviews that were conducted with top respondents—including project managers from different construction firms in UAE, such as Al Wathba Building & Contracting Company, Tiger properties, Al Mawarid General Contracting Co. Ltd, and Tameer constructions.

The semi-structured interviews were organized by an interview protocol that delivered broad questions in a related design whereas offered resilience within a free-open research method (Patton, 1990). The questions of the semi-structured interviews were developed from the current literature and stretched with existence of the analytical incident method that was applied to help participants to mention previous occurrences and the importance they enclosed to it. Particularly, interviewees were requested to refer to the elements of reporting system in projects exemplified in transparency and accurateness, plainly determined purposes and goals, reporting design, scheduling and sharing and to show to which extent the quality of reporting is helping the stakeholders, financial management and other interested parties in achieving the project success in term of the project constraints. Meetings were documented and written down and normally required around 45 and 90 minutes. The team manager was interviewed twice with meetings of 60 minutes each.

Finding Analysis

Table 3

Summary of Themes and Aggregate Dimensions

	First conception	Second themes	Collective dimensions
Elements of effective reporting system in projects	Transparency and accurateness	<ul style="list-style-type: none"> Possibility to get brief and detailed information Rate of excessive information Degree of “by hand” amendments Comparative extent of differences Amount of inconsistencies 	Aggregation
	Plainly determined purposes and goals	<ul style="list-style-type: none"> Advantage for resolve making Advantage and easiness for comprehension Capability to meet legal requirements Degree of safety and data probity 	Integration
	Reporting design; sorts of reports and designs	<ul style="list-style-type: none"> Project dashboard Abridgement administration report Abridgement cost report Risk report Benchmark schedule and futuristic plans and information 	Broad scope
	Scheduling and sharing	<ul style="list-style-type: none"> Providing reports at the time required by management and stakeholders Sharing knowledge according to the user’s needs 	Timeliness
Elements of project success	Success criteria	<ul style="list-style-type: none"> Were success criteria seen? If yes, by what means? If no, why? Which criterion was not achieved? Why certain failures happen? Were the success criteria factual and achievable? What enhancements can be completed in the upcoming to the method of planning deliverables, perform projects or use project assets and people? 	Scope
	Budget	<ul style="list-style-type: none"> Project achieved within the budget 	Cost
	Delivery time	<ul style="list-style-type: none"> Project delivered on the time of delivery 	Time

Data Analysis

Data were translated into specific codes by a repetitive process, collaborating both foreseeable and coming forth themes and themes that were documented based on the rate at which comment happens or is frequent in

the given sample. Analyzing the data done by means of the matrix method recommended by Miles and Huberman (1994), with data diminishing, presenting, and conclusion representation defines configurations of relations and paths (Patton, 1990). The NVivo software package was utilized to arrest and simplify this investigation. A diagram of how this thematic coding method operated is delivered in Table 3.

Findings

Significant results associated to effective reporting system in UAE construction projects are assembled in four aspects of information embodied in broad scope, timeliness, aggregation, and integration. Whereas, project success is being tested in terms of project constraints: cost, time, and scope. The quality of reporting system in UAE construction projects allows owners, clienteles, and projects developers to have on time report about the development of project in an aggregate and meaningful layout, in addition to providing integrated information which in turn enable interested parties from enhancing the process of decision-making and consequently donates to project success. However, considering all success factors that contribute to project success, such as resources, technology, and people is not possible in one paper. Hence, the results of present study are limited by the effective reporting system as a factor of project success.

Elements of effective reporting system in projects. *Transparency and accurateness.* Interviewee's pointed to several characteristic of reports that affect the project success, such as the possibility to get brief and detailed information, rate of excessive information, degree of "by hand" amendments, comparative extent of differences, and amount of inconsistencies. Interviewee's assured that providing aggregative information in different reports contributes to avoiding duplication in costs and saving time which means contributes to project success. However, most of the interviewee's did not consider this association as a strong-important like because it is more related to the appropriate time of reporting.

Plainly determined purposes and goals. Interviewee's highlighted many sub-themes of reports that impact the project success, such as the advantage for making decisions, advantage and easiness for comprehension, capability to meet legal requirements, degree of safety and data probity. Interviewee's confirmed that reporting system that produces integrative information enhances the quality of decisions and donates to achieving the success criteria of the project and delivering projects meeting the expectations of different parties. However, many of the interviewee's considered this link relatively strong-important; again because of the important of timing of affording such integrative reports.

Reporting design; sorts of reports and designs. Interviewee's raised some characteristic of effective reporting system that produce reports that influence the project success exemplified in sorts of reports and designs; Project dashboard, abridgement administration report, abridgement cost report, risk report, benchmark schedule and futuristic plans and information. Interviewee's showed that the reporting system with abroad scope of information financial and non-financial, historical and future information plays an important role in making the right decision and hence delivers the project with the lowest cost and time within the expectations. However, the relationship between the abroad scope information and project success is not such a strong-important unless it is provided on the right time.

Scheduling and sharing. Most of the interviewee's assured that the timeliness or providing repots at the time required by management and stakeholders, sharing knowledge according to the user's needs is the key element of effective reporting system. Interviewee's guaranteed that even if the reporting system provided abroad scope, integrated, aggregated information; it will never help make the right decision and hence deliver

the project with the lowest cost and time within the expectations. Thus, timeliness is considered by many parties as the most important characteristic of effective reporting system that is positively related to project success.

Elements of project success. *Success criteria.* Interviewees have mentioned various success criteria that differ from project to another should be achieved to assure the accomplishment of project success; interviewees said that managers keep evaluating if the success criteria were achieved or not, and investigating how success criteria of project has been met, or why has not been met. Further, assessing the project success required exploring the criteria that have not been achieved and the reason behind particular failure. In addition, it is critical to evaluate whether or not the success criteria are factual and achievable, and what enhancements can be completed in the upcoming to the method of planning deliverables, performing projects, or using project assets and people.

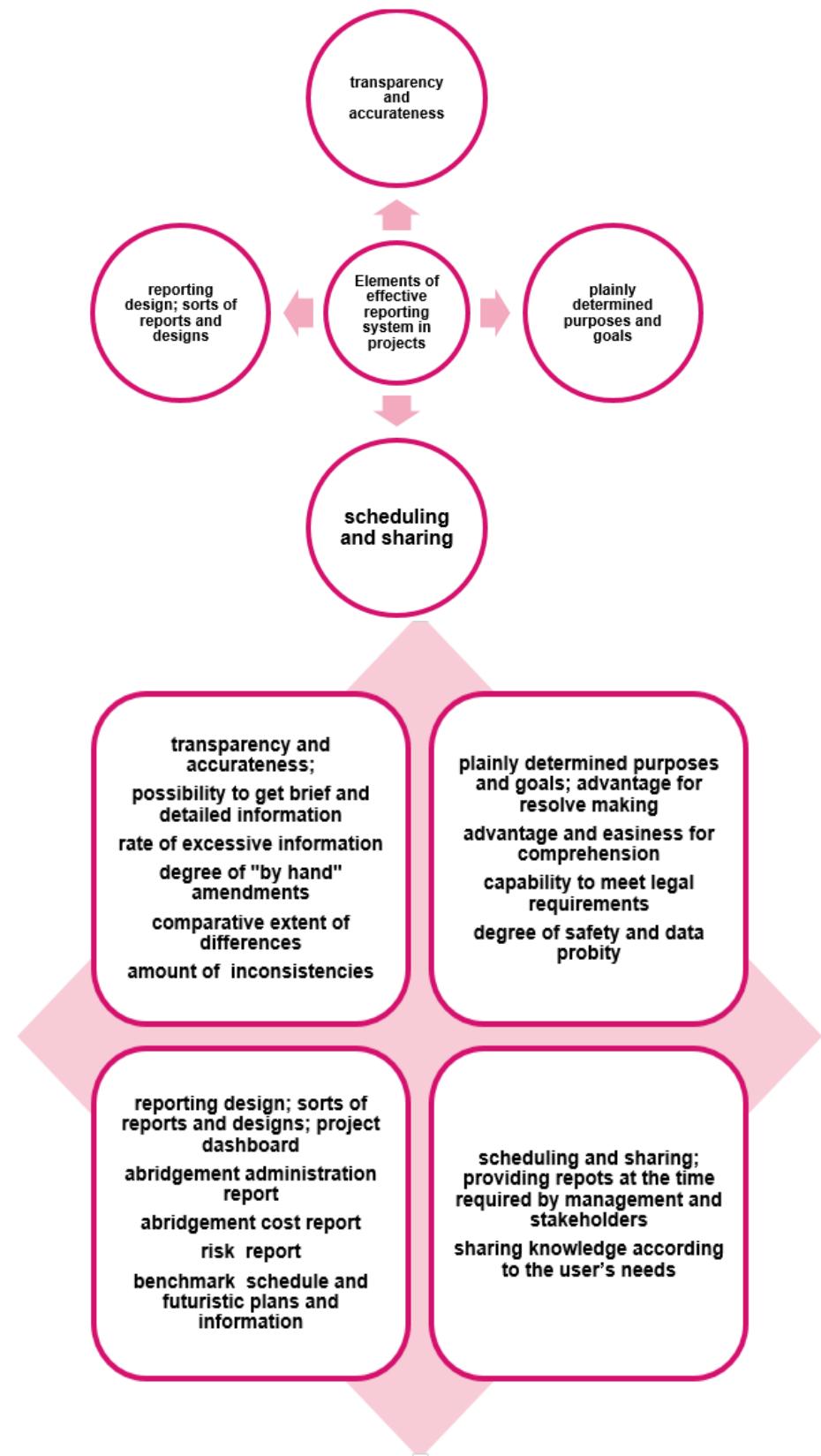
Budget. Achieving the project within the budget has been considered by the interviewees as the most important indicator of project success; as financial failure might lead to project fail. Moreover, interviewees said that having an effective reporting system that provides timely, aggregated information contributes to avoid cost wasting and achieve the project within the budget.

Delivery time. On time, delivery of the project is another aspect along with cost and scope that reflect the project success. Interviewees said “time is money”, thus the delivery time is a vital indicator that save the project from failure and late delivery penalty. Furthermore, interviewees said that effective reporting system that provides abroad scope, timely, and aggregated information plays an important role in avoiding duplication of tasks and hence shortening the time of delivery.

Discussion

Several themes appeared from the analysis as factors of effective reporting system exemplified in characteristics of its outputs (broad scope, timeliness, aggregation, and integration), and how these characteristics of information influence the project success in construction projects in UAE. The characteristics of information influence the project success, as effective reporting system provides abroad scope, timely, and aggregated information which contributes to avoid duplication of tasks, waste costs, and improved decision making process and hence shortening the time of delivery, lessen the cost and meeting the quality expectation toward the project and therefore achieving the project success, this is corresponding with the findings of the study of Trabelsi (2018) that showed the effect of early implementation of IFRS 15 on project success (Hussain et al., 2012, Saganuwan et al., 2015; Irawati & Ardiansyah, 2018).

Timeliness of financial reporting influences the most the project success, as abroad scope, integrated, and aggregated information will not improve the value of decision-made unless it have been submitted on the right time and consequently achieve the project with the minimum cost and time within the project scope. These results correspond with the study of Clatworthy and Peel (2016) which considered the timeliness as the most important feature of effective reporting system that is positively associated to project success. Figure 2 shows the characteristics of effective reporting system and project success.



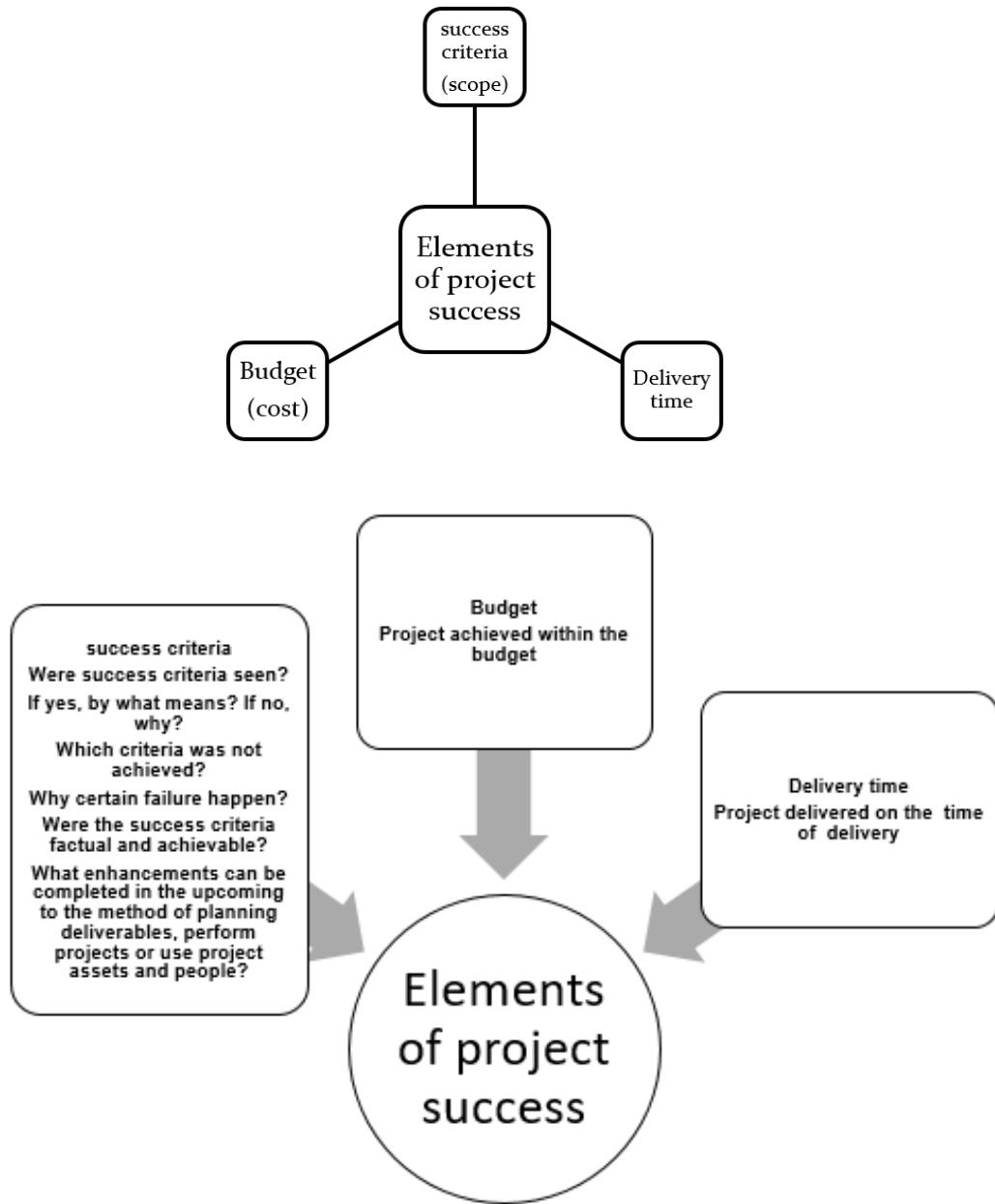


Figure 2. The characteristics of effective reporting system and project success.

Limitations and Future Research

This study examines how effective reporting system might increase the probability of project success in construction projects in UAE; however, there are some other factors contributing to project success in construction projects in UAE, such as resources, technology, human factors, and others; in addition, there are some contextual variables that should be taken into consideration in the phase of designing effective reporting system. Hence, this paper is not studying all project success factors rather it focuses on the characteristic of outputs of the reporting system generally and the financial reporting system particularly (broad scope, timeliness, aggregation, and integration).

Conclusions and Recommendations for Project Managers

Standard officials, customers, investors, stakeholders, sponsors, shareholders, CFOs, project developer, and consultants need to get real time information about the evolution of the project in an aggregated, integrated format, thus effective reporting system that provides such characteristic of information helps them to respond to market changes, engage the stockholders in the process of decision-making. Implementing effective reporting system with the characteristics highlighted in this paper will enable construction companies in UAE to cope with project matters, difficulties, obstacles, and risks, further, it encourages interested parties to evaluate their reporting system and report any present insufficiency.

Implications

This paper adds to both project management and accounting research by providing evidence from an exploration how effective reporting might increase the probability of the project success, with valuable implications for standard officials, customers, investors, stakeholders, sponsors, shareholders, CFOs, project developer, consultants, internal auditors, and accounting academics. Adopting effective reporting system with the characteristics of timeliness, integration, aggregation, and broad scope will probably empower construction companies in UAE, managing project problems, complications and risks, moreover, it encourages project managers to value their reporting system and adjust any inadequacy in attempt to increase the prospect of project success.

References

Ahern, T., Leavy, B., & Byrne, P. J. (2014). Complex project management as complex problem solving: A distributed knowledge management perspective. *International Journal of Project Management*, 32(8), 1371-1381. doi:10.1016/j.ijproman.2013.06.007

Amir, E., & Ziv, A. (1997). Recognition, disclosure, or delay: timing the adoption of SFAS No.106. *Journal of Accounting Research*, 35(1), 61-81.

Bartsch, V., Ebers, M., & Maurer, I. (2013). Learning in project-based organizations: The role of project teams' social capital for overcoming barriers to learning. *International Journal of Project Management*, 31(2), 239-251. doi:10.1016/j.ijproman.2012.06.009

Choe, J. M., & Lee, J. (1993). Factors affecting relationships between the contextual variables and the information characteristics of accounting information systems. *Information Processing and Management*, 29(4), 471-486. doi:10.1016/0306-4573(93)90043-D

Clatworthy, M. A., & Peel, M. J. (2016). The timeliness of UK private company financial reporting: regulatory and economic influences. *British Accounting Review*, 48(3), 297-315. doi:10.1016/j.bar.2016.05.001

De Vries, W. T., & Ester, H. (2015). Inter-organizational Transactions cost management with public key registers: Findings from the Netherlands. *International Journal of Public Administration in the Digital Age*, 2(2), 22-32.

Denzin, N., & Lincoln, Y. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin and Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research*. New York: Sage Publications Ltd.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of management review*, 32(4), 1246-1264.

Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32(3), 543-576. Retrieved from <https://doi.org/10.2307/256434>

Financial Accounting Standards Board (FASB). (2006). Conceptual framework for financial reporting: Objective of financial reporting and qualitative characteristics of decision-useful financial reporting information. *FASB*. Retrieved from https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1218220340119&acceptedDisclaimer=true

Gigler, F., Kanodia, C., Sapra, H., & Venugopalan, R. (2014). How frequent financial reporting can cause managerial short-termism: an analysis of the costs and benefits of increasing reporting frequency. *Journal of Accounting Research*, 52(2), 357-387. doi:10.1111/1475-679X.12043

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: strategies of qualitative research. *The Grounded Theory Review*. Retrieved from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Glaser_1967.pdf

Guba, E. G. (1981). Criterios de credibilidad en la investigación naturalista (Criteria for assessing the truthworthiness of naturalistic inquiries). *ERIC/ECTJ Annual*, 29(2), 75-91.

Hairston, S. A., & Brooks, M. R. (2019). Derivative accounting and financial reporting quality: a review of the literature. *Advances in Accounting*, 44(9), 81-94. doi:10.1016/j.adiac.2018.10.003

Hartmann, A., & Dorée, A. (2015). Learning between projects: More than sending messages in bottles. *International Journal of Project Management*, 33(2), 341-351. doi:10.1016/j.ijproman.2014.07.006

Ibarrondo-Dávila, M. P., López-Alonso, M., & Rubio-Gámez, M. C. (2015). Managerial accounting for safety management: The case of a Spanish construction company. *Safety Science*, 79, 116-125 doi:10.1016/j.ssci.2015.05.014

Irawati, A., & Ardiansyah, R. (2018). Effect of characteristics of management accounting information systems on managerial performance with decentralization as moderating variables. *Jurnal Akuntansi Dan Keuangan*, 9(1), 20.

Kim, T. H., Lee, J. N., Chun, J. U., & Benbasat, I. (2014). Understanding the effect of knowledge management strategies on knowledge management performance: A contingency perspective. *Information & management*, 51(4), 398-416.

Lin, H. F. (2013). Examining the factors influencing knowledge management system adoption and continuance intention. *Knowledge Management Research and Practice*, 11(4), 389-404. doi:10.1057/kmrp.2012.24

Lindner, F., & Wald, A. (2011). Success factors of knowledge management in temporary organizations. *International Journal of Project Management*, 29(7), 877-888. doi:10.1016/j.ijproman.2010.09.003

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: *An expanded sourcebook*. sage.

Nielsen, C., & Roslender, R. (2015). Enhancing financial reporting: the contribution of business models. *British Accounting Review*, 47(3), 262-274. doi:10.1016/j.bar.2015.04.003

Pa, N. C., Taheri, L., & Abdullah, R. (2012). A survey on approaches in knowledge audit in organizations. *Asian Transaction on Computers*, 2(5), 1-8.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.

Pee, L. G., & Kankanhalli, A. (2016). Interactions among factors influencing knowledge management in public-sector organizations: a resource-based view. *Government Information Quarterly*, 33(1), 188-199. doi:10.1016/j.giq.2015.06.002

Polyaninova, T. (2011). Knowledge management in a project environment: Organisational CT and project influences. *Vine*, 41(3). doi:10.21427/D7NK7M

Ramlee, N., Tammy, N. J., Raja Mohd Noor, R. N. H., AinunMusir, A., Abdul Karim, N., Chan, H. B. & Mohd Nasir, S. R. (2016). Critical success factors for construction project. *AIP Conference Proceedings*, 1774(1). Retrieved from <https://aip.scitation.org/doi/pdf/10.1063/1.4965067>

Rahman, A. A., & Shukor, N. S. A. (2011). Knowledge audit process-tales of two organizations. In *2011 International Conference on Research and Innovation in Information Systems* (pp. 1-5). IEEE.

Reich, B. H., Gemino, A., & Sauer, C. (2012). Knowledge management and project-based knowledge in it projects: a model and preliminary empirical results. *International Journal of Project Management*, 30(6), 663-674. doi:10.1016/j.ijproman.2011.12.003

Saganuan, M. U., Ismail, W. K. W., & Ahmad, U. N. U. (2015). Conceptual framework: AIS technostress and its effect on professionals' job outcomes. *Asian Social Science*, 11(5), 97.

Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting horizons*, 17, 97-110.

Stocken, P. C., & Verrecchia, R. E. (2004). Financial reporting system choice and disclosure management. *The Accounting Review*, 79(4), 1181-1203. doi:10.2308/accr2004.79.4.1181

Titman, S., & Trueman, B. (1986). Information quality and the valuation of new issues. *Journal of accounting and economics*, 8(2), 159-172.

Todorović, M. L. Petrović, D. Č., Mihić, M. M., Obradović, V. L., & Bushuyev, S. D. (2015). Project success analysis framework: a knowledge-based approach in project management. *International Journal of Project Management*, 33(4), 772-783. doi:10.1016/j.ijproman.2014.10.009

Too, E. G., & Weaver, P. (2014). The management of project management: a conceptual framework for project governance. *International Journal of Project Management*, 32(8), 1382-1394. doi:10.1016/j.ijproman.2013.07.006

Trabelsi, N. S. (2018). IFRS 15 early adoption and accounting information: Case of real estate companies in Dubai. *Academy of Accounting and Financial Studies Journal*, 22(1). Retrieved from <https://www.abacademies.org/articles/ifrs-15-early-adoption-and-accounting-information-case-of-real-estate-companies-in-dubai-6983.html>

Yeong, A., & Lim, T. T. (2010). Integrating knowledge management with project management for project success. *Journal of Project, Program & Portfolio Management*, 1(2), 8-19.

Wei, Y., & Miraglia, S. (2017). Organizational culture and knowledge transfer in project-based organizations: theoretical insights from a Chinese construction firm. *International Journal of Project Management*, 35(4), 571-585.

Weygandt, J., Kimmel, J. P. D. & Kieso, E. D. (2010). *Managerial accounting: tools for business decision making*. (5th ed.) Hoboken, NJ: John Wiley & Sons.