

The Impact of Project Management Assets and Organizational Culture on Employee Performance

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Abstract

The main purpose of this study is to examine the impact of project management assets (value and imitability) and organizational culture (individualism) on employee performance (quality). The data was collected from 539 employees of State owned enterprises (SoE) of Abu Dhabi and analysed using structural equation modelling (SEM) via SmartPLS 3.0. There were two main results: first, project management assets (value and imitability) have a positive impact on employee performance (quality); second, organizational culture (individualism) has a negative impact on employee performance (quality). Theoretical and practical implications are also provided.

Keywords: Project management assets; organizational culture; individualism; employee performance; UAE

1. Introduction

The concept of performance have received a great attention in management sciences studies in general and human resources studies in particular. This is due to the importance of performance at the individual and organizational level, and due to the interaction of the influences that affect performance and its diversity. Performance concept always links the aspects of activity with the goals that organizations seek to achieve through the tasks and duties of the employees within those organizations.

Numerous studies have addressed the criteria for measuring performance (Cameron & Whetten, 2013; J. Kagaari, Munene, & Mpeera Ntayi, 2010; J. R. K. Kagaari, 2011; Ameen & Ahmad, 2017; McAfee & Champagne, 1993; Xiaoming & Junchen, 2012). Sink & Tuttle (1989) developed one of the first research-based, comprehensive conceptual frameworks for identifying measures of organizational performance. Their framework included the criteria for measuring and evaluating organizational performance. These six criteria can be named as "performance dimensions which are Effectiveness, Efficiency, Quality, Timeliness, Finance and Workplace Environment.

In project management, three of these criteria (cost, time & quality) have been used for measuring project management success. Cost, time and quality (The Iron Triangle), over the last 50 years have become inextricably linked with measuring the success of project management (Atkinson, 1999). In establishing the criteria for success in project management, Atkinson (1999) separate the measurements into two main areas of (1) the delivery stage, and (2) the post-delivery stage. Oisen's (1971) success criteria for more than five decades have been the major criteria for measuring project management success. As observed, these dimensions of success measurement were as part of the very definition of the concept of project management by Oisen (1971). Others have built on this model to arrive at either a larger or more acute set of measurement or success criteria for some perspective of project management. These include Wright (1997) reduction in the number of criteria to time and budget, that when applying project management to the customer only these two matter. Of course, many others have agreed on all three dimensions and these include (de Wit, 1998; Morris & Hough, 1993; Turner, 1993; Ameen & Ahmad, 2013; Wateridge, 1998) among several others such (Comu, Unsal, & Taylor, 2011). These studies agree that cost, time and quality must all be utilized as a touchstone for positive outcome in what they refer to as the iron triangle. In present study, quality criteria found within the "iron triangle" has been adapted for measuring employee performance or determining project success (A. H. Aldholay, Abdullah, Ramayah, Isaac, et al., 2018; A. H. Aldholay, Isaac, Abdullah, Alrajawy, et al., 2018). Traditionally in their quest for project success, project managers are faced with crucial challenges to overcome such as, physical teams to virtually managed project teams, clearly defined project goals, high project transparency, adequate control methods, predefined project methods, communication efficiencies and sufficient risk management, (Pander & Wagner, 2005). Project management does not simply represent the performance of routine behaviour over time; there are nonetheless performed according a certain set of specifications and standards based in which the project would have meaning to stakeholders and surrounding parties including beneficiaries (Hamburger, 1989). Project management assets are becoming an integral part of every aspect and activity in today's organizations that are crucial to survive in a competitive environment, and thus has a profound impact on the performance of the employees (A. H. Aldholay, Isaac, Abdullah, & Ramayah, 2018; A. Aldholay, Isaac, Abdullah, Abdulsalam, et al., 2018). However, there is a lack of clear literature establishing the association between project management and employee performance, considering employee performance is different in many ways from organizational performance. project management is measured with the

help of four characteristics of project management assets acronym VRIO (VRIO is an acronym for Value, Rarity, Imitability, and Organisation) and adapted by (Jugdev & Mathur, 2006; Jugdev et al., 2007). Based on the literature of project management, a source of competitive advantage can be resources, or any assets provided being characterised as having economic value (V), rare (R), inimitable (I) and they have organizational support (O) to leverage these assets (Barney & Hesterly, 2014; Barney, 1991). In an integrated theoretical framework referred to as the VRIO framework, a resource that has organizational support contributes to competitive parity by being valuable, it contributes to temporary competitive advantage if it is both valuable and rare, and it provides sustained competitive advantage if it is valuable, rare and inimitable. Therefore, one of the present investigation objectives is to argue the gap between characteristics of project management assets (value and imitability) and employee performance (quality).

The context of this study is state-owned enterprises (SOEs) of Abu Dhabi Emirate. They are the key economic power-house both at the local and Federal government levels. These SOEs rely heavily on foreign workers from over 200 different national backgrounds. The multi-cultural environment in UAE workplace in general and state-owned enterprises (SOE) in particular has often faced challenges in the area of conflicts that arise out of cultural differences (Khoori, 2014). Khoori (2014) emphasize that immediate attempt must be made to improve awareness in this area towards increased overall performance. The main purpose of this study is to examine the impact of project management assets (value and imitability) and organizational culture (individualism) on employee performance (quality).

2. Literature Review

2.1 Employee Performance (EP)

Performance refers to the extent to which employees are able to fulfil the mission of the workplace (Cascio, 2006). As observed from the definition, performance may be observed at the individual level and at the organizational level. The concept has been defined and perceived differently from varied perspectives (Awadh & Saad, 2013). Despite these discrepancies, Awadh & Saad (2013) mentioned that focus on performance has been in two main areas of transactional efficiency and effectiveness towards organizational goals (Barney, 1991; Stannack, 1996). Performance measurement has taken a variety of perspectives over the years. Aside from attributing the “output variable” to varied perspectives, (J. Kagaari et al., 2010), (J. R. K. Kagaari, 2011) and others again measure performance in the form of management practices rather than performance as an output. It is also not new that performance has been managed from a functional perspective as conceptualized by McAfee & Champagne (1993). Ultimately, McAfee & Champagne (1993) proposed a framework for improving performance and productivity of the employee. Key themes such as the use of appraisal and performance measurement systems were discussed; these however, fall out of scope of the present study, even though McAfee & Champagne (1993) was highly informational and reviewed as part of the empirical studies of the present investigation. The concept of organizational performance has been clearly distinguished from efficiency, effectiveness, productivity and other success measurement even though some investigations have not paid attention to these differences (Cameron & Whetten, 2013). Others have clearly distinguished employee performance from organizational performance (Xiaoming & Junchen, 2012); a distinction important to the present investigation. Xiaoming & Junchen (2012) together with Wang (2012) measure performance from an organizational perspective using financial and non-financial indicators. Even from the perspective of the worker or employee, the financial and non-financial perspective may yet apply (Chenhall, 2005). Whereas time and quality may be considered as non-financial, cost may be considered as a financial measure to performance.

The present study established a generic measurement of employee performance resorted to the use of the quality criteria. As discussed earlier, three criteria for measuring employee performance or determining project success at the delivery stage include the time, cost and quality criteria found within the “iron triangle” (Atkinson, 1999). In context of the present investigation, this represents a good measure of employee performance. It was adapted by Comu et al. (2011), and further adopted for the present study, as this theory is particularly applicable to management of projects and measurement of performance at the employee level using quality criteria.

It must be noted that within an enterprise, or organization, performance entails the employee’s ability to achieve a particular target or mission that has been set for them. Many investigations have sought the association between a wide variety of factors and performance in order to arrive at how this may be improved towards the overall success of the organization. Even though many investigations have simply focused on antecedence of organizational and employee performance, Daft et al. (2010) argue that there is the need to pay attention to how organizational systems are defined instead. Paying attention to organizational strategies will help tune the organization in line with the goals and objectives.

2.2 Project Management Assets (PMA)

Project management is measured with the help of four characteristics of project management assets acronym VRIO and mentioned by (K Jugdev & Mathur, 2006; Ameen & Ahmad, 2014; Kam Jugdev et al., 2007). The inter-relationship between resources assets and asset characteristics are presented in their study. Before attention is offered to how characteristics of project management may translate into competitive advantage or may affect employee performance, there is the need to focus on how project assets characteristics are associated with project assets. There is no doubt project management remains a source of competitive advantage for any organization. The source of

competitiveness is established from two main sources in terms of resources; tangible and intangible assets (Barney, 2007). Whereas tangible assets enhance the value and organizational support dimensions, intangible assets can fit all four areas of the key characteristics of project management success. Essentially, tangible assets are not rare and can only enhance value and organizational support. It may be inferred from previous studies that the present study is interested in the capacity of project management asset characteristics to transform into specific competitive outcomes, building from tangible and intangible assets. The VRIO framework has been described as a strategic tool for analysing the internal environment of the firm (Hesterly & Barney, 2006); this framework can equally be used to manage the internal environment of the project and how tangible and intangible resources are challenged to meet project success criteria. Considering the one main area of project success criteria (quality), one key hypothesis is established pertaining to two of project management asset (value and imitability. According to Hesterly & Barney (2006), Newbert (2008) and Tuan & Takahashi (2010), value helps answer the question whether or not a resource enables the firm exploit an opportunity within the larger environment. Project management asset characteristics of being able to create value by taking advantage of external opportunities help create economic value at various levels of the organization. In addition, project management asset of inimitability is present when competitors who do not implement project management or do not implement it in the similar scope as the organization does it (Hesterly & Barney (2006) and Barney (1991)). Newbert (2008) and Tuan & Takahashi (2010) assertions are in this direction. Consequently, the following hypothesis is proposed:

H1: Value has a positive effect on employee performance.

H2: Imitability has a positive effect on employee performance.

2.3 Organizational Culture (CULT)

Applying the concept of culture to groups and professions, there is bound to be some level of conceptual and semantic confusion. This is because these social units themselves are not easy to define unequivocally. Schein (2004) bases his discussions of culture on the key characteristic of any group, the fact that the members of a group have a shared history. He goes on to assert that; any social unit whose members have a shared history are bound to have developed a culture. Moreover, the strength of this culture will be highly dependent on how long the group has been in existence, how stable the group's membership is, and how emotionally intensive the group's historical shared experiences were.

Culture in general has been thoroughly reviewed and elaborated on from various perspectives Awadh & Saad (2013). According to Aktaş et al.(2011) culture represents the norms, values, beliefs, and attitudes that affect or determine an organizational behavior. The concept has been defined by many others including Schwartz & Davis (1981) as "shared philosophy, ideology, value, assumption, beliefs, hope, behaviour and norms that bound the organization together" and more recently by Xenikou & Furnham (2012) in a more complex attempt. Particularly, Xenikou & Furnham (2012) definition is adopted for the present investigation.

A rational idea of culture is not difficult to come by; however, the difficulty lies in developing a theoretical definition for it. The vast availability of research on the subject (Ashkanasy, Broadfoot, & Falkus, 2000; Cameron & Quinn, 2011; Deal & Kennedy, 1982; Hofstede & Minkov, 2010; Martin, 2001; Trice & Beyer, 1993) is evidence of this difficulty. The vast availability of research on the subject also proves its relevance in the field of academics. According to Schein (2010), the confusion surrounding the definition of culture creates complications both in academics and practice as definitions are used differently and are inconsistent. There may be questions surrounding the relevance of culture while there are other concepts such as norms, values, behavior patterns, rituals, traditions among others. To answer this Schein (2010) mentions that culture incorporates other vital factors with regards to what groups share in common. Culture considers factors such as structural stability, depth, breadth, and patterning or integration. Others including Hofstede et al. (1990) here established a culture differences model where three levels of culture are captured within a continuum of culture and place of socialization. The culture of a group infers that the group is structurally stable to some extent. This is because, culture is not only shared by the members of a group, and it defines the group. This is in the sense that, the group develops a sense of identity, and once this has become a stabilizing force for the group, the group does not easily let go of it (Schein, 2010). Culture is not easily modified as the members of a group cherish the meaning and predictability it provides for the group. Therefore, the culture of a group remains unchanged even after the departure of certain important members of the group. This dimension is the third according to Hofstede (1980). Hofstede (2003) defined individualism as that aspect of culture within the society where ties between people living in the common society are loose and not strongly wove together. In an individualist culture, everyone is expected to cater for himself or herself. No one cares for the other or consider himself connected to the other person in any personal way. Individualism also extends to mean one's concern for his or her immediate family such as parents, spouse or children. On the other end, collectivism refers to the culture where inter-personal relationships are established and held as valuable. In the own words of Hofstede (2003), collectivism refer to the "society in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty". As opposed to collectivism, individualism

value personal privacy and independence. Such societies are more characterized by the tendency to seek individual pleasure, individual expression of interests and find personal time to perform personal activities. On the opposite end of this continuum, collectivists have the tendency to value reciprocity of favors, they have a sense of belongingness and have a high regard for tradition. Individualistic societies include areas such as the United States of America, Canada, Australia, and other such countries where democracy prevails and is shared by all members within the society. On the contrary, collectivist societies like Indonesia, Pakistan, Chile and such others find it rather hard to understand that democracy must be shared by all. In collectivist societies, pressure/shame is used as means to control members whilst individualist societies use internal pressure-guilt to control members. Consequently, the following hypothesis is proposed:

H3: Individualism has a positive effect on employee performance.

3. Research Method

For this study, the hypothesized variables and their relationships in the model have been derived from the available literature of the models and theories that have been prescribed in the literature mentioned above. The proposed model can be seen in Fig.1 below.

A 19-items questionnaire was developed for this study, and in line with existing literature in the project management assets field, a multi-item Likert scale was applied (Lee, Yoon, & Lee, 2009). The variables were measured using the 7-point Likert Scale, with 7 being 'Strongly Agree' and 1 being 'Strongly Disagree'. Validated instruments were adapted from related previous studies to measure the variables of this study. Data collection was conducted using a self-administered paper questionnaire which was delivered 'in-person' from December 2016 till February 2017 to employees. The employees were approached while in main facilities at Abu Dhabi Water and Electricity Authority (ADWEA), Dubai Electricity and Water Authority (DEWA), Sharjah Electricity and Water Authority (SEWA) and Federal Electricity and Water Authority (FEWA), they were given the questionnaire to be filled and left at the same place to be collected in the same day. A total of 900 questionnaires were distributed, with 560 sets returned of which 541 responses were useful for the analysis.

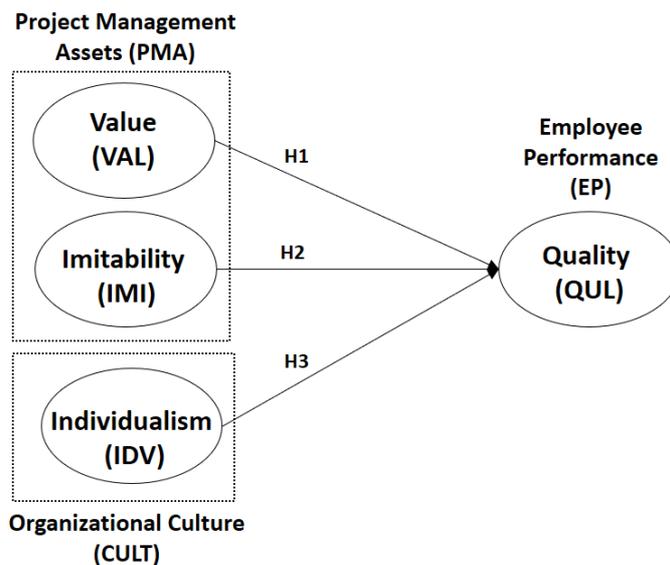


Figure 1: The proposed model

4. Data Analysis and Results

Partial Least Squares (PLS) Structural Equation Modeling-Variance Based (SEM-VB) was utilized to examine the research model in this research, by using the SmartPLS 3.0 software (Ringle, Wende, & Becker, 2015). Analyzing Data through the second-generation multivariate data analysis technique which is SEM offers a simultaneous analysis which leads to more accurate estimates (Isaac, Abdullah, Ramayah, & Mutahar, 2017; Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2017; Isaac, Abdullah, Ramayah, & Mutahar Ahmed, 2017).

4.1 Descriptive analysis

Table 1 presents the mean and standard deviation of each variable in the current study. The respondents were asked to indicate their opinion. Value recorded mean score of 4.56 out of 7.0, with a standard deviation of 1.49, indicating that the respondents agreed that project management has helped them be better, faster and cheaper in what

they do, increased their overall business performance, help them respond to industry threats and opportunities. Imitability recorded mean score of 4.70 out of 7.0, with a standard deviation of 1.49, indicating that the respondents agreed that many organizations in their industry do not practice project management the way they do, and how they practice project management makes the practice unique to their organization.

4.2 Measurement Model Assessment

The values of all the individual Cronbach's alpha coefficients in this study exceeded the suggested value of 0.7 (Kannana & Tan, 2005; Nunnally & Bernstein, 1994). Furthermore, for testing construct reliability, the values of all the composite reliability (CR) exceeded 0.7 (Gefen, Straub, & Boudreau, 2000). The values of all Average variance extracted (AVE) exceeded the recommended value of 0.50 (Hair, Black, Babin, & Anderson, 2010). Table 1 shows that all items in this study had factor loadings higher than the recommended value of 0.5 (Hair et al., 2010) except for items VAL4 and IDV5 which was eliminated from the scale due to low loadings.

Table 1: Mean, standard deviation, loading, cronbach's Alpha, CR and AVE

construct	Item	Loading (> 0.5)	M	SD	α (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Value (VAL)	VAL1	0.878	4.56	1.49	0.887	0.917	0.690
	VAL2	0.809					
	VAL3	0.809					
	VAL4	Deleted					
	VAL5	0.790					
	VAL6	0.865					
Imitability (IMI)	IMI1	0.785	4.70	1.49	0.770	0.853	0.593
	IMI2	0.766					
	IMI3	0.721					
	IMI4	0.804					
Individualism (IDV)	IDV1	0.785	4.764	1.099	0.736	0.834	0.558
	IDV2	0.711					
	IDV3	0.787					
	IDV4	0.699					
	IDV5	Deleted					
Quality (QUL)	QUL1	0.847	4.90	1.33	0.878	0.916	0.732
	QUL2	0.852					
	QUL3	0.880					
	QUL4	0.843					

Note: M=Mean; SD=Standard Deviation, α = Cronbach's alpha; CR = Composite Reliability, AVE = Average Variance Extracted
Key: VAL: value , IMI: imitability, IDV: Individualism, QUL: quality

Cross-loadings and Fornell-Larcker were used to assess the discriminant validity of the measurement model. In this study, the indicators' outer loadings on a construct exceeded all its cross-loadings with other constructs, and hence, the cross loading criterion had satisfied the requirements (refer to Table 2).

Table 2: Results of discriminant validity by the cross loading

	VAL	IMI	IDV	QUL
VAL1	0.878	0.583	0.594	0.526
VAL2	0.809	0.626	0.492	0.556
VAL3	0.809	0.640	0.557	0.622
VAL5	0.790	0.666	0.406	0.559
VAL6	0.865	0.600	0.611	0.509
IMI1	0.619	0.785	0.499	0.561
IMI2	0.559	0.766	0.563	0.582
IMI3	0.466	0.721	0.584	0.534
IMI4	0.666	0.804	0.433	0.618
IDV1	0.595	0.450	0.785	0.309
IDV2	0.501	0.515	0.711	0.347
IDV3	0.500	0.519	0.787	0.434
IDV4	0.330	0.510	0.699	0.364
QUL1	0.619	0.626	0.387	0.847
QUL2	0.541	0.654	0.489	0.852
QUL3	0.554	0.661	0.470	0.880
QUL4	0.588	0.615	0.346	0.843

Key: VAL: value , IMI: imitability, IDV: Individualism, QUL: quality

Table 3 displays the results for discriminant validity by using the Fornell-Larcker criterion. It was found that the square root of the AVEs on the diagonals (shown in bold) are greater than the correlations between constructs (corresponding row and column values), this indicates a good discriminant validity (Fornell & Larcker, 1981; Chin, 1998).

Table 3: Results of discriminant validity by Fornell-Larcker criterion

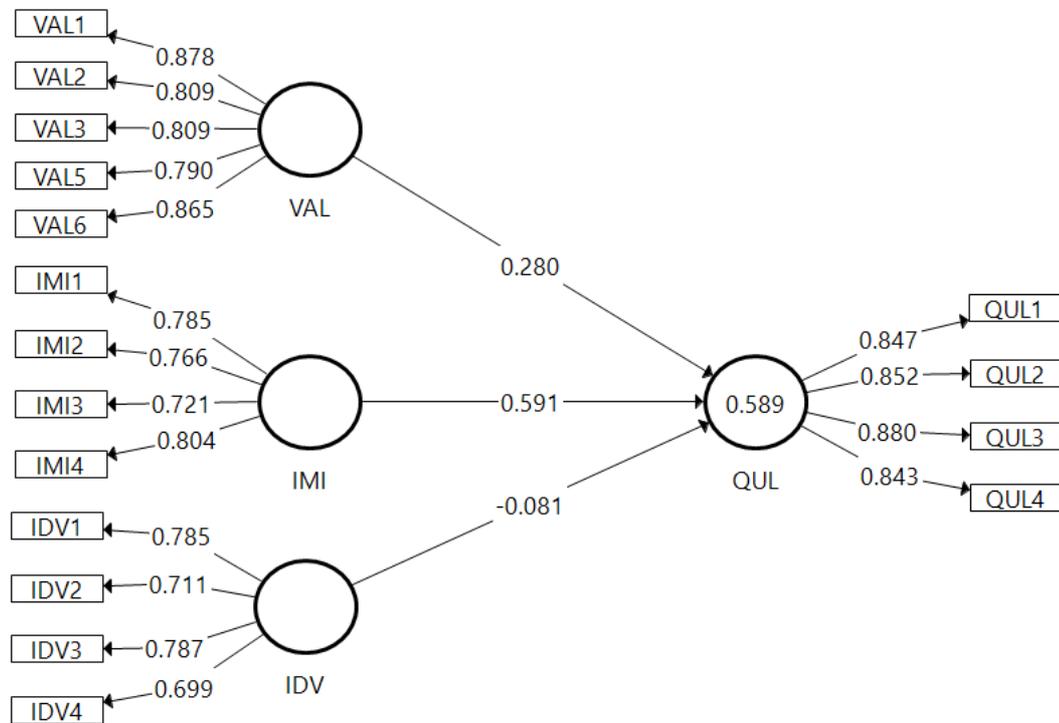
Factors		1	2	3	4
1	IDV	0.747			
2	IMI	0.671	0.770		
3	QUL	0.494	0.747	0.856	
4	VAL	0.640	0.754	0.673	0.831

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.

Key: VAL: value , IMI: imitability, IDV: Individualism, QUL: quality

4.3 Structural Model Assessment

Figure 2 and Table 4 depict the structural model assessment. Value and imitability significantly predict employee performance (quality). Hence, H1 and H2 are accepted with ($\beta = 0.280, t= 5.599, p <0.001$) and ($\beta = 0.591, t= 12.877, p <0.001$) respectively. Organizational culture (individualism) has a negative impact on employee performance (quality) with ($\beta = -0.081, t= 1.924, p <0.05$). Fifty-nine percent of the variance in employee performance (quality) is explained by value, imitability, and individualism.



Key: VAL: value , IMI: imitability, IDV: Individualism, QUL: quality

Figure 2: PLS algorithm results

Table 4: Structural path analysis result

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value
H1	VAL→QUL	0.280	0.050	5.599	0.000
H2	IMI→ QUL	0.591	0.046	12.877	0.000
H3	IDV→ QUL	-0.081	0.042	1.924	0.027

Key: VAL: value , IMI: imitability, IDV: Individualism, QUL: quality

5. Discussion

In this paper we propose a conceptual model (Figure 1) based on the literature to link the characteristics of project management assets in terms of value & imitability and organizational Culture in terms of individualism, as independent variables, to employee performance, as dependent variables which in turn led to enhance understanding

of the role played by project management assets and culture in terms of employee performance in state-owned enterprises SoE in the United Arab Emirates.

The study found that value positively affect quality. This is explained by the fact that the more project management asset is enhancing the overall performance and profitability, The more the employees are able to work according to specifications of job description and to execute activities according to design with an error-free performance and have stakeholders best interests at heart. These results are in line with previous studies in the project management assets field (Aubry, Hobbs, & Thuillier, 2007; Ameen & Ahmad, 2012; Patanakul, 2010). Likewise, imitability was found to positively affect quality. This is explained by the fact that the more project management asset is unique and hard to imitate and is specific to this business, The more the employees are able to work according to specifications of job description and to execute activities according to design with an error-free performance and have stakeholders best interests at heart. These results are in line with previous studies in the project management assets field (Aghazadeh, 2015; Karpen, Bove, Lukas, & Zyphur, 2015). Finally, individualism culture has negative effect on quality. The results show that the more the employees are able to create their own culture and not taking their boss decisions for granted, care about what others think about them, feel motivated by the friendly atmosphere, think that it is improper to express feelings in public and clearly know what is good and what is bad. Thus, there is no negative effect of individualism culture on the performance in terms of quality within State-owned Enterprises, SoE in the United Arab Emirates. These results are in line with previous studies about organizational culture (Arditi, Nayak, & Damci, 2017; Ching, Hoffman, Cao, & Schniederjans, 2014; Dubey et al., 2017; Gopalakrishnan & Zhang, 2017; Iljins, Skvarciany, & Dloh, 2015). Future research should be conducted to investigate the relationship between variables by conducting cross-cultural studies as recommended by previous studies (Isaac, Abdullah, Ramayah, & Mutahar, 2017a; Isaac, Abdullah, Ramayah, & Mutahar, 2017b; Isaac, Masoud, Samad, & Abdullah, 2016).

6. Conclusion

Organizations should increase spending on research and development in order to increase the organizational effectiveness (Osama Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2018; Osama Isaac, Abdullah, Ramayah, & Mutahar, 2018; Alrajawy, Daud, Isaac, & Mutahar, 2017). Although the United Arab Emirates government institutions and its state-owned enterprises are ahead of regional counterparts in terms of performance (Global Innovation Index, 2016), Its employee performance levels remain very low. They are “not actively performed their work, meaning the overwhelming majority are not committed to their performance and are less likely to become more productive. therefor these SOEs enterprises are striving to enhance its employee performance especially in terms of quality . In addition, the multi-cultural environment in UAE workplace in general and state-owned enterprises (SOE) in particular has often faced challenges in the area of conflicts that arise out of cultural differences (Khoori, 2014). Khoori (2014) emphasize that immediate attempt must be made to improve awareness in this area towards increased overall performance. The findings of this study could be considered as one of the initiatives to serve on that direction. The main purpose of this study is to examine the impact of project management assets (value and imitability) and organizational culture (individualism) on employee performance (quality) within state-owned enterprises in the United Arab Emirates. Despite various constraints to the study, the results have been encouraging, as it has managed to throw some lights on a new perspective. This study proposed a model, which includes project management characteristics namely, value and imitability, and organizational culture (individualism) as independent variables, and employee performance in term of quality as the dependent variable. The results revealed that the four independent variables significantly explain 59 % of quality. This implication of this research can be seen as an attempt to contribute to the understanding of the characteristics of project management assets that lead to a firm’s competitive advantage and thus enhanced employees performance (Mathur, Jugdev, & Shing Fung, 2013). This research offers empirical support to the theoretical relevance of valuable and imitable of resources that permit efficient and effective quality creation. (Karpen et al., 2015). In addition, this study could provide significant benefits to managerial boards and policy makers at these enterprises on how to utilize its strategic assets in a way that enhance the performance of its employees. In addition to the limited scope of the study and limitations with regard to sample size, response rate, and self-report bias, it is believed that this study has a valid and reliable instrument to test relationships between the factors and examine hypotheses that the characteristics of project management assets (value and imitability) and organizational culture (individualism) will predict employee performance outcome specifically quality. Moreover, cross-sectional was used as the research design of this current research whereby all the variables incorporated in the hypothesized model were evaluated at a single point in time. According to De Wulf (1999), no definite conclusions can be drawn from such an approach, specifically regarding the causality of relationships among variables. As for future work, the effect of organizational culture (individualism) has negatively affect employee performance (quality); future research could opt to further examine the mentioned effect. Also, due to the diversity nature of UAE’s workplace, they may help in developing a unique culture within an organization. Therefore, future studies may examine the intervening effect of organizational culture between organizational excellence and performance.

Appendix Appendix A

Instrument for variables

Variable	Measure	Source
Value (VAL)	VAL1: Project management has helped us be better, faster and cheaper in what we do. VAL2: Project management has increased our profitability. VAL3: Project management has increased our overall business performance. VAL4: Managing things in the form of projects at my organization help us respond to industry threats and opportunities. VAL5: We used project management to provide better products and services. VAL6: Project management is a source of Competitive Advantage to my company.	(Kam Jugdev & Mathur, 2006)
Imitability (IMI)	IMI1: Many organizations in our industry do not practice project management the way we do. IMI2: How we practice project management makes the practice unique to my organization. IMI3: Even if 1/3 of those people that practice project management in my company left tomorrow, project management will still not change. IMI4: Relative to our competitors, project management in my company is unique.	
Individualism (IDV)	IDV1: People have strong loyalty to the group(s) they belong to IDV2: The conventions/rules of the group I belong to influence my behaviour IDV3: I am concerned with what the others think about me IDV4: People are promoted/recognized based on their loyalty and age IDV5: It is immoral for a boss not to offer a job to a relative	(Hofstede et al., 2010)
Quality (QUL)	QUL1: Employees within this organization are able to work according to specifications of job description. Employees are able to execute activities according to design. Employee performance are error-free. QUL3: Employees have stakeholders' best interests at heart.	(Comu et al., 2011; J. Kagaari et al., 2010; Zhu & Huang, 2007)

References

- Aghazadeh, H. (2015). Strategic Marketing Management: Achieving Superior Business Performance through Intelligent Marketing Strategy. *Procedia - Social and Behavioral Sciences*, 207(21), 125–134. <http://doi.org/10.1016/j.sbspro.2015.10.161>
- Aktaş, E., Çiçek, I., & Kiyak, M. (2011). The effect of organizational culture on organizational efficiency: The moderating role of organizational environment and CEO values. *Procedia-Social and Behavioral Sciences*, 24, 1560–1573.
- Aldholay, A. H., Abdullah, Z., Ramayah, T., Isaac, O., & Mutahar, A. M. (2018). Online learning usage and performance among students within public universities in Yemen. *Int. J. Services and Standards*, 12(2), 163–179.
- Aldholay, A. H., Isaac, O., Abdullah, Z., Alrajawy, I., & Nusari, M. (2018). THE ROLE OF COMPATIBILITY AS A MODERATING VARIABLE IN THE INFORMATION SYSTEM SUCCESS MODEL: THE CONTEXT OF ONLINE LEARNING USAGE. *International Journal of Management and Human Science (IJMHS)*, 2(1), 9–15.
- Aldholay, A. H., Isaac, O., Abdullah, Z., & Ramayah, T. (2018). The role of transformational leadership as a mediating variable in DeLone and McLean information system success model: The context of online learning usage in Yemen. *Telematics and Informatics*, 35(5), 1421–1437. <https://doi.org/10.1016/j.tele.2018.03.012>
- Aldholay, A., Isaac, O., Abdullah, Z., Abdulsalam, R., & Al-Shibami, A. H. (2018). An extension of Delone and McLean IS success model with self-efficacy. *International Journal of Information and Learning Technology, IJILT-11-2017-0116*. <https://doi.org/10.1108/IJILT-11-2017-0116>
- Alrajawy, I., Daud, N. M., Isaac, O., & Mutahar, A. M. (2017). Examine Factors Influencing the Intention to use Mobile Learning in Yemen Public Universities. *Asian Journal of Information Technology*, 16(2), 287–297. <http://doi.org/10.3923/ajit.2017.287.297>
- Ameen & Ahmad, (2017). Information Systems Strategies to Reduce Financial Corruption. In *Springer Proceedings in Business and Economics* (Vol. 1, pp. 731–740). http://doi.org/10.1007/978-3-319-43434-6_65
- Ameen, A. A., & Ahmad, K. (2012). Towards Harnessing Financial Information Systems in Reducing Corruption : A Review of Strategies. *Australian Journal of Basic and Applied Sciences*, 6(8), 500–509.
- Ameen, A. A., & Ahmad, K. (2014). A Systematic Strategy for Harnessing Financial Information Systems in Fighting Corruption Electronically. *Knowledge Management International Conference (KMICe) 2014*, 12 – 15 August 2014, Malaysia , 12–15. Retrieved from <http://www.kmice.cms.net.my/>

- Ameen, A. A., & Kamsuriah Ahmad. (2013). A Conceptual Framework of Financial Information Systems to Reduce Corruption. *Journal of Theoretical and Applied Information Technology*, 3(2), 59–72.
- Arditi, D., Nayak, S., & Damci, A. (2017). ScienceDirect Effect of organizational culture on delay in construction. *JPMA*, 35(2), 136–147. <http://doi.org/10.1016/j.ijproman.2016.10.018>
- Ashkanasy, N. M., Broadfoot, L. E., & Falkus, S. A. (2000). Questionnaire measures of organizational culture. In *Handbook of Organizational Culture and Climate*. Sage Publications.
- Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management*, 17(6), 337–342. [http://doi.org/10.1016/S0263-7863\(98\)00069-6](http://doi.org/10.1016/S0263-7863(98)00069-6)
- Aubry, M., Hobbs, B., & Thuillier, D. (2007). PROJECT A new framework for understanding organisational project management through the PMO. *International Journal of Project Management*, 25, 328–336. <http://doi.org/10.1016/j.ijproman.2007.01.004>
- Awadh, A. M., & Saad, A. M. (2013). Impact of Organizational Culture on Employee Performance. *International Review of Management and Business Research*, 2(1), 168–175. <http://doi.org/10.21276/sb.2017.3.2.4>
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <http://doi.org/10.1177/014920639101700108>
- Barney, J. B. (2007). *Gaining and sustaining competitive advantage*. Prentice hall.
- Barney, J. B., & Hesterly, W. S. (2014). *Strategic Management and Competitive Advantage: Concepts and Cases* (5th editio). New Jersey: Pearson.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- Cameron, K. S., & Whetten, D. A. (2013). *Organizational effectiveness: A comparison of multiple models*. Academic Press.
- Cascio, W. F. (2006). (2006). *Managing Human Resources: Productivity, Quality of Life, Profits*. New York: McGraw-Hill Irwin.
- Chenhall, R. H. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: an exploratory study. *Accounting, Organizations and Society*, 30(5), 395–422.
- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling*. In G. A. Marcoulides (Ed.), *Modern methods for business research (pp. 295-358)*. New Jersey: Lawrence Erlbaum Associates. Mahwah, NJ: Lawrence Erlbaum.
- Ching, V., Hoffman, J. J., Cao, Q., & Schniederjans, M. J. (2014). The effects of organizational culture and environmental pressures on IT project performance : A moderation perspective. *International Journal of Project Management*, 32(7), 1170–1181. <http://doi.org/10.1016/j.ijproman.2013.12.003>
- Comu, S., Unsal, H. I., & Taylor, J. E. (2011). Dual Impact of Cultural and Linguistic Diversity on Project Network Performance. *Journal of Management in Engineering*, 27(3), 179–187. [http://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000052](http://doi.org/10.1061/(ASCE)ME.1943-5479.0000052)
- Daft, R. L., Murphy, J., & Willmott, H. (2010). *Organization theory and design*. Cengage learning EMEA.
- de Wit, A. (1998). Measurement of project management success. *International Journal of Project Management*, 6(3), 164–170.
- De Wulf, K. (1999). *The Role of Seller in Enhancing Buyer-Seller Relationship*. University of Central Florida.
- Deal, T. E., & Kennedy, A. A. (1982). Corporate cultures: The rites and rituals of organizational life. *Reading/T. Deal, A. Kennedy.–Mass: Addison-Wesley*, 2, 98–103.
- Dubey, R., Gunasekaran, A., Childe, S. J., Papadopoulos, T., Hazen, B., Giannakis, M., & Roubaud, D. (2017). International Journal of Production Economics Examining the effect of external pressures and organizational culture on shaping performance measurement systems (PMS) for sustainability benchmarking : Some empirical fi ndings. *International Journal of Production Economics*, 193(June), 63–76. <http://doi.org/10.1016/j.ijpe.2017.06.029>

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(1), 1–79.
- Global Innovation Index. (2016). *Government institutions effectiveness: Yemen versus Arab countries: Rank among 143 countries*, Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO).
- Gopalakrishnan, S., & Zhang, H. (2017). Client dependence and vendor innovation: The moderating role of organizational culture ☆. *Industrial Marketing Management*, 66(November 2016), 80–89. <http://doi.org/10.1016/j.indmarman.2017.07.012>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). New York: Pearson.
- Hamburger, D. H. (1989). The Project Manager-Risk Taker and Contingency Planner. *AACE International Transactions*, H-1.
- Hesterly, W., & Barney, J. B. (2006). *Strategic Management and Competitive Advantage Concepts and Cases, Global Edition*. Pearson Education Limited.
- Hofstede, G. (2003). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.
- Hofstede, G., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind*, Third Edition.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 286–316.
- Hofsteds, G. (1980). *Culture's consequences*. Beverly Hills, Sage Publications.
- Ilijns, J., Skvarciany, V., & Dloh, O. (2015). Impact of Organizational Culture on Organizational Climate during the Process of Change, 213, 944–950. <http://doi.org/10.1016/j.sbspro.2015.11.509>
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2017). Internet usage, user satisfaction, task-technology fit, and performance impact among public sector employees in Yemen. *International Journal of Information and Learning Technology*, 34(3), 210–241. <http://doi.org/10.1108/IJILT-11-2016-0051>
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2017a). Internet Usage and Net Benefit among Employees Within Government Institutions in Yemen: An Extension of Delone and Mclean Information Systems Success Model (DMISM) with Task-Technology Fit. *International Journal of Soft Computing*, 12(3), 178–198. <http://doi.org/10.3923/ijscmp.2017.178.198>
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2017b). Internet Usage within Government Institutions in Yemen: An Extended Technology Acceptance Model (TAM) with Internet Self-Efficacy and Performance Impact. *Science International*, 29(4), 737–747.
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2018). Factors determining user satisfaction of internet usage among public sector employees in Yemen. *International Journal of Technological Learning, Innovation and Development*, 10(1), 37–68. <http://doi.org/10.1504/IJTLID.2018.10012960>
- Isaac, O., Abdullah, Z., Ramayah, T., Mutahar, A. M., & Alrajawy, I. (2017). Towards a Better Understanding of Internet Technology Usage by Yemeni Employees in the Public Sector: An Extension of the Task-Technology Fit (TTF) Model. *Research Journal of Applied Sciences*, 12(2), 205–223. <http://doi.org/10.3923/rjasci.2017.205.223>
- Isaac, O., Abdullah, Z., Ramayah, T., Mutahar, A. M., & Alrajawy, I. (2018). Integrating User Satisfaction and Performance Impact with Technology Acceptance Model (TAM) to Examine the Internet Usage Within Organizations in Yemen. *Asian Journal of Information Technology*, 17(1), 60–78. <http://doi.org/10.3923/ajit.2018.60.78>
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar Ahmed, M. (2017). Examining the Relationship Between Overall Quality, User Satisfaction and Internet Usage: An Integrated Individual, Technological, Organizational and Social Perspective. *Asian Journal of Information Technology*, 16(1), 100–124. <http://doi.org/10.3923/ajit.2017.100.124>

- Isaac, O., Masoud, Y., Samad, S., & Abdullah, Z. (2016). The mediating effect of strategic implementation between strategy formulation and organizational performance within government institutions in Yemen. *Research Journal of Applied Sciences*, 11(10), 1002–1013. <http://doi.org/10.3923/rjasci.2016.1002.1013>
- Jugdev, K., Gita, M., & Fung, T. S. (2007). Project management assets and their relationship with the project management capability of the firm. *International Journal of Project Management*, 25(6), 560–568. <http://doi.org/10.1016/j.ijproman.2007.01.009>
- Jugdev, K., & Mathur, G. (2006). Project management elements as strategic assets : preliminary findings. *Management Research News*, 29(10), 604–617. <http://doi.org/10.1108/01409170610712317>
- Jugdev, K., & Mathur, G. (2006). Project management elements as strategic assets: preliminary findings. *Management Research News*, 29(10), 604–617.
- Kagaari, J., Munene, J. C., & Mpeera Ntayi, J. (2010). Performance management practices, employee attitudes and managed performance. *International Journal of Educational Management*, 24(6), 507–530. <http://doi.org/10.1108/09513541011067683>
- Kagaari, J. R. K. (2011). Performance management practices and managed performance: the moderating influence of organisational culture and climate in public universities in Uganda. *Measuring Business Excellence*, 15(4), 36–49.
- Kannana, V. R., & Tan, K. C. (2005). Just in time, total quality management, and supply chain management: understanding their linkages and impact on business performance. *Omega: The International Journal of Management Science*, 33(2), 153–162.
- Karpen, I. O., Bove, L. L., Lukas, B. A., & Zyphur, M. J. (2015). Service-dominant orientation: Measurement and impact on performance outcomes. *Journal of Retailing*, 91(1), 89–108. <http://doi.org/10.1016/j.jretai.2014.10.002>
- Khoori, A. A. (2014). Awareness required to improve multicultural environment in UAE workplac.
- Lee, B. C., Yoon, J. O., & Lee, I. (2009). Learners' acceptance of e-learning in South Korea: Theories and results. *Computers and Education*, 53(4), 1320–1329. <http://doi.org/10.1016/j.compedu.2009.06.014>
- Martin, J. (2001). *Organizational Culture: Mapping the Terrain*. SAGE Publications. Retrieved from <https://books.google.com.my/books?id=fIcXBAAQBAJ>
- Mathur, G., Jugdev, K., & Shing Fung, T. (2013). Project management assets and project management performance outcomes. *Management Research Review*, 36(2), 112–135. <http://doi.org/10.1108/01409171311292234>
- McAfee, R. B., & Champagne, P. J. (1993). Performance management: A strategy for improving employee performance and productivity. *Journal of Managerial Psychology*, 8(5), 24–32.
- Morris, P. W. G., & Hough, G. H. (1993). *The Anatomy of Major Projects: A Study of the Reality of Project Management*. Wiley.
- Newbert, S. L. (2008). Value, rareness, competitive advantage, and performance: a conceptual-level empirical investigation of the resource-based view of the firm. *Strategic Management Journal*, 29(7), 745–768. <http://doi.org/10.1002/smj.686>
- Oisen, R. P. (1971). Can project management be defined? *Project Management Quarterly*, 2(1), 12–14.
- Pander, S., & Wagner, R. (2005). *Unternehmensübergreifende Zusammenarbeit in der Automobilentwicklung: durch erfahrungsgelitete Kooperation die Grenzen der Planbarkeit überwinden*. Hampp München.
- Patanakul, P. (2010). *An Empirical Study on the use of Project Management Tools and Techniques across Project Life-Cycle and their Impact on Project Success*. *Journal of General Management* (Vol. 35). <http://doi.org/10.1177/030630701003500304>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). *SmartPLS 3*. Bonningstedt: SmartPLS.
- Schein, E. H. (2010). *Organizational Culture and Leadership*. John Wiley & Sons. Retrieved from <https://books.google.com.my/books?id=DIGhIT34jCUC>
- Sink, D. S., & Tuttle, T. C. (1989). *Planning and Measurement in Your Organization of the Future*. Industrial Engineering and Management Press. Retrieved from <https://books.google.com.my/books?id=IXqAQgAACAAJ>

- Stannack, P. (1996). Perspectives on employee performance. *Management Research News*, 19(4/5), 38–40.
- Trice, H. M., & Beyer, J. M. (1993). *The Cultures of Work Organizations*. Prentice Hall. Retrieved from <https://books.google.com.my/books?id=oX27AAAAIAAJ>
- Tuan, N., & Takahashi, Y. (2010). *Organisational Capabilities, Competitive Advantage And Performance In Supporting Industries In Vietnam*. *Asian Academy of Management Journal* (Vol. 15).
- Turner, J. R. (1993). *Handbook of Project-Based Work*. London: McGraw-Hill.
- Wang, G.-L. (2012). A Study of How the Organizational Culture of International Tourist Hotels Affects Organizational Performance: Using Intellectual Capital as the Mediating Variable. *Journal of Global Business Management*, 8(1), 189.
- Wateridge, J. (1998). How can IS/IT projects be measured for success? *International Journal of Project Management*, 16(1), 59–63. [http://doi.org/https://doi.org/10.1016/S0263-7863\(97\)00022-7](http://doi.org/https://doi.org/10.1016/S0263-7863(97)00022-7)
- Wright, J. N. (1997). Time and budget: the twin imperatives of a project sponsor. *International Journal of Project Management*, 15(3), 181–186. [http://doi.org/https://doi.org/10.1016/S0263-7863\(96\)00059-2](http://doi.org/https://doi.org/10.1016/S0263-7863(96)00059-2)
- Xenikou, A., & Furnham, A. (2012). *Group Dynamics and Organizational Culture: Effective Work Groups and Organizations*. Palgrave Macmillan. Retrieved from <https://books.google.com.my/books?id=OSQdBQAAQBAJ>
- Xiaoming, C., & Junchen, H. (2012). A literature review on organization culture and corporate performance. *International Journal of Business Administration*, 3(2), 28.
- Zhu, Z., & Huang, H. (2007). The Cultural Integration in the Process of Cross-border Mergers and Acquisitions. *International Management Review*, 3(2).

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