

Strategy Control effect on Project Success

Juma Hassan Alzaabi^{1*} Hassan Saleh Al-Dhaafri²
1.Management and Science University, Malaysia
2.University of Dubai, Dubai, UAE

Abstract

Purpose: This study was done to examine the effect of Project Management (PM) and Strategy Control (SC) on Project Success (PS). Moreover, the paper established an explanation of how the project success can be enhanced by implementing strategy control and project management. **Design/methodology/approach:** a survey questionnaire design was developed to examine the model of the research. 157 respondents were collected from Sharjah Construction Companies and analyzed with SmartPLS and SPSS. **Findings:** Based on statistical analysis, results reported positive and significant effect of Strategy control and Project management on Project success was confirmed. **Practical implications:** The study introduces a framework to align project management with business strategy. It will also help stakeholder, managers and other decision makers to have a comprehensive overview when implementing Strategy. **Originality/value:** This study is considered as one of the few empirical studies that examine the collective effect of Strategy Control and Project Management on Project Success.

Keywords: Strategy Control (SC), Project Management (PM), Project Success (PS).

1. Introduction

The high competitive existence in the markets forces the Companies to enhance Strategy Control and increase their performance in order to sustain their business and remain competitive (Al-Dhaafri & Al-Swidi, 2014). To assist the strategic success, companies have to adopted some modern approaches and philosophies like Strategy Control and BSC. Strategy Control (SC) as a management philosophy can be one of those factors that can help PM system to achieve the firm aimed targets. Moreover, it is an argument that SC is a pre-requisite practice to win in the market (Kaplan & Norton, 2001; Niven, 2008; Porter, 1996). Project success as a desired outcome for any strategy and practice can be also considered as a practice that can help Project management to control their scope and proposals in an excellent way to achieve the highest success level. Although, most of practices in SC are moving in way, but there are still lacking of the significance of employee role in developing strategic project performance control for the sake of accomplishing business success (Srivannaboon & Milosevic, 2006). This study examined the relationship between SC, PM and PS. Due to the findings in the previous literature of the relationship between the used variables, this study is an attempt to investigate the effect of SC and PM as independent variables that can enhance Project success through implementing quantitative research based on questionnaire survey.

2. Related Literatures

In the literature of Strategy and Project management studies, there have been many researches that addressed Project Success. This reflects the importance of project success to have sustainable growth in a very high competitive environment. Therefore, project success is considered as a main strategic goal for the construction companies (Din, Abd-Hamid, & Bryde, 2011). Moreover, project management researchers have devoted a very high effort to align projects with the business strategy and achieve strategic success (Srivannaboon, et al., 2006; Bryde, 2003).

2.1. Business Strategy

Strategy (*Stratos*) as a word was derived from Greek that was used to name the person who leads the army (Bruce & Langdon, 2000; Gartner, 1999; Matloff, 1996). However, strategy is widely used these days with very huge definition diversity. For instance, Michel Porter has defined competitive strategy as being deferent from the competitors by choosing deferent set of activities in order to deliver unique mix of value (Porter, 1980). Grant and Jordan (2013) introduce strategy as the means of how objectives are achieved. Others argued that strategy is about the future key issues of a firm (Johnson, Whittington, & Scholes, 2011).

As Kaplan and Norton (1996) argue, to convert short term activities into long term objectives and implement aligned strategy there are four processes have to be implemented which are; translating the vision into understood strategy, setting targets and Planning, communicating and linking strategy to performance measurement, and strategy learning and feedback. Therefore, Kaplan and Norton (1996) four strategy alignment processes method is selected with adaption in this research in-order to align business strategy with project management. To conclude, Kaplan and Norton method is used in this research because of the wide use of the BSC model (Al-Ashaab, Flores, Magyar, & Doultisino, 2011; Cooke-Davies, 2002; Din, et al., 2011; Hussin & Yusof, 2013).

2.2. Project Management

According to Tuman (1983), a project is the people and resources of the organization to achieve a defined objective and purpose (Tuman, 1983). Project can be also defined as a temporary endeavor undertaken to create a unique product, service or result (PMI, 2013). While the project management is the process of involving the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed the stakeholder needs and expectations (PMI, 2013). Kerzner (2013) argued that project management is the processes that include planning, organizing, directing, and controlling resources of a company to achieve specific and defined goals for a particular project.

Atkinson has modified the Iron Triangle (Cost, Time and Quality) method become the "Square Route" of success criteria, which provides more realistic and balanced indication of success (Atkinson, 1999). However, this research uses a model development by Din et al. (2011), with seven dimensions to cluster a project management and they are; project management leadership; strategy and policy; staff; resources and partnerships; project life cycle management processes; key performance indicators, and Financial management. Moreover,

2.3. Project success

Individual personalities, contract type, project type, nationalities could cause a variation in the perceptions and the relative importance of success dimensions (Mir & Pinnington, 2014). To different people, success means different thing (Shenhar, Dvir, Levy, & Maltz, 2001). Accordingly, to measure the project success the study has used a construct given by Din et al. (2011) with adaptation.

2.4. Project Management and Business Strategy

Srivannaboon and Milosevic (2006) in their study addressed two aspects to provide framework in order to align project management with business strategy which are; the two-way influence that should take place between project management and business strategy, and the process used for the Management between the two end phases. However, a failure to tie the organization projects to business strategy or to their portfolio will result if the processes are not aligned with business strategy, what tails project termination or continue implementing a project that is out of the business scope (Srivannaboon, et al., 2006). Many other researchers enhance toward aligning project management with business strategy in order to achieve success (Meskendahl, 2010; Morris & Jamieson, 2005).

In conclusion, the discussed literature review above provides clear evidence that the project is influenced by Strategy Control. It also declare that the performance of the firms and their success are interrelated to how strong they align with business strategy and how the final goals of the firm are achieved.

2.5. Project Success and strategy

Project success can be measured across four dimensions; meeting customer benefits, meeting planning goals and design, meeting developing organization benefit, and finally meeting the defense and national infrastructure benefit (Lipovetsky, Tishler, Dvir, & Shenhar, 1997). However, there are also many issues found that could stand behind the increase of the project failures such as; the absence of a clear vision and statement of requirements, lack of project decomposition, unrealistic expectations due to estimating difficulties and organizational politics, lack of stakeholder involvement and focus, inadequate staffing policies and team conflict, and lack of strategic focus and executive management support (Yetton, Martin, Sharma, & Johnston, 2000). As a result, accomplishment of the organizational strategic objectives is the conclusion of project success (Shenhar, et al., 2001), and therefore the following hypothesis is proposed:

H1: Strategy Control has significant positive effects on Project Success.

2.6. Project success and Project Management

One of the facts is that if the project fulfills the expectations it will be viewed as a success (Bryde D. J., 2003). Adding more, Project Management is an effective tool to increase the organization productivity (Mir & Pinnington, 2014). However, project success can only be measured after the project is completed (Cooke-Davies, 2002). Therefore, organizations should have a system that ensures achieving the stakeholders' short-term and long-term benefits (Mir, et al., 2014).

As a result of the given in the literature, the project success is the measurement tool to what degree the project management is implemented (Din, Abd-Hamid, & Bryde, 2011).

H2: Project Management has a significant and positive effect on Project Success

3. Methodology

To measure the relationship between the investigated variables, this quantitative study employed a survey questionnaire research method (Kerlinger & Lee, 2000). As shown in the record taken from Sharjah engineering department on the 14th November 2014, there were 2536 companies registered as active construction companies.

As the study requires, the managerial level was focused on with the implemented survey because they are more involved in building, executing, or monitoring strategy. Moreover, every specified respondent is playing role or mediating between employees and stakeholders. According to the European Commission (2003), the firms are categorized into; micro (Less than ten employees), small (less than 50 employees), medium (less than 250 employees), and Large (more than 250 employees).

Moreover, this paper is formed to examine the relationships between the variables used in the (SC-PM-PS) model. The framework of the variables clears how align the projects with business strategy to achieve strategic project success. The questioner included some demographic questions to categorize the respondents, and other questions that reflect study variables' perceptions.

A random distribution among Sharjah construction companies were done to collect the data. Moreover, there were 215 distributed questioners and one hundred fifty seven usable returned back. The variables are adopted from previous studies; Project Success measures have been adopted from Bryde (2003), SC measurements are from Kaplan and Norton (2007), whereas measurements of PM from Din et al. (2011). Statistical Package of Social Sciences (SPSS) and Structural Equation Modeling (SEM) technique through Smart-PLS statistical software were used to test the data and examine the hypothesis of the study. Furthermore, the data analysis methods are selected in relation to the variable characteristics and the questions of the research (Byrne, 2010).

3.1. Research Framework

Based on the related literature review, the framework of this study was developed and each variable was fully discussed in the literature review with the relationship to the others. However, as it can be concluded from the literature, there is a lack in the literature of the studies that examines the effect of Strategy Control and Project management on project success (Srivannaboon & Milosevic, 2006). Based on that, this research is done to fill the found gap. Moreover, this research is designed in to increase the number of those studies that covers the relationships between Strategy Control, Project Management, and project success.

The framework of the study has categorized the model variables into endogenous and exogenous. The exogenous variable is an independent one that is not affected by another variable. On the other hand, endogenous variables are impacted by others and may sometimes cause an effect on other variables. More specifically, the exogenous variable in the paper model is Strategy Control and Project Management while the endogenous is the project success.

4. Data Analysis

4.1. Demographic Distribution of the Respondents

The collection of data was through questionnaire survey distribution over the period of five months period starting from January 2015. The final received collection of samples was 157 out of the all targeted companies (215) with achieving percentage of 73%. The Table 1 below shows the demographic respondents.

Table 1: Demographic respondent information

Demographic Variable	Category	Frequency	Percent
Respondent	Owner	57	36.3%
	Executive	7	4.5%
	Administration Manager	14	8.9%
	Project Manager	20	12.7%
	Engineer	41	26.1%
	Accountant	18	11.5%
	Total	157	100.0%
Company Size	Small	91	58.0%
	Medium	48	30.6%
	Large	18	11.5%
	Total	157	100.0%
Company Region	City of Sharjah	65	41.4%
	East coast (of Sharjah)	92	58.6%
	Total	157	100.0%

4.2. Descriptive Statistics

A descriptive analysis for data was implemented to describe the Strategy Control, Project Management, and project success. The results monitor the implementation level of each variable in the companies. Moreover, it is clearly given that the project success has a higher concentration than the other constructs with 3.766 mean and 0.620 as a standard deviation. This result declares the importance of the success to the respondents. The next respondent concentration was on Project Management with 3.609 mean values and 0.556 standard deviation.

Finally, the lowest reported value was on Strategy Control with mean value of 3.392 and standard deviation of 0.667. This result slightly indicates the lack of Strategy aligning management in the contracting companies in the Emirates of Sharjah and support the study done by Srivannaboon and Milosevic (2006) in the literature review. Given that, the lowest mean and the highest standard deviation obtains the resistance to be monitored found in the contracting companies. Therefore, the result obtains the resistance to monitor Strategy Control in relation to other constructs.

Strategy Control system is a new practice in the construction companies in Emirate of Sharjah. Therefore, many initials have to be done to have Strategy implemented and Controlled such as training, lecturing, and customizing.

4.3. The Construct Validity

It is the extent to which the measures are actually measuring an item (Trochim, 2006). Construct validity can be examined by implementing the discriminate validity, content validity, and convergent validity simultaneously.

4.3.1. The Content Validity

The content validity is the degree to which the measurement item reflects the concept of a given construct (Hair, Anderson, Tatham, & Black, 2010; Pennington, 2003). According to the discussed factor analysis of the model variables, all the used items in the paper model are correctly assigned to their constructs. Firstly, items loading are high and significant in their construct column when comparison applied with the other constructs (Chow & Chan, 2008).

Table 2: Factor Analysis and loadings of the items

Construct	Dim.	Items	PMF	PMKPI	PML	PMLS	PMPR	PMSf	PMSt	PS	SCCL	SCFL	SCP	SCT
Project Management	PMF	PMF1	0.824	0.327	0.277	0.391	0.344	0.335	0.316	0.423	0.308	0.261	0.244	0.299
		PMF2	0.886	0.471	0.343	0.481	0.371	0.449	0.237	0.434	0.339	0.342	0.430	0.352
		PMF3	0.748	0.340	0.097	0.256	0.284	0.323	0.245	0.416	0.265	0.179	0.277	0.259
	PMKPI	PMKPI1	0.438	0.902	0.267	0.508	0.406	0.417	0.321	0.400	0.442	0.443	0.541	0.403
		PMKPI2	0.396	0.887	0.260	0.511	0.235	0.397	0.330	0.367	0.558	0.633	0.632	0.474
	PML	PML1	0.200	0.195	0.870	0.247	0.319	0.353	0.338	0.307	0.170	0.148	0.246	0.220
		PML2	0.332	0.319	0.905	0.373	0.347	0.369	0.303	0.353	0.239	0.276	0.254	0.239
	PMLS	PMLS1	0.409	0.531	0.352	0.906	0.293	0.366	0.311	0.361	0.466	0.498	0.399	0.487
		PMLS2	0.445	0.507	0.295	0.915	0.391	0.449	0.346	0.432	0.474	0.519	0.455	0.437
	PMPS	PMPS1	0.399	0.300	0.334	0.376	0.895	0.323	0.388	0.326	0.243	0.215	0.216	0.226
		PMPS2	0.324	0.343	0.333	0.291	0.880	0.278	0.369	0.240	0.245	0.273	0.247	0.157
	PMSf	PMSf1	0.377	0.369	0.355	0.388	0.254	0.920	0.392	0.625	0.366	0.359	0.398	0.394
		PMSf2	0.461	0.471	0.398	0.441	0.369	0.935	0.350	0.572	0.377	0.449	0.522	0.453
	PMSt	PMSt1	0.291	0.368	0.382	0.365	0.385	0.411	0.909	0.415	0.283	0.405	0.293	0.271
PMSt2		0.281	0.273	0.247	0.271	0.374	0.289	0.871	0.336	0.147	0.231	0.247	0.190	
Project Success	PS	PS1	0.394	0.328	0.328	0.219	0.262	0.499	0.337	0.722	0.357	0.320	0.357	0.306
		PS2	0.485	0.373	0.318	0.346	0.248	0.483	0.357	0.733	0.348	0.360	0.351	0.348
		PS3	0.389	0.385	0.306	0.401	0.339	0.509	0.219	0.736	0.293	0.252	0.302	0.365
		PS4	0.358	0.260	0.264	0.266	0.251	0.462	0.284	0.795	0.272	0.188	0.247	0.276
		PS5	0.400	0.356	0.243	0.385	0.253	0.507	0.325	0.821	0.368	0.285	0.344	0.371
		PS6	0.376	0.325	0.287	0.428	0.172	0.431	0.333	0.722	0.386	0.397	0.370	0.309
		PS7	0.315	0.224	0.223	0.356	0.138	0.483	0.346	0.751	0.291	0.272	0.253	0.300
		PS8	0.369	0.323	0.272	0.229	0.255	0.498	0.354	0.735	0.361	0.267	0.306	0.376
	SCCL	SCCL1	0.287	0.387	0.175	0.334	0.132	0.356	0.212	0.332	0.749	0.485	0.488	0.579
		SCCL2	0.358	0.506	0.194	0.504	0.235	0.275	0.202	0.314	0.838	0.641	0.598	0.596
Strategy Control	SCFL	SCFL1	0.253	0.450	0.193	0.403	0.292	0.346	0.186	0.436	0.832	0.559	0.496	0.623
		SCFL2	0.254	0.570	0.148	0.473	0.202	0.389	0.376	0.346	0.617	0.896	0.664	0.531
	SCP	SCP1	0.328	0.494	0.290	0.525	0.288	0.392	0.270	0.348	0.629	0.885	0.559	0.488
		SCP2	0.311	0.556	0.249	0.397	0.285	0.469	0.281	0.369	0.610	0.600	0.904	0.539
	SCT	SCT1	0.399	0.627	0.260	0.453	0.185	0.434	0.270	0.393	0.575	0.644	0.904	0.521
		SCT2	0.295	0.367	0.186	0.301	0.165	0.367	0.192	0.385	0.577	0.373	0.512	0.818
SCT3	0.328	0.440	0.296	0.476	0.222	0.420	0.281	0.417	0.650	0.519	0.525	0.882		

4.3.2. The Convergent Validity Analysis

The convergent validity is the extent to which a group of variables are related in the concept of measuring the same item (Hair, et al., 2010). As the argument of Hair et al. (2010), there are three criteria tests required to employ the convergent validity; the composite reliability (CR), average variance extracted (AVE), and factor loadings. Table 3 shows that all the loadings of the used items in the accepted range (Hair, et al., 2010). The ranges of Composite Reliability are from 0.849 to 0.925 and the Cronbach Alpha from 0.731 to 0.89. These shown results are in the recommended level which is 0.7 (Fornell & Larcker, 1981; Hair, 2010).

Table 3: Convergent Validity and significant of the factor loading

Construct	Variable	Items	Loadings	Cronbach alpha	AVE	CR
Project Management	PMF	PMF1	0.824	0.759	0.675	0.861
		PMF2	0.886			
		PMF3	0.748			
	PMKPI	PMKPI1	0.902	0.750	0.800	0.889
		PMKPI2	0.887			
	PML	PML1	0.870	0.733	0.788	0.881
		PML2	0.905			
	PMLS	PMLS1	0.906	0.794	0.829	0.906
		PMLS2	0.915			
	PMPR	PMPR1	0.895	0.731	0.788	0.882
		PMPR2	0.880			
	PMSf	PMSf1	0.920	0.838	0.860	0.925
		PMSf2	0.935			
	PMSt	PMSt1	0.909	0.740	0.793	0.884
PMSt2		0.871				
Strategy Control	SCCL	SCCL1	0.749	0.732	0.652	0.849
		SCCL2	0.838			
		SCCL3	0.832			
	SCFL	SCFL1	0.896	0.739	0.793	0.885
		SCFL2	0.885			
	SCP	SCP1	0.904	0.777	0.818	0.900
		SCP2	0.904			
	SCT	SCT1	0.818	0.806	0.721	0.886
		SCT2	0.882			
		SCT3	0.846			
project Success	PS	PS1	0.722	0.890	0.566	0.912
		PS2	0.733			
		PS3	0.736			
		PS4	0.795			
		PS5	0.821			
		PS6	0.722			
		PS7	0.751			
		PS8	0.735			

Therefore, the above results have confirmed the outer model convergent validity. Furthermore, the average variance extracted (AVE) values are examined to confirm the outer model convergent validity. Moreover, AVE reflects the extracted average of variance among a group of items according to their relation to the shared variance with the measurement errors. Finally, if the AVE value is more than 0.5, it means that the used set of items to measure a construct have sufficient convergence (Barclay, Higgins, & Thompson, 1995). In this study, AVE values as have been listed in table 3 are in the range of (0.566 and 0.860) which indicates a good construct validity level with the used measures (Barclay, et al., 1995).

4.4. The Discriminant Validity Analysis

The discriminant validity of the measure's shared variance within a construct should be greater than the shared variance among the other constructs (Compeau, Higgins, & Huff, 1999). As shown in Table 4, AVE square roots for all used constructs are replaced at the correlation matrix. Moreover, The discriminant validity of the paper outer model has been confirmed, because the attributes in the Table 4 that carry the items reading for the related construct are higher than the other readings of the column bellow the other constructs. In conclusion, it has been confirmed from the found results that the items used in this study are valid and reliable (Fornell & Larcker, 1981).

Table 4: The Discriminant Validity Matrix

construct	Dimension	PMF	PMKPI	PML	PMLS	PMPR	PMSf	PMSt	PS	SCCL	SCFL	SCP	SCT
PM	PMF	0.675											
	PMKPI	0.467	0.800										
	PML	0.305	0.294	0.788									
	PMLS	0.469	0.569	0.354	0.829								
	PMPR	0.408	0.361	0.376	0.377	0.788							
PS	PMSf	0.454	0.455	0.407	0.448	0.339	0.860						
	PMSt	0.321	0.364	0.359	0.361	0.426	0.399	0.793					
	PS	0.515	0.429	0.373	0.436	0.320	0.644	0.425	0.566				
SC	SCCL	0.372	0.557	0.233	0.516	0.275	0.401	0.247	0.446	0.652			
	SCFL	0.326	0.598	0.244	0.559	0.274	0.438	0.364	0.390	0.699	0.793		
	SCP	0.393	0.654	0.281	0.470	0.260	0.499	0.305	0.422	0.655	0.688	0.818	
	SCT	0.373	0.489	0.259	0.507	0.217	0.458	0.262	0.441	0.742	0.573	0.586	0.721

4.5. Testing the Direct Hypotheses

Because the goodness of the outer model has been confirmed, the relationships among the model variables are to be tested. The hypothesized model was tested using PLS Algorithm and illustrated in Table 5.

Table 5: The Results of the Inner Structural Model

Hypothesis	Relation	path coefficient	std error	T-VALUE	P-value	Decision
H1	SC-> PS	***0.500	0.0667	7.5013	0.000	Supported
H2	PM -> PS	***0.656	0.067	10.733	0.000	Supported

*:p<0.05; **:p<0.01; ***:p<0.001

The results in Table 6 shows that Strategy Control (SC) has a positive significant effect on Project Success (PS) with values of (β= 0. 500, t=7.501, p<0.001). Therefore, the hypothesis (H1) was supported. Moreover, the results also shows that Project Management (PM) has a positive and significant effect on Project Success (PS) (β=0.656, t=10.733, p<0.001). Accordingly, the effect of PM on PS Hypothesis was supported.

4.6. The Predictive Relevance of the Model

R-square is explained by the predictor variables of the endogenous variable. Therefore, the model predictive power for the endogenous variables is considered by the indication of R-squares.

4.6.1. Cross-Validated Redundancy

R Square is considered as a predictive power indicator to the relations of the model. Additionally, in order to confirm the model predictive validity the research is using a developed technique by Stone (1975) and Geisser (1975) which is called “the sample’s reuse technique to fit”. Moreover, predictive relevance model can be examined by Stone - Geisser (1975) through employing the blindfolding facility provided in Smart-PLS which is designed to omit some of the data and to tackle with them as missing values and do parameters estimation. Next, the assumed missing raw of data is reconstructed then with some estimated parameters. As a result, the blindfolding procedure generates the general cross-validating metrics (Q2). However, Q2 is given in different forms based on the form of desired prediction which is cross-validated communality and cross-validated redundancy. However, the cross-validated redundancy measure can be reliable indicator for the investigated model (Fornell & Cha, 1994). Furthermore, the model is considered to have predictive validity if the cross-redundant communality for all used endogenous variables are more than 0, else it cannot be concluded (Fornell & Cha, 1994).

Table 6: Predictive Quality Indicators of the Model

Variable	Variable Type	Cross-Validated Communality	Cross-Validated Redundancy	R Square
Project Success (PS)	Endogenous	0.435	0.239	0.447

In conclusion as Table 7 demonstrates, cross-redundant communality for the endogenous variable which is (0.435). Therefore, the model is considered to have predictive validity as a result of having the cross-redundant communalities for the tested variable more than zero (Fornell, et al., 1994).

4.7. The Goodness of Fit of the Whole Model

PLS Structural Equation Modeling provides one goodness of fit measure only. Global fit measure (GoF) for PLS is the geometric mean of the average R square and average communality for the endogenous constructs (Tenenhaus & Vinzi, 2005). Hence, GoF variance extracted calculated by both outer and inner of the model. Therefore, the following formula is given base on a theory done by Wetzels et al. (2009).

$$Gof = \sqrt{r^2 * AVE}$$

$$Gof = \sqrt{0.447 * 0.566} = 0.453$$

Table 7: Goodness of Fit (GoF)

Variable	R Square	AVE	GoF
Project Success (PS)	0.447	0.566	0.453

When putting the reached value using the equation given above and putting it to the scale of GoF provided by Wetzels et al. (2009) which is; small =0.1, medium =0.25, and large=0.36 it can be concluded that the model is largely indicating large goodness of Fit validity.

5. Conclusion

This study is examining the direct effect of Strategy Control and project management on Project Success. As given in the results above, all hypotheses have been confirmed. In addition, in consistent with other previous studies, Project Management has been found to have a positive and significant effect on Project Success ($\beta=0.656$, $t=10.733$, $p<0.001$) in line with other previous findings (Atkinson, 1999; Atkinson, et al., 2006; Bryde, 2008; Cooke-Davies, 2002; De-Wit, 1988; Din, et al., 2011; Kerzner, 2013; Lipovetsky, et al., 1997; Meskendahl, 2010; Mir, et al., 2014; Shenhar, et al., 2001). The effect of Strategy Control Project Success was detected with a positive and significant effect values of ($\beta= 0.500$, $t=7.501$, $p<0.001$). The given findings of the effect of Strategy Control on project success is in line with many implied debates in the literature (Alshemmari, 2012; Alsudiri, et al., 2013; Antony, et al., 2010; Artto, et al., 2008; Atkinson, 1999; Bose, et al., 2007; Cooke-Davies, 2002; De-Wit, 1988; Hussin, et al., 2013; Kaplan, et al., 1996; Morris, et al., 2005; Srivannaboon, et al., 2006)

The results of this study will launch an argument between the researchers and it will trigger further investigations and examinations of other factors that may take place in these relationships. The framework of this study is a unique in its status and suggests some new relationships which have not been studied before.

Practically, the study findings have different practical implications. It clears the way to stakeholders, managers, and other decision makers to involve Strategy Control in line with project management. Due to the complexity of implementing Strategy, managers should think to have further practices such as BSC framework to ease the SC pre-implementation and post-implementation stages. Moreover, organizations face difficulties when implementing any strategy, therefore, other instruments such as the BSC is needed to facilitate and clears the misunderstanding for successful implementation. Based on the conclusion of this study, all the managerial level of the organizations should influence toward strategy implementation. The reason behind that is to avoid flying out of the flock and achieving unwanted success. Another purpose of having the right implementation to strategy is to achieve the maximum success and avoid having any failure in the Project management practices.

Likewise any previous study, this study has faced some limitations. Firstly, the collection of the data was by self-reported which is considered as one of common method biases (Thornton, 2006). Secondly, the study has used cross-sectional design to collect data which is considered as another limitation. Secondly, because the respondents were asked to answer the questions in a five likert scale which can be influenced by the biased perception of the situation, this study recommends a mixed research design to be considered in the future. Finally, the study results could be different if the study used longitudinal design instead of the cross-sectional study. Therefore, examining the relationship between the study constructs at a certain point of time may lead to accuracy lacking. Hence, it is strongly recommended to conduct the longitudinal designed studies to examine the effect of SM, PM on PS.

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