

Managing for Stakeholders: The Role of Stakeholder-Based Management in Project Success

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Abstract

Today, project management practices play a key role in different industries and sectors. Project management is promoted as an organizational strategic component that leads innovation, creates value and turns vision into reality. Despite the importance of projects and project management their high rate of failures and challenges is a major concern of both industry and academia. Among the reasons that affect project outcomes, stakeholder influential attributes and more importantly, their understanding and effective utilization and management are identified as the key to project success. This study utilizes the body of knowledge developed in the field of project management and uses stakeholder theory combined with a number of complementary theories to achieve its goals and objectives. The study moves beyond the traditional power-based frameworks employing six key influential attributes to examine their direct and mediating effects on project success. The quantitative survey data are analyzed using SEM statistical techniques and procedures to produce research results. The research results have led to the development of a new typology of stakeholder influential attributes (TSIA) and a stakeholder-based project management model (SBPMM) that aid managing for stakeholders' strategy and principle.

Keywords: managing for stakeholders, project success, stakeholder management, project management, strategic management

1. Introduction

Projects are organizational strategic instrument that lead innovation and create value. However their failures and challenges cost global businesses, governments and organizations fortune each year. The recent studies conducted by the academia and industry including studies by McKinsey in collaboration with the University of Oxford (McKinsey Quarterly, 2012), and KPMG New Zealand multi-industrial survey (KPMG, 2010), as well as the 2000–2011 CHAOS report (Standish Group, 2000-2011) confirm high rates of project challenges and failures. The international development projects are also subject of failures and great disappointments (Lavagnon Ika, 2013). Scholars have cited “the ignorance or poor stakeholder management” as one of the key reasons responsible for project failure (Aaltonen, 2011; Chang, Chih, Chew, & Pisarski, 2013; Hietbrink, Hartmann, & Dewulf, 2012; Yang, Shen, Ho, Drew, & Xue, 2011; Zolin, Cheung, & Turner, 2012). Findings indicate that issues within the stakeholder environment are mainly related to the stakeholder influential attributes and behaviours and their understanding and management (Beringer, Jonas, & Kock, 2013; Fageha & Aibinu, 2013; Mitchell, Agle, & Wood, 1997; Rowley & Moldoveanu, 2003), which require exhaustive analysis, broader knowledge, and inclusive management methodology, techniques and tools in order to effectively be assessed, utilized and managed to ensure projects well-being and success.

2. Literature Review and Hypothesis Development

The stakeholder theory (Freeman, 1984) is the main theory of this research. The study utilizes body of knowledge developed in the field of project management and uses numbers of complementary theories such as the theory of stakeholder influences (Rowley, 1997), the theory of network governance (Jones, Hesterly, & Borgatti, 1997) stakeholder-agency theory (Hill & Jones, 1992), and stakeholder salience theory (Mitchell et al., 1997) for the purpose of this study.

Our aim is to investigate the direct effect of stakeholder influential variables on project success and the mediating role of stakeholder management processes between the influential variables and project success. In line with our objectives, we have moved beyond the traditional power-based approach covering broader concepts. This approach is expected to better address the issues related to the stakeholder management and project success through the: 1. employment of all key influential attributes that can cause project, its organization and success, and 2. employment of the key comprehensive stakeholder management processes that can play the role of mediator.

The conceptual framework of this study is drawn directly from the literature comprising two types of exogenous and endogenous variables as follows: 1. Project stakeholder influential variables, consisting six latent variables of power, interest, urgency, legitimacy, proximity, and relationship network (independent variables); and 2. Manage-through-Stakeholder, consisting five observed variables of stakeholder identification & classification, communication, engagement, empowerment, and risk control (mediator); and 3. Project success (dependent variable). The conceptual framework of this study consists of 12 variables. It is assumed that IV leads to mediator, and in turn mediator causes the DV (Baron & Kenny, 1986) by modifying their original relationships (Jaccard & Jacoby, 2010). The 12 variables are measured by 68 ordinal items. The next section covers the key concepts and variables used in this study.

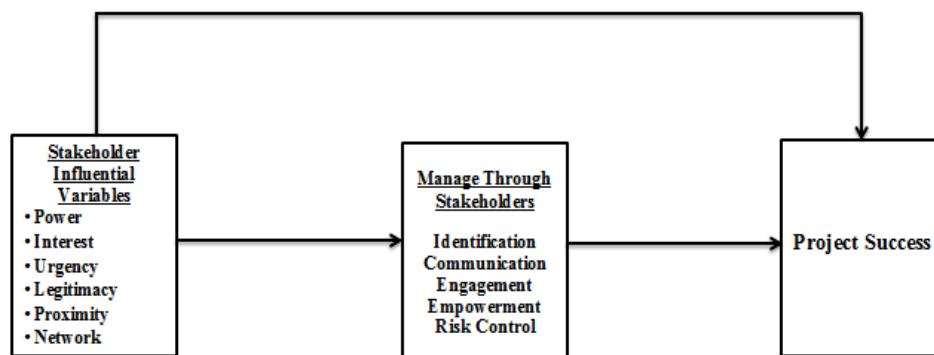


Figure 1. Conceptual framework

2.1 Project Success

The purpose of a project is to deliver benefit to its stakeholders. Stakeholder benefits are the driver for the project and achievement of stakeholders' objectives is the driver for project success. Cooke-Davies (2002) defines three levels of success including project management success, project success and constant project success. From the base-organization viewpoint, Andersen (2008) described success as project product success (benefits), project management success (deliverables), and project success as the sum of both. From the stakeholder perspective, Beringer et al. (2013) claimed that stakeholder behaviour and management of such behaviour is the key to project portfolio success. The study by Keogh, Fourie, Watson, and Gay (2010) on the department of health and science (MIT) proves the importance of stakeholder involvement in the development of a new curriculum for its success. Toor and Ogunlana (2010) research findings on large public sector development projects moved the topic beyond the traditional iron triangle and concluded that stakeholders' perception and satisfaction is the key to project success. From the base organization's (project owner) viewpoint, Eskerod and Jepsen (2013) reconfirmed the importance of stakeholders by stating that a project can only be successful if stakeholders are first motivated and in return have contributed to the project.

2.2 Stakeholder Theory

The idea of maximizing for stakeholders evolved through Freeman's "Strategic Management: A Stakeholder Approach" which became the theoretical ground for further developments. Stakeholder theory is a theory of organizational management and ethics (Phillips, Freeman, & Wicks, 2003). It opposes the free market norm of shareholder capitalization and promotes stakeholder maximization. For many decades economists have been defining the purpose of a business as an instrument to capitalize on shareholders, this was also referred to the legal purpose of a business. Stakeholder scholar Stout (2012) stated that this is a misinterpretation as law has not defined the purpose of a business to capitalize on shareholders; law simply says to do the lawful. This may also reflect the purpose of a project as an instrument established to deliver benefits to its stakeholders that include the project owner.

Stakeholder theories grow into different branches, models and criteria, for example the three taxonomies of normative, instrumental, and descriptive (Donaldson & Preston, 1995), the primary and secondary domains (Clarkson, 1995), the typology of organizational stakeholders (Savage, Nix, Whitehead, & Blair, 1991), the resource-based influential strategies (Frooman, 1999), and the salience framework (Mitchell et al., 1997), and managing for stakeholders (Freeman, Harrison, & Wicks, 2007).

Stakeholder has been defined and conceptualized in a wide range from broad to narrow. One of the earliest broad and classic definitions was introduced by Freeman (1984) who defined stakeholder as “any group or individual who can affect or be affected by the achievement of the organization’s objectives”. Influenced by the Freeman’s theory, but interested more in project outcome, Cleland (1986) provided a more narrow view defining project stakeholder as individuals or institutions that are either under or beyond project manager’s authority, and directly or indirectly get affected by the project’s outcome, and have share or stake or an interest in project. PMBOK guide (PMI, 2013, p. 29) defines stakeholders as “individual, group, or organization who may affect or be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, who may be actively involved in the project or have interests that may be positively or negatively affected by the performance of completion of the project”. Littau, Jujagiri, and Adlbrecht (2010) conducted a meta-analysis study on stakeholder theory in project management discipline; authors found that the PMBOK guide definition has become the dominant stakeholder definition for the field of project management as of 2006 onwards. The definition adopted by this research expands on type III defining project stakeholder as individual(s), or group(s), or organization(s) who have property rights, or an interest (self or moral) or human rights in the project, and can affect or be affected by the project activity or its outcome. This definition departs from the networked and dynamic environment of stakeholder community giving voice to all may count.

2.3 Stakeholder Influential Attributes

Scholars’ disagreement and diverse opinions on Freeman’s principles of who and what counts, led Mitchell et al. (1997) to the development of the theory of stakeholder salience. Mitchell et al. (1997) added two more variables of legitimacy and urgency to fill the gaps related to the single variable of power. However, the salience framework was criticized for ignoring stakeholders beyond the economic value of the firm or project (Banerjee, 2008; Bourne & Walker, 2005; Yang, Shen, & Ho, 2009).

The next popular framework is the power/interest matrix which was formulated by Johnson and Scholes (1999). The model was modified and used in project environment by Olander and Landin (2005). Additionally, adopting from Mitchell et al. (1997) salience framework, Bourne and Walker (2006) introduced the typology of power, urgency and proximity. Authors replaced legitimacy with proximity to add a new dimension and eliminate legitimacy’s restriction. However these efforts were also criticized for remaining within the traditional framework of power, ignoring the dynamism of stakeholder environment and other influential attributes (Banerjee, 2008). Arguably, the traditional power-based frameworks have their strengths and weaknesses and miss out important critical factors such as the complexity of relationship network and the significance of stakeholders’ moral interest in favour of others. To fill the gap and in order to provide a fresh insight this study has moved beyond the salience-based frameworks employing all key influential attributes. The following section will provide an overview of theories, models and views that are relevant to these six key attributes.

Power: is the ability used by some to bring the outcomes they wish (Salancik & Pfeffer, 1974). Power was cited by Mitchell et al. (1997) through organizational theories of agency, resource dependence and transaction cost. Power was also categorized in organizational settings by Etzioni (1964) as coercive power (physical resources or force i.e. gun), utilitarian (financial resources), and normative (prestige). A number of researchers have argued that project’s survival and well-being is influenced by stakeholders’ power. It’s a tool that can save or kill a project. Power has been an ongoing debate; many stakeholder scholars including Freeman (1984), Donaldson and Preston (1995), and Clarkson (1995) challenged the importance of power in favour of legitimacy in stakeholder-manager relationship. This study retains power for further assessment.

HIa. Stakeholders’ power effects project success.

Interest: Johnson and Scholes (1999) modified the stakeholder environment scanning model introduced by Mendelow (1981) to measure stakeholder interest through formulated power/interest matrix (Olander & Landin, 2005). Authors’ organizational stakeholder mapping is about how interested stakeholders are in pursuing their expectations and whether they have the power to push for. In contrary to the power-dependent arguments, Rowley and Moldoveanu (2003) stated that interest-based perspective is capable of mobilizing stakeholder group and influence the focal organization independent from power or urgency. Additionally, Freeman, Harrison, Wicks, Paramar, and Colle (2011) added to the topic stressing the moral interest as an important criterion for

identifying who counts. This research will retain interest as an independent influential variable for further examination.

H1b. Stakeholders' interest effects project success.

Legitimacy: is often coupled with power as socially acted attribute; it is also referred to legitimate or illegitimate usage of power in which if it used through legitimate channels may sustain otherwise lost (Davis, 1973). According to Mitchell et al. (1997) both variables of legitimacy and power are linked while being independent. Authors argued that a stakeholder of a firm may have a legitimate claim to make but its claim will not receive salience from management unless he/she has either the power to push for or has a high degree of urgency to drive the claim forward. Bourne & Walker (2006) replaced legitimacy with proximity claiming it ignores stakeholders beyond contractual rights. Yang, Shen, Bourne, et al. (2011) also replaced legitimacy with proximity due to its complication and restriction.

In contrary to the above power-dependent approaches, scholars have described legitimacy through broader notion that explains the subject as a socially constructed concept with ownership title, moral rights, interest (self or moral), legal, contractual, and exchange relationship (Carroll & Buchholtz, 2011; Phillips, 2003; Suchman, 1995). Legitimacy was also promoted by a number of scholars as the core attribute in stakeholder-manager relationships (Clarkson, 1995; Donaldson & Preston, 1995; Freeman, 1984). This study will retain legitimacy as one of the key factors in stakeholder-manager relationships.

H1c. Stakeholders' legitimacy effects project success.

Urgency: Mitchell et al. (1997) proposed urgency to respond to the dynamism of situation. Urgency refers to how urgent stakeholders' claims are; such urgent claims are based on time sensitivity and criticality (Mitchell et al., 1997). The importance of urgency in project field was also confirmed by other researchers (Bourne & Walker, 2006; Yang, Shen, Bourne, et al., 2011). This study will retain urgency for further assessment.

H1d. Stakeholders' urgency effects project success.

Proximity: evaluates stakeholders' relationship based on their ties with the project management team and processes (Bourne & Walker, 2006). Proximity in conjunction with other attributes is expected to add a dimension enabling project managers to analyze community of stakeholders based on their closeness, role and relationships with the team and processes. This study finds proximity relevant and will retain it for further analysis.

H1e. Stakeholders' proximity effects project success.

Network: Rowley (1997) argued that stakeholder network topology of relationship to be more complex than it was described by Freeman (1984). Author argued that the relationship does not happen in dyadic form; it happens in the form of network of influences with direct links among stakeholders. The characteristics of these relational networks lead to density and or centrality of relationships which may cause coalitions or conflicts among stakeholders (Rowley, 1997). Yang, Shen, Bourne, et al. (2011) tested the stakeholder relationship management and found it significant. Authors categorized it into two processes. First promoting the relationship between project stakeholders, and second analyzing the stakeholders' impact through networks of relationships. This study finds relationship network relevant and will retain it for further analysis.

H1f. Stakeholders' relationship network effects project success.

2.4 Stakeholder Management Process

Stakeholders are the originator of the project management organization that is responsible for the delivery of stakeholders' expectation and satisfaction. The successful delivery of any project deliverables highly depend on stakeholder engagement and management (Chang et al., 2013), and the effective engagement and management of stakeholder relies on project manager's ability to identify stakeholders' expectations from the beginning to close-up (Cleland, 1999). Researchers described project stakeholder management as a process in which project team facilitates the needs of stakeholders to identify, discuss, agree, and contribute to achieve their objectives (Brammer & Millington, 2004; Pajunen, 2006; Rowlinson & Cheung, 2008). Similarly, Kerzner (2011, p.34) describes stakeholder relationship management through six continues processes, including "identifying stakeholders, analyzing, engaging, identifying information flow, enforcing stakeholder agreement, and stakeholder debriefing." Additionally, from the base-organization viewpoint, Eskerod and Jepsen (2013) suggested three processes of stakeholder identification, assessment, and prioritisation.

This study has drawn the key stakeholder management processes from the literature to construct its mediating factor. The mediating variable of Manage-through-Stakeholder (MTS) consists of five observed variables of

stakeholder identification & classification, communication, engagement, empowerment, and risk control. The aim here is to investigate the mediating role of MTS on the relationship between stakeholder influential variables and project success. Therefore, and in line with the research objectives, and the hypothesized model (Little, Cunningham, Shahar, & Widaman, 2002), we have treated MTS construct as a latent factor with five observable indicators.

Manage-through-Stakeholder consists of following hypotheses.

H2a. The relationship between stakeholders' power and project success is significantly improved when manage-through-stakeholder is mediated.

H2b. The relationship between stakeholders' interest and project success is significantly improved when manage-through-stakeholder is mediated.

H2c. The relationship between stakeholders' legitimacy and project success is significantly improved when manage-through-stakeholder is mediated.

H2d. The relationship between stakeholders' urgency and project success is significantly improved when manage-through-stakeholder is mediated.

H2e. The relationship between stakeholders' proximity and project success is significantly improved when manage-through-stakeholder is mediated.

H2f. The relationship between stakeholders' relationship network and project success is significantly improved when manage-through-stakeholder is mediated.

3. Research Methodology

The purpose of this study is to put concepts into relationships to investigate and produce model (Saunders, Thornhill, & Lewis, 2009). Under this correlational study, quantitative survey is selected as the most suitable method. This research has employed the means of web named "Internet-based survey" (Fricker, 2008) that best serves the purpose of gathering data from a large sample on a global scale (Fleming & Bowden, 2009). For the purpose of data analysis two sets of tools including Statistical Package for Social Science (SPSS v. 21), and Analysis of Moment Structures (Amos v. 21) were used.

3.1 Sampling Method

For the purpose of sample size the formula (Note 1) introduced by Krejcie and Morgan (1970) was used to determine the right sample size. Aligned with the survey strategy researchers approached a number of the world's leading project management associations and standards to promote the survey among their respective professional members. We received positive support from the following leading project management associations and their respective members:

1. The Project Management Institute (PMI) with professional community member of 408,524.
2. Association for Project Management (APM, UK) with professional community member of 27,000.
3. Australian Institute of Project Management (AIPM) with professional community member of 10,000.

The total associations' member respondents/population is 445,524 ($N = 445,524$). In order to accurately calculate the sample size researchers used a simple and comprehensive tool provided by National Statistical Service Australia (NSS, 2012). The NSS calculator provided a sample size of 384. Over the period of four months (November 2013 to February 2014), altogether 290 questionnaires were received which is a 75.5% response rate. Dropping the unworkable 32 responses left us 258 completed and valid responses. The 258 valid responses provided a concrete and workable response rate of 67.2%. The response rate of 67.2% is believed to be satisfactory to proceed with data analysis. Baruch and Holtom (2008) suggested an average response rate of 52.7% for studies at individual level. Additionally, the 258 (67.2%) valid response satisfies the rule of thumb in terms of framework variables, parameters and good fit using SEM (Hair, Anderson, Tatham, & Black, 2010; Ho, 2006).

Project and stakeholder management professionals from 47 different countries and variety of industries completed the survey. A majority of 41.1% of the respondents belonged to the age group of 36-45 followed by 46-55 (31.8%), and 26-35 (17.8%). In terms of experience, 39.5% had 6-10 years' experience managing projects and stakeholders followed by 24.4% with 11-15, and 17.4% with 16 years and above, and 14.7% with 0-5 years. With respect to the education the majority of 59.3% hold master's degrees, 26% bachelors and 13.2% hold doctoral degrees. Table 1 provides more details on respondents' profile.

3.2 Research Instrument

A new set of questionnaire was developed to conduct a fresh study. The questionnaire design was guided by the theories, conceptual framework and the research hypothesis. Tull and Hawkins (1990) objective-based and Sekaran and Bougie (2010) closed questions approach was also adopted. For the purpose of measurement, the study has used five-point liker-type scale to measure variables. The five-point liker-type scale provides less bias in mean, variance, covariance, correlation coefficient and the reliability of scores (Krieg, 1999). We then performed number of steps to ensure quality questionnaire over the period of one year. The steps included the review of literature, construct of the questionnaire, interviews with ten project and stakeholder management professionals, review of the questionnaire by the expert panel of four experts, conducting questionnaire pre-tests and finally conducting pilot test to ensure validity and reliability of the questionnaire.

Table1. Profile of Respondents

Position	Project Size (Financial Resources/USD 10 ³)	Project Size (Number of Stakeholders)	Experience (Project Management)	Membership
Project manager (62.4%)	≥ 49: (0%)	0-10 (3.1%)	0-5 (18.6%)	PMI (83.3%)
Program manager (13.6%)	50 - 99: (3.5%)	11-30 (9.7%)	6-10 (39.5%)	APM (10.9%)
Portfolio manager (6.6%)	100 - 499: (9.3%)	31-50 (17.1%)	11-15 (24.4%)	AIPM (5.8%)
Operations manager (4.7%)	500 - 999: (9.7%)	51-100 (28.3%)	16< (17.4%)	
Change manager (.8%)	1,000 - 4,999: (24.8%)	101-500 (19%)		
Line manager (1.9%)	5,000 - 14,999: (31%)	500< (22.9%)		
Senior executive (10.1%)	≤15,000: (21.7%)			

4. Data Analysis

4.1 Reliability, Validity of Measurement Scales

In order to determine how well the collected data measures the construct of the study, psychometric properties including principle component analysis (PCA), reliability and CFA test was carried out (Anderson & Gerbing, 1988). The reliability was initially assessed using Cronbach's alpha coefficient. The results show that the reliability of the constructs exceeded the 0.7 (Sekaran, 2011). Item to total correlations were also satisfactory with no threats as per Saxe and Weitz (1982) suggestion of 0.3 and above.

Principle component analysis with varimax rotation was carried out to remove statements that do not significantly contribute to the constructs. All constructs with underlying statements entered into the PCA. The Bartlett's test of sphericity (sig. < .05) and KMO score with .943 was the indicator of suitability of the sample for factor analysis. We achieved factor loading scores higher than 0.5 for all items which stated the satisfactory explanations of the items (Hair et al., 2010). This analysis reconfirmed our twelve factors with the first factor accounting for 38.16% of the total variance explained (70.511%). The Monte Carlo test confirmed the PCA result.

Continuing with the analysis, each construct was averaged in order to measure as a single factor. Mean, Standard Deviation (S.D.) and correlations were estimated for each construct. Additionally, we used CFA to assess convergent, and discriminant validity and construct reliability. All the constructs were included in a single measurement model as suggested by Anderson and Gerbing (1988). The entire factors significantly loaded with 0.5 scores and higher (Hair et al., 2010). The excel stat tools designed by Gaskin (2012) was used to calculate the Correlation Matrix, Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV), the result is shown in Table 3. According to Hair et al. (2010) the threshold for Construct Reliability should be higher than 0.7, and higher than 0.5 for factor loading scores. The value of average variance extracted (AVE) of greater than 0.5 also confirmed the existing convergent validity (Bagozzi, Yi, & Phillips, 1991). For the purpose of confirming discriminant validity, the MSV and ASV of each construct should not be greater than its AVE (Hair et al., 2010). The results confirmed that there is no violation in validity test (Table 3).

Next, we examined measurement model's goodness of fit. Based on our research objectives and hypothesized model (Little et al., 2002), and in order to reduce the complexity and likelihood of the unwanted interaction effects between the large number of variables (MacKinnon, 2008), we treated the Manage-through-Stakeholder variable as a latent factor with five observed indicators including identification, communication, engagement, empowerment, and risk control. The hypothesized model generated a chi-square of 1.357 with 832 degrees of freedom with fit indices of RMSEA=.037, GFI=.796, CFI=.618, AGFI=.768, NFI=.328, TLI=.585, and p<.000.

However, the re-specified model provided a better fit with chi-square of 1.365 and 457 degrees of freedom with fit indices of RMSEA=.038, GFI=.879, CFI=.974, AGFI=.852, NFI=.910, TLI .970, and $p < .000$ (Table 2). According to Hair et al. (2010) p -value is expected to be significant if $N > 250$ or $m \geq 12$.

Table 2. Measurement model fit

Fit indices	Hypothesized Model	Re-specified Model
CMIN/DF	1.357	1.365
DF	832	457
p -value	<.000	<.000
GFI	.796	.879
AGFI	.768	.852
NFI	.328	.910
TLI	.585	.970
CFI	.618	.974
RMSEA	.037	.038

Note: CMIN/DF, 1<good<3; significant p -value if $N > 250$ or $m \geq 12$, GFI, AGFI, NFI & TLI $> .8$ permissible; $> .9$ good; $> .95$ great (Hair et al., 2010; McDonald & Ho, 2002), CFI $> .95$ if $12 < M < 30$ (Byrne, 2010; Kline, 2011); RAMSEA < 0.05 good (Hair et al., 2010; Schumacker & Lomax, 2012)

4.2 Research Model Testing

The structural equation modeling technique was employed to test theoretical hypothesis model with the maximum likelihood approach. Here, we proposed a Stakeholder-Based Project Management Model (SPMM) with a series of constructs based on project management theories and literature. The hypothesized relationship between constructs of the study is shown in figure 2.

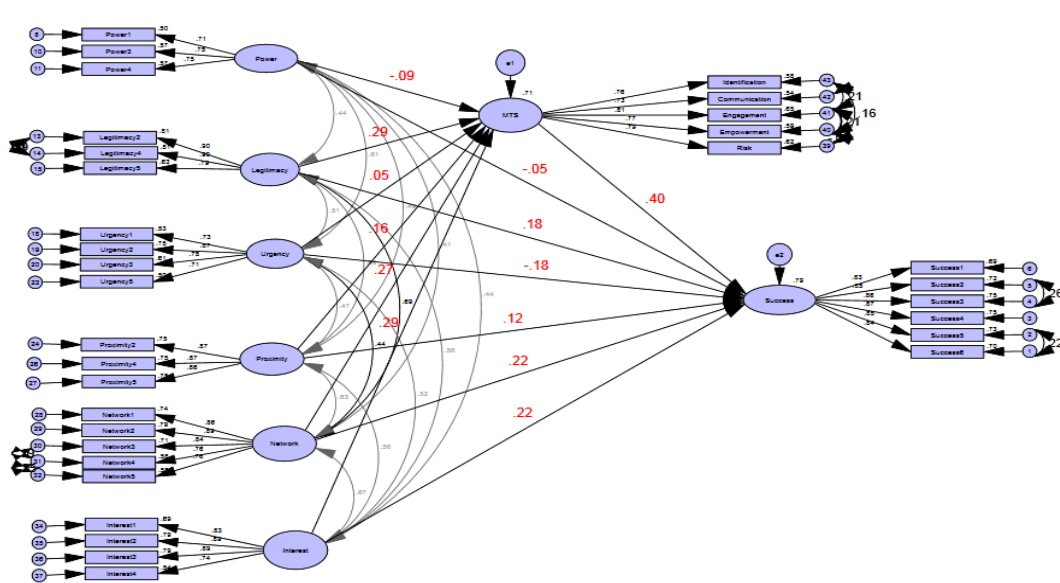


Figure 2. Path diagram of structural model

The output of structural model reveal that the stakeholder conceptualized variables including interest ($\beta = .33, t = 5.07, p < .001$), network ($\beta = .32, t = 4.52, p < .001$), legitimacy ($\beta = .30, t = 4.47, p < .001$), and proximity ($\beta = .19, t = 2.94, p < .001$) have significant positive effect on project success.

The conceptualized variable of power from the other hand doesn't have a significant effect on project success. However, the conceptualized variable of urgency has negative effect on project success with $\beta = -.16$ and $t = -2.64$ and $p < .01$. It is concluded that H1b, H1c, H1d, H1e and H1f are supported, and H1a is not supported (Table 4).

The same as the re-specified model, the structural equation model also confirmed a satisfactory goodness of fit. To examine the mediation model as suggested by James, Mulaik, and Brett (2006), we run two mediation model testing of full and partially mediation. The results of the research alluded that the partial mediation model is a better model fit compared to the full mediation model (Table 5).

Table 3. Mean, standard deviation, zero-order correlation, convergent and discriminant validity

	Mean	S.D.	CR	AVE	MSV	ASV	Proximity	Power	Legitimacy	Urgency	Network	Identification	Communication	Engagement	Empowerment	Risk	Success	Interest
Proximity	3.799	1.081	0.933	0.736	0.482	0.318	0.932											
Power	4.183	0.783	0.839	0.512	0.397	0.171	0.476	0.838										
Legitimacy	4.099	0.982	0.927	0.719	0.578	0.371	0.681	0.486	0.910									
Urgency	4.079	0.824	0.878	0.590	0.397	0.233	0.499	0.630	0.565	0.874								
Network	3.958	0.913	0.917	0.650	0.588	0.360	0.634	0.427	0.722	0.468	0.916							
Identification	4.147	0.791	0.883	0.558	0.549	0.331	0.520	0.396	0.518	0.482	0.532	0.879						
Communication	3.995	0.832	0.858	0.502	0.432	0.294	0.461	0.343	0.537	0.455	0.555	0.657	0.857					
Engagement	4.052	0.874	0.887	0.572	0.540	0.348	0.571	0.283	0.642	0.384	0.593	0.692	0.596	0.882				
Empowerment	3.866	0.854	0.879	0.548	0.540	0.323	0.516	0.287	0.594	0.450	0.612	0.576	0.632	0.735	0.878			
Risk	3.974	0.861	0.895	0.588	0.549	0.277	0.498	0.307	0.551	0.391	0.526	0.741	0.493	0.583	0.498	0.893		
Success	3.991	0.932	0.949	0.727	0.588	0.386	0.694	0.327	0.760	0.361	0.767	0.575	0.555	0.704	0.622	0.578	0.949	
Interest	3.938	0.943	0.913	0.677	0.503	0.341	0.592	0.445	0.584	0.555	0.674	0.559	0.605	0.549	0.605	0.503	0.709	0.912

Note: all correlations were significant in $p < .001$. Cronbach Alpha stands on diagonal line.

Table 4. Represented H1

	Variables	Beta	S.E.	C.R.	β	P	H1
Success	<--- Power	-.125	.098	-1.2	-.08	.199	H1a
Success	<--- Legitimacy	.338	.076	4.467	.30	***	H1c
Success	<--- Urgency	-.247	.094	-2.639	-.16	.008**	H1d
Success	<--- Proximity	.163	.055	2.938	.19	.003**	H1e
Success	<--- Network	.391	.086	4.525	.32	***	H1f
Success	<--- Interest	.387	.076	5.067	.33	***	H1b

Note: $p < 0.001$ ***, $p < 0.01$ level **

Table 5. Comparing full and partial mediation goodness of fit

Fit Indices	Partial Mediation Model	Full Mediation Model
CMIN/DF	1.392	1.470
DF	374	379
p-value	<.000	<.000
GFI	.888	.882
AGFI	.861	.855
NFI	.920	.914
TLI	.972	.966
CFI	.976	.970
RMSEA	.039	.043

Note: CMIN/DF, $1 < \text{good} < 3$; significant p-value if $N > 250$ or $m \geq 12$, GFI, AGFI, NFI & TLI $> .8$ permissible; $> .9$ good; $> .95$ great (Hair et al., 2010; McDonald & Ho, 2002), CFI $> .95$ if $12 < M < 30$ (Byrne, 2010; Kline, 2011); RAMSEA < 0.05 good (Hair et al., 2010; Schumacker & Lomax, 2012)

Following these procedures, we have examined the relationship between stakeholders' influential variables and project success when Manage-through-Stakeholder is mediated (H2). The mediation test revealed that the relationship between influential variables of interest ($\beta = .296$, $p < .01$), legitimacy ($\beta = .280$, $p < .01$), proximity ($\beta = .154$, $p < .05$) and network ($\beta = .322$, $p < .01$) with project success is significantly improved when Manage-through-Stakeholder is mediated (Table 6 & 7).

Table 6. Regression weights for full mediation model

			Estimate	S.E.	C.R.	β	P
MTS	<---	Interest	.200	.042	4.759	.296	***
MTS	<---	Network	.226	.050	4.539	.322	***
MTS	<---	Proximity	.079	.030	2.599	.154	.009
MTS	<---	Legitimacy	.188	.042	4.518	.280	***
Success	<---	MTS	1.528	.128	11.965	.892	***

Note: $p < 0.001$ ***, $p < 0.01$ level **

The test also indicated that the variables of power and urgency didn't fulfil the mediation criteria. It is concluded that H2b, H2c, and H2f partially mediated, while H2e is fully mediated.

Table 7. Regression weights for partial mediation model

Variables			Estimate	S.E.	C.R.	β	P
MTS	<---	Interest	.201	.050	4.031	.285	***
MTS	<---	Network	.198	.059	3.375	.270	***
MTS	<---	Proximity	.077	.037	2.096	.144	.036
MTS	<---	Legitimacy	.198	.050	3.961	.284	***
Success	<---	MTS	.675	.150	4.496	.410	***
Success	<---	Legitimacy	.200	.074	2.691	.174	.007
Success	<---	Urgency	-.306	.078	-3.948	-.203	***
Success	<---	Proximity	.099	.052	1.905	.112	.057
Success	<---	Network	.259	.085	3.047	.215	.002
Success	<---	Interest	.250	.076	3.279	.216	.001

Note: $p < 0.001$ ***, $p < 0.01$ level **, $p < 0.05$ level *

For the purpose of post hoc analysis Sobel test was performed to test partial mediation effects. Sobel test is a powerful mediation test which has greater statistical power than other methods in mediation test (MacKinnon, 2008). The Sobel test results have significantly proved our assumptions and the effectiveness role of the mediator. Our conclusion of hypothesis is presented in table 8.

Table 8. Comparison of direct and indirect mediation when MTS is mediated

Variables	MTS		Sobel Test			Conclusion
	Direct	Indirect	Z	S.E.	p	
Interest	.22***	.12*	2.99	.04	<.01	Partial Mediation Supported
Legitimacy	.17**	.11*	2.64	.05	<.01	Partial Mediation Supported
Proximity	.11	.10*	-	-	-	Full Mediation Supported
Network	.21***	.11*	2.97	0.04	<.01	Partial Mediation Supported

Note: $p < 0.001$ ***, $p < 0.01$ **, $p < 0.05$ level *

5. Discussion and Implications

The hypothesis testing results revealed that out of 12 hypotheses, 9 hypotheses were supported. As it was predicted in the theoretical framework, H1 results confirmed the existence of two categories of stakeholder influential attributes of positive and negative. The category of positive effect on project success consists of interest, legitimacy, proximity and network. The negative effect on project success includes urgency, and finally power with no significant, but negative weight on project success. These results are the foundation and the key important insight of this empirical research. The H2 results confirmed the positive effect of Manage-through-Stakeholder (MTS) on project success and more importantly, its significant mediating role between stakeholder influential attributes of interest, legitimacy, proximity and network (positive attributes) and project success. Additionally, from the four positive attributes, proximity was the only variable with the perfect mediation of full mediation. The other two variables of power and urgency could not participate in the mediation test due to their non-significant paths.

The stakeholder segmentation methodology was used to produce a simple but meaningful model. Based on H1 results a new Typology of Stakeholder Influential Attributes (TSIA) was introduced. The TSIA (Figure 3) is the

foundation and the building block of this research outcome. The framework classifies stakeholders based on their type of effect (positive or negative) and level of influence (low to high) on project success. Depending on classification, the model further recommends relevant managerial strategy to be employed.

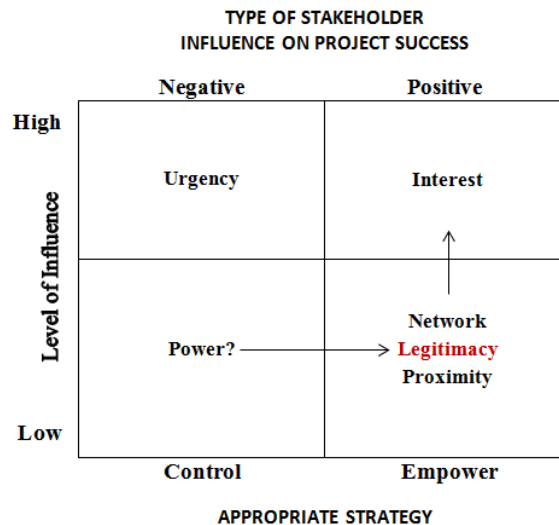


Figure 3. Typology of stakeholder influential attributes

Under the above typology, depending on the nature and the level of influence, stakeholders are classified into four regions including:

Type 1: Stakeholders with positive quality of interest that can highly contribute to project's success. These stakeholders are recommended to be empowered.

Type 2: Stakeholders with positive qualities of network, legitimacy, and proximity with low to moderate contribution to project's success. These stakeholders are also suggested to be empowered.

Type 3: Stakeholders with negative weight of urgency that can highly disturb project's success. These stakeholders are recommended to be controlled.

Type 4: Stakeholders with negative weight of power that can disturb project's well-being, but if utilized under legitimate channels as authority can positively contribute to project's success. These stakeholders are also recommended to be controlled.

Under the typology of stakeholder influential attributes "interest" shows the highest positive influence. The other three attributes of "network, legitimacy and proximity" are also classified as positive with low to moderate influence in comparison to the interest. These are variables meaning with respect to the situation they may result in higher or lower degree of positive effects. "Urgency" from the other hands is classified as negative with high effect that calls for management attention with control strategy. This result makes sense as audience see urgency as an attribute that pressures project and its resources and deliverables due to its critical and time sensitive claims especially if the claim comes from those that can be an exposure to the project. Power was the only variable with no significant, but some negative weight. This outcome supports the classical argument on power as being part of legitimacy. Scholars have diverse opinion about power. On one side of the continuum there are numbers of power-based studies (Johnson & Scholes, 1999; Mitchell et al., 1997; Olander & Landin, 2005) in which power is the dominant variable, while other variables depend on power to influence. On the other side of the continuum is the work of scholars who were suspicious about the role of power and challenged its role in favour of legitimacy in stakeholder-manager relationship (Clarkson, 1995; Donaldson & Preston, 1995; Freeman, 1984). Additionally, some moved beyond self-interest stressing the importance of the moral interest in favour of others (Freeman et al., 2011). These scholars raised concern about stakeholders' power and the legitimacy of their claims as a critical factor for management's attention. Suchman (1995) and Weber (2009) also argued that if power is used through legitimate channels as authority may sustain otherwise is lost. In harmony with these scholars and the stakeholder normative core, we find our results and the TSIA classification in favour of legitimacy in stakeholder-project management relationship.

Building and operationalizing on the above TSIA, the overall hypotheses results has led to the construction of the Stakeholder-Based Project Management Model (SBPMM). The SBPMM is a process-based success-focused

framework that facilitates enterprise stakeholder and project management approach (figure 4). The SBPM framework consists of two parts and six areas. Similar to the EFQM model, the SBPM model consists of project enablers and the project results. The first part (enabler) represents the predictors that initiate project and project organization and lead success, and the second part (result) represents a set of criteria that measure success. Stakeholders appear on both sides as predictors and criteria. The enabler part consists of four stakeholder attributes and a process area with five stakeholder management processes. The results part consists of project outcomes with three sets of key criteria. Figure 4 illustrates the model.

Under the SBPMM, the enablers (proximity, interest, network, and legitimacy) initiate the project and its organization to lead success. The SBPMM also confirms the importance of management processes including identification, communication, engagement, empowerment and risk control. These processes perform key role in effective utilization and management of stakeholder environment. The SBPMM is a success-oriented framework that is built on significant paths between independent variables of influential attributes and the dependent variable of project success through the mediating variables. The aim here is to differentiate between enablers and preventers. Urgency and power are considered as preventers due to their non-significant path and therefore do not qualify to take part in the model. However their effect and position was classified and discussed under the TSIA. This approach is expected to better help researchers and practitioners in their stakeholder management activities.

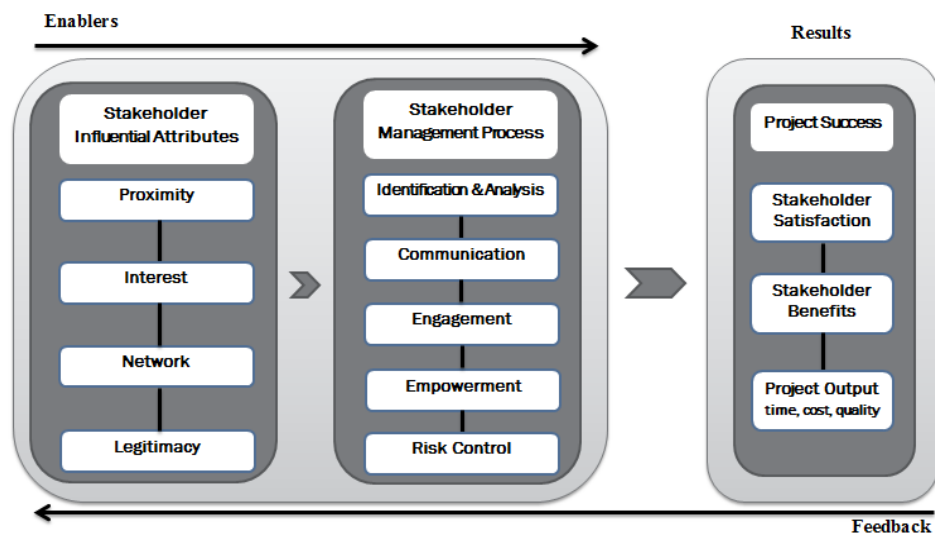


Figure 4. Stakeholder-based project management model

We argue that the introduced frameworks (TSIA and SBPMM) are in consistent with the managing for stakeholders' strategy and principle which is about best stakeholder management thinking (Freeman et al., 2007). The philosophy behind managing for stakeholder is ethics and the cooperative capitalism as a system of social cooperation and value creation. It's a mind-set of serving all stakeholders to secure stable return for both stock and stakeholders. It opposes the idea of trades off between the forceful and fragile stakeholder groups and their interests. We argue that projects are no difference from firms in terms of purpose which is delivering value; they are strategic component of organizations that affect variety of individuals and interest groups and therefore should be managed and aligned with organizational enterprise strategy and principles of managing for stakeholders. The introduced TSIA and SBPMM facilitate such management. They provide a solid foundation for a more ethical and effective project and stakeholder management. They discount power and promote legitimacy as the base for stakeholder-manager relationship. They call for identification, classification, communication, engagement and empowerment of all stakeholders with interest (self or moral), with legitimate claims, and proximity ties, and relationship network. They also call for managements' attention and control for urgency of claims, and suggest stakeholder risk management and control. In harmony with the managing for stakeholders' enterprise strategy and principles (Freeman et al., 2007), the introduced TSIA and SBPMM promote satisfaction of as many as stakeholders simultaneously, call for no trade-off between stakeholders, and actively support communication, engagement, empowerment and commitment of both primary and secondary stakeholders, and suggest constant monitoring and improvement of the processes to lead greater achievement and success. In sum the introduced managing for stakeholders frameworks are expected to facilitate greater success through a more ethical project governance and management.

6. Conclusion and Recommendations

This study examined the direct effect of the six key stakeholder influential attributes on project success. As well as their mediating effects through the five managerial processes. The research results produced two frameworks including TSIA and SBPMM that facilitate managing for stakeholders' principles in project environment. The models are expected to provide community of researchers and practitioners with greater insight in their project and stakeholder management activities. With respect to the limitation of the study we should add that survey studies use mono-method which is based on respondents' perceptions with the possibility of common response bias. This survey study might be the subject of mono-method bias. For the purpose of future studies, we suggest investigating the TSIA and SBPMM through longitudinal research study. This study opens a new window for researchers to move beyond the traditional power-based approach and map the six key influential attributes and analyze their effect through other social theories such as the theories of social conflicts.

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Note

Note 1. $S = X^2 NP(1-P) \div d^2(N-1) + X^2 P(1-P)$

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