

STAKEHOLDER EVALUATION OF MANAGEMENT PERFORMANCE - A STUDY OF CONSTRUCTION SITE MANAGERS

Campbell Fraser

School of Management, Griffith University, Brisbane, Queensland, Australia

Stakeholder theory is a major contemporary issue in management research, based on the premise that for sustainable business success to exist, detailed and comprehensive consideration of the objectives of all principal stakeholders must be addressed and acted upon. This paper examines construction site managerial effectiveness within a stakeholder theory orientation. It examines perceptions of importance of performance dimensions held by a sample of construction site managers and project stakeholders comprising of clients, architects, engineers and quantity surveyors. The findings of the research show that perceptions of what actually constitutes construction site manager effectiveness varies significantly across stakeholder groups. By identifying the individual performance dimensions where significant differences of opinion between stakeholders exist, a framework is created for the analysis of the reasons behind such discordance and ultimately create solutions in order to provide performance criteria acceptable to all.

Keywords: stakeholder, evaluation, site manager, performance

INTRODUCTION

The aim of this paper is to investigate the differences in beliefs in what constitutes an effective construction site manager through the analysis of opinions provided by the managers themselves and other key players in a construction project.

The key players, or stakeholders, analysed in this paper are those individuals whose stake in the construction project is invariably affected by the activities of the construction site manager in his or her capacity as the most senior representative of the contractor permanently based on the construction site. Specifically, the key stakeholders identified are the architect, the civil/structural engineer, the services engineer, the quantity surveyor, the client/client's representative, the subcontractors, the manager's subordinates (eg foreperson) and the manager's superior (eg contracts manager).

Contemporary management thinking is paying a great deal of attention to "stakeholder theory", positing that sustainable business success rests, to a great extent, with a systematic consideration of the needs and goals of all key stakeholders. In the case of construction, site managers are required to simultaneously manage a multitude of relationships with external stakeholder groups affected by their actions and behaviours.

This paper examines construction site managerial effectiveness within the context of stakeholder theory. It investigates perceptions of the importance of dimensions of managerial effectiveness as held by the contractual stakeholders of 61 Australian

construction projects, and explores the use of a performance measurement tool, comprising of 52 performance elements, as a means by which such stakeholders may articulate their views on what they believe constitutes effective management and score managers accordingly.

Two hypotheses were proposed. Firstly it was hypothesised that significant differences exist between stakeholder groups, and secondly it was hypothesised that significant differences would exist between the managers themselves depending on their ability measured across a series of performance elements. The findings of the research confirm both hypotheses and suggested remedies are proposed.

BACKGROUND

Many organisations (Blair, 1998) are assessing their performance in a holistic manner that expands beyond meeting the immediate objectives of shareholders towards an appreciation of their human and social capital (Clarke, 1998) and concern for a multitude of stakeholders (Donaldson and Preston, 1995; Harrison and Freeman, 1999). In order to incorporate the needs of stakeholders into the organisational performance planning process, it is necessary to allow stakeholders to express their views in an appropriate forum. In a way similar to that of organisational actions affecting stakeholders, the actions and behaviours of managers also affect a variety of individuals and the organisations or groups that are associated with them. Thus, there is a need for these stakeholders to be able to communicate their specific needs and expectations, as well as an assessment of a manager's performance. This form of multi-rater evaluation, also known as the 360-degree feedback method (Yamarino and Atwater, 1993; Bracken, 1994; Jones and Brearley, 1996; Boyatzis, 1997; Church and Waclawski, 1999) has been extensively used in research and practice for measuring a manager's performance, and forms the basis of the methodology used in this work.

When used to measure the relative importance of performance elements, the method can also clearly serve the purpose of gauging the needs and expectations of stakeholders in order to ensure that actual performance satisfies them as closely as practically possible. In order to develop shared understandings of expectations of what is to be achieved and how, an adaptation of the method can be utilised. The identified stakeholders can be invited to provide their opinions on how important they believe specific performance elements are. Being informed of their stakeholders' set benchmarks, managers can then adopt different behaviours, communication strategies or a combination of both in a way that will allow, within the organisational constraints, the maximum degree of stakeholder satisfaction.

The management of stakeholder expectations is much more than an attempt to adhere to normative management directives. In certain circumstances, it can be a critical function of the manager's role on which the successful completion of tasks depends. In the case of construction project management, for example, the successful completion of the project depends on the coordination of the activities of a large number of professionals and operatives employed by a variety of organisations. This, in turn, requires that the manager in charge of the project can successfully balance the needs, cultures, and objectives of all stakeholders.

METHODOLOGY

Data Collection Instrument

The data collection instrument allowed data on the importance ratings and the evaluation of individual performance to be collected simultaneously. The 52 performance elements (comprising the performance index developed and validated in Fraser, 1999) were listed in the middle column. In the left column, the respondents were asked to assess the manager's level of ability on each element on a five point scale described in the accompanying instructions sheet as follows: 1=incompetent, 2=weak, 3=fair, 4=good, 5=outstanding. In the right hand column they were asked to indicate the importance of each one of the competency elements on a five point scale defined, also in the instructions section, as: 1=no importance, 2=limited importance, 3=important, 4=of great importance and 5=of paramount importance. Only the anchors appeared on the actual data collection form.

Sampling and Data Collection

Uniformity was sought in terms of construction type, size, stage in the project development, and procurement method in order to standardise the job requirements and minimise the impact of exogenous factors. Project size and complexity were controlled to ensure that the managers would need to have both high levels of understanding of complex technical issues and the managerial ability to manage a large, multidisciplinary team and considerable resources. There also needed to be a sufficient number of sites accessible for data collection. These requirements were best met in high rise residential construction. In all major cities in Australia, a total of 97 sites were at the time of data collection operational and well established. Every project manager was personally approached during site visits and after the project requirements were fully explained to them, 46 agreed to participate, representing a 48% response rate. Each participating manager nominated either five or six individuals, one of each stakeholder group, with whom they had a close working relationship as their evaluators.

The criteria for selecting evaluators were that they had to be willing to participate, and knowledgeable both in terms of what is required of a manager and of the performance of the person they were to assess. A control group of 15 objectively identifiable as ineffective managers were recruited through an advertisement in a national newspaper. The individuals that were selected after an initial screening interview had all been project managers in construction and had been either dismissed because of low performance, or they had voluntarily left the industry after having been officially told that they were under-performing. This group was treated in exactly the same manner as the main research group.

A total 329 construction professionals participated in the research, 61 of which were the project managers whose performance was evaluated. These managers also provided self-evaluations and their opinions on the importance of each one of the performance elements. The breakdown of each performance element is presented in Table 1.

Data Analysis Procedures

The first objective of the data analysis was to test the hypothesis that perceptions of the importance of the performance elements would vary according to the profession of each assessor. The role of each participant to the construction process is different, and so is his or her relationship with the project manager. Hence, their perceptions of what

is important or not in terms of the managers' performance were expected to be different. The procedure used for exploring and interpreting the patterns of differences among predictors as a whole, in order to understand the dimensions along which groups differ with each other was discriminant analysis.

One-Way Analysis of Variance (ANOVA) was used to re-test the hypothesis that different stakeholder groups would assign varying degrees of importance to the performance elements as well as cross-validate the observations of the discriminant analysis. Tukey's honestly significant difference (HSD) method (Morgan and Griego, 1998) was used to compare pairs of group means for statistically significant differences and to construct the profiles of expectations for each specific stakeholder group. The second hypothesis to be tested was that the managers' perceptions of the importance of each performance element would vary according to their level of performance. All nominated assessors for each manager, and the managers themselves, rated the manager's level of performance on each performance element. One overall score was calculated for each manager, defined as the average of the sum of points each of the assessors (including the managers themselves) assigned to each one of the performance elements.

Table 1: Performance Elements

1	Coordination and planning of site activities	27	Conveying minutes of meetings
2	Preparation of programs	28	Availability of manager for consultation
3	Scheduling subcontractor timetables	29	Inspection of work
4	Assigning tasks and providing instructions	30	Walking about site
5	Checking drawings	31	Monitoring performance data
6	Discussing quality of work	32	Requesting input and participation from others
7	Ordering material and plant	33	Listening with open mind to work suggestions
8	Technical understanding	34	Conveyance of appreciation
9	Human resource planning	35	Provision of reward
10	Staff selection	36	Provision of performance feedback
11	Site training of staff	37	Delegation of responsibility
12	Managing routine operational problems	38	Backing of subordinate
13	Diagnosis of defects	39	Enforcement of company policy
14	Urgent purchase of material/hiring of plant	40	Following of official disciplinary procedures
15	Managing health and safety	41	Provision of negative performance feedback
16	Selection of appropriate construction methods	42	Liaison with client's representatives
17	Dealing with work variations	43	Liaison with statutory bodies
18	Reaction to matters raised by others	44	Liaison with local council authorities
19	Delegation of tasks to others	45	Community service activities
20	Completion of written records relating to project	46	Managing interpersonal conflict
21	Processing correspondence with other parties	47	Managing contractual conflict
22	Maintenance of adequate filing systems	48	Honesty
23	Preparation of cost and progress reports	49	Ethical behaviour
24	Answering routine procedural questions	50	Upholding of company values
25	Dissemination of requested information	51	Non-work-related discussion
26	Holding regular site meetings	52	Out of work socialisation

Three distinct 'performance level' groups were identified: a 'high-performing' group of 11 managers that achieved scores consistently higher than everyone else and scored no less than 'good' (4) and mostly 'outstanding' (5) across all performance elements; a 'mediocre' group of 35 adequately performing, currently employed; and the known 'under-performing' group that comprised the 15 former managers. The perceptions of four groups ('high-performing', 'mediocre', 'under-performing' and immediate superiors) were examined variable by variable using Kruskal-Wallis 1-Way ANOVA.

RESULTS

Perceptions of importance of performance elements by stakeholder group

The discriminant analysis resulted in 9 clearly distinguishable groups with the re-classification hit rates far exceeding what chance alone could have produced (ie the prior probabilities calculated on the basis of groups size). These are shown in Table 2.

The One-Way ANOVA indicated that 28 variables exhibited statistically significant differences at the 95% significance level. Seven of these variables (34, 35, 01, 36, 33, 32, 26) were the ones with the highest correlation within the first discriminant function (Eigenvalue= 1.3195, Wilk's λ =.052019 with .0000 significance of the Chi-square and Canonical Correlation Coefficient=.7542) and six (44, 42, 43, 49, 17, 39) within the second discriminant function (Eigenvalue=1.0110, Wilk's λ =.120659 with .0000 significance of the Chi-square and Canonical Correlation Coefficient=.7090).

It appears that there is a high level of agreement between the managers, their superiors and subordinates on what constitutes effective management as no statistically significant differences were observed between these groups. We can therefore conclude that all internal stakeholders, ie those employed by the construction contractor, appear to have similar perceptions as to what constitutes effective management.

Table 2: Statistically Significant Differences Between Groups

Site Manager	Site Manager	Civil Engineer	Architect	Sub	QS	M&E	Fore-person	Client
Civil Engineer	10,24,33,37,42,46,47,48,49							
Architect	34,35,41,42	1,10,24, 32, 33, 34, 35, 36, 38, 39, 40,41, 47, 48						
Sub	3,5,43	1,3,10,11,24,33,37, 42, 43,44, 47,49	3,34,35,42,43,44					
QS	44,46,47	10,24,37	1,8,26,33,34,35,36, 41, 42, 47	1,3,5,43,44,47				
M&E	3,10,46,48	24	1,3,10,33,34,35,36, 41, 47	1,10,43,44	3,10			
Fore-Person			1,10,33, 34, 35,36,38,47	1,3,10,42,43,44				
Client	24,39,40,42, 44, 48, 49		1,10,33,34,35,36,38,39,40	10,11,17,24,39,40,42, 43,44, 49	10,24,34,40,42	15,24,40	40	
Contract Manager			39,40,45	43,44		15		43,35

The civil engineers disagreed on 10 elements with the project managers, exhibiting the overall furthest distance in viewpoint from them. The client's representatives, often former construction project managers themselves, disagreed on 7 elements whilst architects and services engineers disagreed on 4 elements. Finally, sub-contractors and surveyors disagreed with the project managers on only 3 of the elements.

Interestingly the greatest differences in viewpoint occur between the stakeholder groups rather than with the managers themselves. Civil engineers and architects disagree on the importance of 14 out of the 52 performance elements that comprise the project manager's job.

CONCLUSION

This paper has examined perceptions of managerial effectiveness using the logic of stakeholder management. It has explored perceptions of the importance of specific performance elements as considered by stakeholders to the performance of individual project managers in a 360-degree process. The results of the research have clearly demonstrated that a noteworthy discrepancy exists among key stakeholders' opinions on what constitutes effective management. For example, civil/structural engineers disagree with managers on ten elements, architects on four elements and surveyors on three. Given that there are 52 elements in total, there is, for example only 80% agreement existing between the engineer and the manager.

Over the life-cycle of a large scale project, such a 20% discordance of opinion on what manager should actually be doing is likely to be detrimental to harmonious relationships. Having identified the sources of the discordance, it is proposed that the findings of this research have created a framework for improvement of such fundamental relationships.

Additionally this study has demonstrated that high performing managers concur with their superiors on the relative importance of specific performance elements. It could be suggested that the high performing managers are more likely to succeed their superiors in the future, particularly as they share the values of their superiors who will have a significant influence on the managers promotion prospects. The high performing managers appear to know what is required in order to reach higher levels in their organisations.

REFERENCES

- Blair, M. M. (1998) For whom should corporations be run?: An economic rationale for stakeholder management. *Long Range Planning*, **31**(2): 195-200.
- Boyatzis, R. E. (1997) Management: A Sociological Introduction. *Human Relations* **50**(4): 461-467.
- Bracken, D. W. (1994) Straight talk about multirater feedback. *Training and Development*, **48**(9): 44-51.
- Church, A. H. and Waclawski, J. (1999) Influence behaviours and managerial effectiveness in lateral relations. *Human Resource Development Quarterly*, **10**(1): 3-34.
- Clarke, T. (1998) The stakeholder corporation: A business philosophy for the information age: *Long Range Planning*, **31**(2): 182-194.
- Donaldson, T. and Preston, L. E. (1995) The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, **20**(1): 65-91.

- Fraser, C. (1999) A non-results-based effectiveness index for construction site managers. *Construction Management and Economics*, **17**(6): 789 - 798.
- Fraser, C. (2000) The influence of personal characteristics on construction site managers' effectiveness. *Construction Management and Economics*, **18**(1): 29-38.
- Harrison, J. S. and Freeman, E. R. (1999) Stakeholders, social responsibility and performance: Empirical evidence and theoretical perspectives. *Academy of Management Journal*, **42**(5): 479-485.
- Morgan, G. A. and Griego, O. V. (1998) *Use and Interpretation of SPSS for Windows: Answering Research Questions with Statistics*. (Mahwah, NJ, Lawrence Erlbaum Associates).
- Yamarino, F. J. and Atwater, L. E. (1993) Understanding Self-perception Accuracy: Implications for Human Resource Management. *Human Resource Management*, **32**(2&3) 231-247.