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CLIENT VERSUS CONSULTANT INFLUENCE ON CLIENT INVOLVEMENT IN COMPUTER SYSTEM SELECTION PROJECTS: A TWO-ACTOR MODEL OF THE THEORY OF PLANNED BEHAVIOR

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Abstract

The engagement of external IS professionals to supplement in-house resources is a widespread and growing practice. Limited prior research on consultant engagement suggests client involvement is a key factor of success. With the objective of better understanding the antecedents of client involvement in computer system selection consultancies, several variations on Ajzen and Madden's theory of planned behavior (TPB) are tested. Appreciating the potential power of the consultant to facilitate or block client involvement, a major variation on perceived behavioral control is the inclusion of the consultant's attitude toward involving the client. The resultant "two-actor" model is tested using partial least squares and survey data from firms that engaged external consultants to assist with computer system selection. Client attitude alone has relatively low explanatory power. The findings highlight the non-volitional nature of client involvement and the power of the consultant to block or facilitate that involvement.

Keywords: Consultant engagement, management consultants, IS/IT human resource management, package selection, computer system selection, outsourcing, client involvement, theory of reasoned action, theory of planned behavior, TRA, TPB.

INTRODUCTION

Rapid advancements in IT are making it difficult for many firms to cost-effectively manage the increasingly complex IS function. As the IT infrastructure and applications become more sophisticated, many organizations must rely on vendors and external consultants, who often are better placed to remain current on state-of-the-art technologies (Gable et al. 1998). Current trends toward outsourcing and alternative organizational forms have also increased the firm's reliance on external IT consultants in both advisory and operational capacities.

Limited prior research on consultant engagement suggests client involvement is a key factor of success (Gable 1991; Gable and Raman 1992; Gable and Sharp 1992). With the objective of better understanding the antecedents of client involvement in computer system selection consultancies, several variations on Ajzen and Madden's theory of planned behavior (TPB) are tested. The paper proceeds as follows. First, relevant literature is reviewed. Second, the study model is described. Third, the research

methodology is presented. Fourth, results of model and hypothesis testing are related. Next, implications for practice and further research are discussed, and finally, several conclusions are drawn.

THE LITERATURE

The effective use of consultants is an important concern for organizations of all sizes and for all sectors of the economy. Rehfuss (1979) presents a prescriptive discussion of the complexity of the consultant management process. Cartwright (1979), drawing upon the experiences of a city government's zero-based budgeting (ZBB) implementation project, focuses on the importance of flexibility in dealing with a consultant and emphasizes the role of monitoring as a management tool. Pattenaude (1979, pg. 203) said "too little attention has been paid to the effective management of this process which has characteristics which make it a unique activity, different from the management of permanent employees and programs." He suggests that in order to maximize the impact of the consultant, "each phase of the engagement has to be controlled and consciously managed by the client."

Client Involvement

While several researchers have suggested the importance of client involvement in consultant engagement (Churchman and Schainblatt 1965, 1967; Gable 1991; Gable and Sharp 1992; Kolb and Frohman 1970; Tilles 1961; Turner 1982), most of this work has been descriptive and exploratory and supported primarily by anecdotal evidence. Tilles maintains, that for consultant engagement to be successful, the process must be viewed as being directed toward the achievement of specific organizational results, "where the client accepts responsibility for direction of the process." Delone (1988) suggests that the involvement of external expertise is not a substitute for management involvement. Lees and Lees (1987) examined difficulties experienced by small businesses with implementing computer systems and observed that they often overestimate the impact of consultant and vendor support, or conversely, they underestimate the importance of their own role in achieving successful selection and implementation.

Research into the importance of user involvement in MIS has yielded mixed results (Barki and Hartwick 1989). One possible reason for these mixed results has been inattention to the intervening variable of relationships. As evidence, Gable (1991; Gable and Sharp 1992) found that client involvement does not have a direct effect on consultant engagement success, but that it has a large, positive indirect effect through client/consultant relations. These studies conclude that client involvement is a main antecedent of good client/consultant relations and that it is important to further disentangle these relations if they are indeed the main antecedent of successful consultant engagement. Gable echoes a call made two decades earlier by Lucas and Plimpton (1972) who, through a case study of consultant engagement experiences of the United Farm Workers Organizing Committee, concluded that "establishing and maintaining the relationship deserves equal attention to the task effort. The crucial components in this type of consulting are establishing a psychological contract, considering the consultant's impact on the organization, developing the client's capability to solve the problem, planning for termination, and developing trust based power."

The Theory of Planned Behavior

One theoretical model, which offers the potential to help explain and predict client involvement, is Fishbein and Ajzen's (1975; Ajzen and Fishbein 1980) theory of reasoned action (TRA). TRA posits that one's *intention* to act a certain way (e.g., the client's disposition toward being involved in the selection project) is derived from two general classes of factors, one personal and the other reflecting social influence. The personal factor is the individual's positive or negative evaluation of performing the behavior; this factor is termed the attitude toward the behavior. The second antecedent of intention is the person's perception of social pressures put on him or her to perform or not to perform the behavior in question; since it deals with perceived prescription, this factor is termed subjective norm. People will intend to perform a behavior when they evaluate it positively and when they believe that important others think they should perform it. Furthermore, barring the presence of external variables (e.g., ill-health), intention leads to action (behavior).

Ajzen and Madden (1986) propose an extension of TRA: the theory of planned behavior (TPB). The extended theory incorporates perceived control over behavioral achievement as a determinant of intention and behavior. They maintain that most behaviors are not entirely volitional (a key condition of TRA), the non-volitional nature of the behavior implying a certain lack of control. They suggest that behavioral control is best viewed on a continuum and that whenever control over the behavioral goal is incomplete, TRA, which relies on intention as the sole predictor of behavior, will be insufficient. Examples of factors which can

interfere with control over intended behavior, and which are internal to the individual, include skills, abilities, knowledge, and adequate planning. Examples of external factors are time, opportunity, and dependence of the behavior on the cooperation of others. In a study of college students, Ajzen and Madden found that TPB permitted more accurate prediction of attitude and behavior than did TRA. Mathieson et al. (2001) obtained similar results with their new construct of perceived resources.

THE STUDY MODEL

Figure 1 depicts the hypothesized model, including the predicted direction and sign of model paths. The model is an adaptation of TPB and reflects four main constructs: (1) client motivation (toward involvement); (2) consultant motivation (toward client involvement); (3) client perceived control over the process and their involvement (perceived behavioral control); and (4) client involvement. Client perceived behavioral control and consultant motivation are conceptually viewed in the diagram as key factors affecting the overall level of client control over their involvement. Independent of the perceptions of the client, the degree to which the consultant is motivated to involve the client not only affects the perceived control of the client, but should have a direct impact as well. Essentially, it suggests that the client's perception often is not a full and accurate representation and, therefore, does not necessarily mediate all antecedent factors—in this case the actions of the consultant. Finally, we also introduce initial conjectures that the consultant can moderate the impact of the client's motivation and perceived behavioral control on actual involvement. In these instances, the consultant is viewed as potentially enhancing or conversely degrading the impact of these two factors. For example, a client who is motivated to be involved in a process will be more strongly related to the actual behavioral results if the consultant is also favorably disposed. The three hypotheses implicit in the model are: H1–client involvement is higher the more positive the client's motivation toward being involved; H2–client involvement is higher the more positive the consultant's motivation toward client involvement; H3–client involvement is higher, the more perceived control the client has over the process; H4–consultant motivation moderates the impact of client involvement and client perceived control.

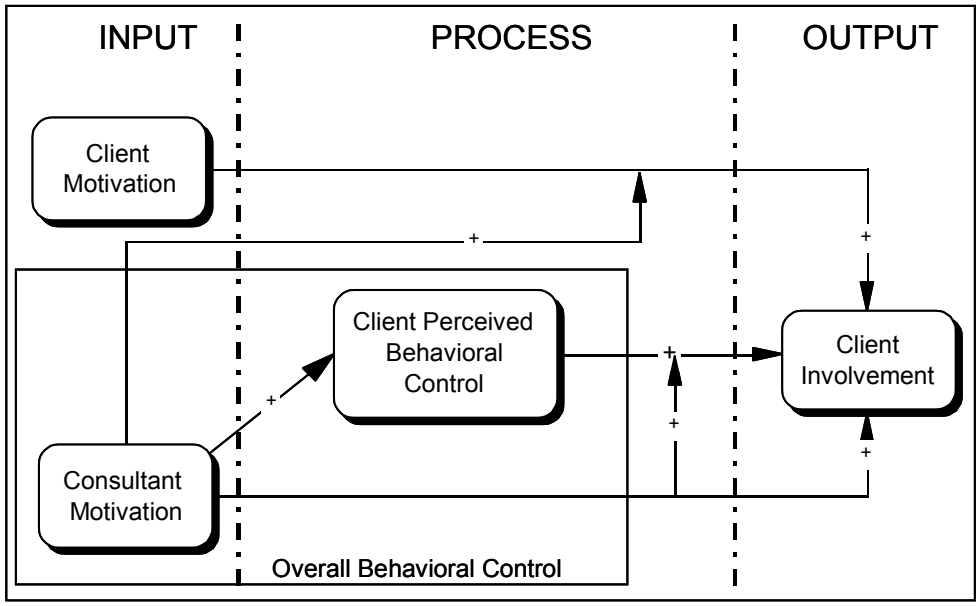

Figure 1. The Hypothesized Model

The model deviates from and extends TPB in several major respects. These variations include the derivation of a higher-order measure of motivation from TPB attitude and subjective norm constructs; the measurement of involvement (the behavior) rather than intention as the main dependent variable; and a *post hoc* measure of perceived behavioral control. Finally, recognizing the potential power of the consultant to facilitate or block client involvement, a further variation is the inclusion of the consultant's motivation to involve the client (i.e., the second actor) as an additional factor represent behavioral control over and above the perceptions of the client. Each of these variations is discussed next.

Higher-order Factor of Intrinsic Motivation: An Integration of Attitude and Subjective Norm

Consistent with the aim of TPB, this study is focused on the role of control over client involvement. Primary interest thus lies not in the relative impact of attitude vs. subjective norm on behavior (the subject of much prior testing of TRA), but the client's expressed level of control and the observed relative control of the client versus the consultant. With a view toward parsimony and our desire to focus on the issue of control, and in light of evidence illustrating the extent to which attitude and subjective norm overlap, we have conceptually and operationally combined attitude and subjective norm to yield a single higher-order measure of intrinsic motivation (for both the client and the consultant). In some sense, one can characterize this approach as a surrogate for intention, which we opted to forgo in lieu of actual behavior, to be discussed next.

Behavior Rather than Intention as the Dependent Variable

Given the cross-sectional design, and in order to maximize the predictive power of the model, the dependent variable is a measure of the actual behavior rather than client intention. Szajna (1994) suggests that self reported measures of intention suffer from common-method bias. This problem is particularly acute where intention is measured at the same time as its antecedents. Szajna concluded that, "choice behavior is a stronger measure of intentions than subject reported intentions because…intentions are merely a self-report on the potential for future behavior." Further, in the current study, having the behavior as the dependent variable also allows us to include consultant attitude as an antecedent (which otherwise becomes logically problematic if consultant attitude is used as an antecedent of client intention).

Taylor and Todd (1995) suggest that "pragmatically, the inclusion of intention is found to increase the predictive power of models such as TRA, TPB and TAM…relative to models that do not include intention." Davis et al (1989) observe that many studies have found that both TAM and TRA predict behavioral intention well, but yield much weaker predictions of self-reported behavior. Thus excluding intention, one would expect weaker results. Where strong results are observed, without intention explicitly measured, we should be reassured of the predictive value of the antecedents.

Post hoc Measure of Control

A major difference between the control construct in our model and Ajzen and Madden's (1986) measure of perceived behavioral control, is the timing of measurement. They measure perceived control at the beginning of the process. Here, control is measured after the process at the same time that the behavior is measured. It is for this reason that control is considered a "process" rather than an "input" construct in the model. While Ajzen and Madden's approach is more practical for prediction purposes, the approach used here is expected to yield a more accurate measure for theory and model testing, as the respondent speaks from experience regarding their actual behavioral control abilities. This measure is still labeled as perceived behavioral control to reflect the self-report nature from the respondent in contrast to potential alternate quantitative measures of actual control behavior.

Consultant Attitude Toward Client Involvement (A Second Actor)

Perhaps the main, and most interesting, extension to TRA/TPB in the model is the inclusion of a second actor. The inclusion of consultant motivation as well as client motivation represents a two-actor adaptation of TPB, implicitly reflecting the non-volitional nature of the behavior and the predicted influence of the consultant. No known prior research has addressed the potential for including multiple actors in a TRA or TPB model.

In the "two-actor" model, both the client's own motivation to be involved and the consultant's motivation to involve the client are posited to have significant influence on the level of client involvement. In this sense, the forces or "potential outcomes" influencing client involvement can be usefully considered in terms of those that affect the client and those that affect the consultant. Examples of potential outcomes that may encourage the client to be involved are: (1) positive recognition of project effort and results from senior management; (2) becoming more marketable as a result of the project experience; and (3) playing a significant role in future computerization in the firm. Examples of potential outcomes that may discourage client involvement are: (1) getting fired, perhaps as a result of a failed computerization project; (2) working overtime due to the additional demands of the computerization project; and (3) the loss of other (preferred) responsibilities due to a lack of time to attend to them. It should be noted that whether or not a particular outcome is considered good or bad is a personal judgment.

On a consultant engagement, the client may decide in advance to maximize or minimize his or her own involvement and behave accordingly. Yet, the client's level of actual involvement may be significantly influenced by the consultant's behavior as well. The consultant may endeavor to either encourage or discourage client involvement through a variety of means. As with the client, the consultant is also subject to influences that either encourage or discourage their facilitating client involvement in the engagement. Examples of potential outcomes that encourage the consultant to involve the client are: (1) the client assumes greater responsibility for certain project tasks, thus reducing the consultant's effort on those tasks; (2) the client assumes greater responsibility for the project outcome, thus reducing the risk of consultant failure; (3) the consultant spends less time educating the client on the results; and (4) the client is in a better position to assume responsibility for the project once the consultant has withdrawn. Examples of potential outcomes that may discourage the consultant from involving the client are: (1) spending more time educating the client on the process; (2) the client becoming more acutely aware of consultant limitations; and (3) client dissatisfaction with recommendations because they have a greater awareness of market offerings. Again, it should be noted that whether or not a particular outcome is good or bad is a personal judgment. "The client being in a better position to assess consultant performance" may be an outcome the confident consultant welcomes, but which the diffident consultant would avoid.

THE RESEARCH METHODOLOGY

The Research Design

The research design includes, first, a pilot case study; second, a cross-case analysis of five firms (Gable 1991); third, specification of the *a priori* model; and finally, analysis of survey data on 71 computer system selection projects (Gable 1991, 1994; Gable and Sharp 1992).

The Study Unit of Analysis

The study unit of analysis is the computer system selection project. Reasons for focusing the research on the selection project are several. In practice, the consultant is often engaged to assist with computer system selection only. Less than half the study sample retained the consultant during implementation. Also, it is important to assess selection success prior to commencing installation in order to decide whether to proceed, how to proceed (e.g., planning implementation strategy), and whether to retain the consultant further (e.g., to project manage implementation).

The Survey Sample

Firms studied are registered clients of the Local Enterprise Computerization Program (LECP).[1] The LECP is a Singapore Government Program to encourage and assist local businesses to become more competitive through the adoption of information technology (Gable and Raman 1992). All LECP projects involve two main players: (1) the client project manager and (2) the client's chosen consultant. The consultant's role is to conduct feasibility and system studies, to develop system specifications, to evaluate and select a software house, and (optionally) to supervise implementation. The definition of a consultant is implicit in the LECP minimum registration criteria. The consultant must have: (1) a tertiary or professional qualification in an IT related field; (2) a minimum of eight years work experience in executing or managing feasibility studies, or in planning, analysis, design, development, or implementation of information systems; and (3) detailed references for at least three recent consulting projects in these experience areas. The consulting team may include but may not be limited to junior consultants with a minimum of three years relevant work experience, and who satisfy the other two criteria.

Questionnaires were mailed to 85 clients who had "completed" selection. Thirty-nine consultants were also canvassed in the main survey.[2] Appendices A, B, and C include details of relevant input, process, and output items from the client and consultant

[1]Previously known as the Small Enterprise Computerisation Program (SECP).

[2]Approximately half of the projects were handled by "big 6" consulting companies (the world's then six largest audit/consulting firms, including Arthur Andersen & Co., Coopers & Lybrand Associates Pte. Ltd., Deloitte Haskins + Sells, Ernst & Young Consultants Pte. Ltd., and Price Waterhouse).

instruments. "Completed" client response to the survey was 83% (71 of 85 clients who had completed selection).[3] Thirty-two consultants, representing 21 consulting companies, responded regarding their involvement in the selection projects.

Operationalization of Model Constructs

A single process construct, control, is included in the study model (Figure 1) and is derived from the two client instrument items, C3 and C4. C3 directly measures the amount of control the client had over the consultant's services. C4, a multiple response item, was converted into a dichotomous variable, Barriers, where 0 indicates no barriers to client involvement existed and 1 indicates there were barriers. Broadly, this definition of control conforms to that implied in TPB: both items are proxy measures of actual control over circumstances surrounding the behavior of interest.

Five items were included in the instruments to measure client involvement; two from the client perspective (C1, C2), and three from the consultant perspective (N1, N2, N3).

Client and consultant attitude and subjective norm are measured as prescribed in TRA (Fishbein and Ajzen 1975). Clients were requested to score 11 normative or modal outcomes of their involvement in the selection project (Appendix C.1), first using a –3 to +3 goodness/badness scale, and second using a +7 to +1 likely/unlikely scale. Cross multiplying the two sets of scores yields 11 attitude indices. Summing the indices yields an expected utility index of the client's attitude toward their involvement in the project. The client's subjective norm was computed similarly, on the basis of client responses to a normative list of five significant referents (C.2). Consultants were asked to rate 16 possible outcomes of them involving the client (C.3) and six potentially significant referents (C.4). The consultant's attitude and subjective norm were computed as for the client.[4]

MODEL AND HYPOTHESIS TESTING

The hypothesized model was tested using partial least squares. Tests for path significance were made using bootstrapping with 500 re-samples. The PLS procedure (Wold 1982) has been gaining interest and use among researchers in recent years because of its ability to model latent constructs under conditions of non-normality and small to medium sample sizes (Chin 1998; Chin and Gopal 1995; Chin and Newsted 1998). It allows one to both specify the relationships among the conceptual factors of interest and the measures underlying each construct, resulting in a simultaneous analysis of (1) how well the measures relate to each construct and (2) whether the hypothesized relationships at the theoretical level are empirically true. This ability to include multiple measures for each construct also provides more accurate estimates of the paths among constructs, which is typically biased downward by measurement error when using techniques such as multiple regression. Furthermore, due to the formative nature of some of the measures used and non-normality of the data, LISREL analysis was not appropriate (Chin and Gopal 1995). Thus, we chose PLS-Graph version 3.00 (Chin 2001) to perform the analysis following the analytical procedures outlined by Chin et al. (1996). Due to page limitations and our desire to present a reasonable description of the theory and prior research, we opted to put less emphasis on the methodological details of the analyses and thus are unable to fully explicate the methodology or results.[5] In general, it should be noted that the PLS algorithm is designed to optimally combine scale measurement items for predictive purposes. We point out that the TRA/TPB approach consists of summing individual items to form overall indices such as belief or evaluation or subjective norm constructs that are then applied in a path analytic model typically using multiple regression. The PLS algorithm follows a similar approach, but rather than equally summing the items, it optimally weights each set of items based on the path model. Thus, the results we obtained should be never worse than if we followed the standard procedure as outlined by Fisbhein and Ajzen (1975).

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[3]In addition to being the registered LECP project contact, client respondents are generally senior or middle management (87% of the total) and often owner-managers.

[4]Reliability testing of the indices yielded Cronbach's alphas of .70, .86, .85, and .83 for client attitude, client subjective norm, consultant attitude, and consultant subjective norm, respectively.

[5]Those wishing to understand the process for assessing interaction effects using PLS are encouraged to read the Chin, Marcolin, and Newsted (1996) paper.

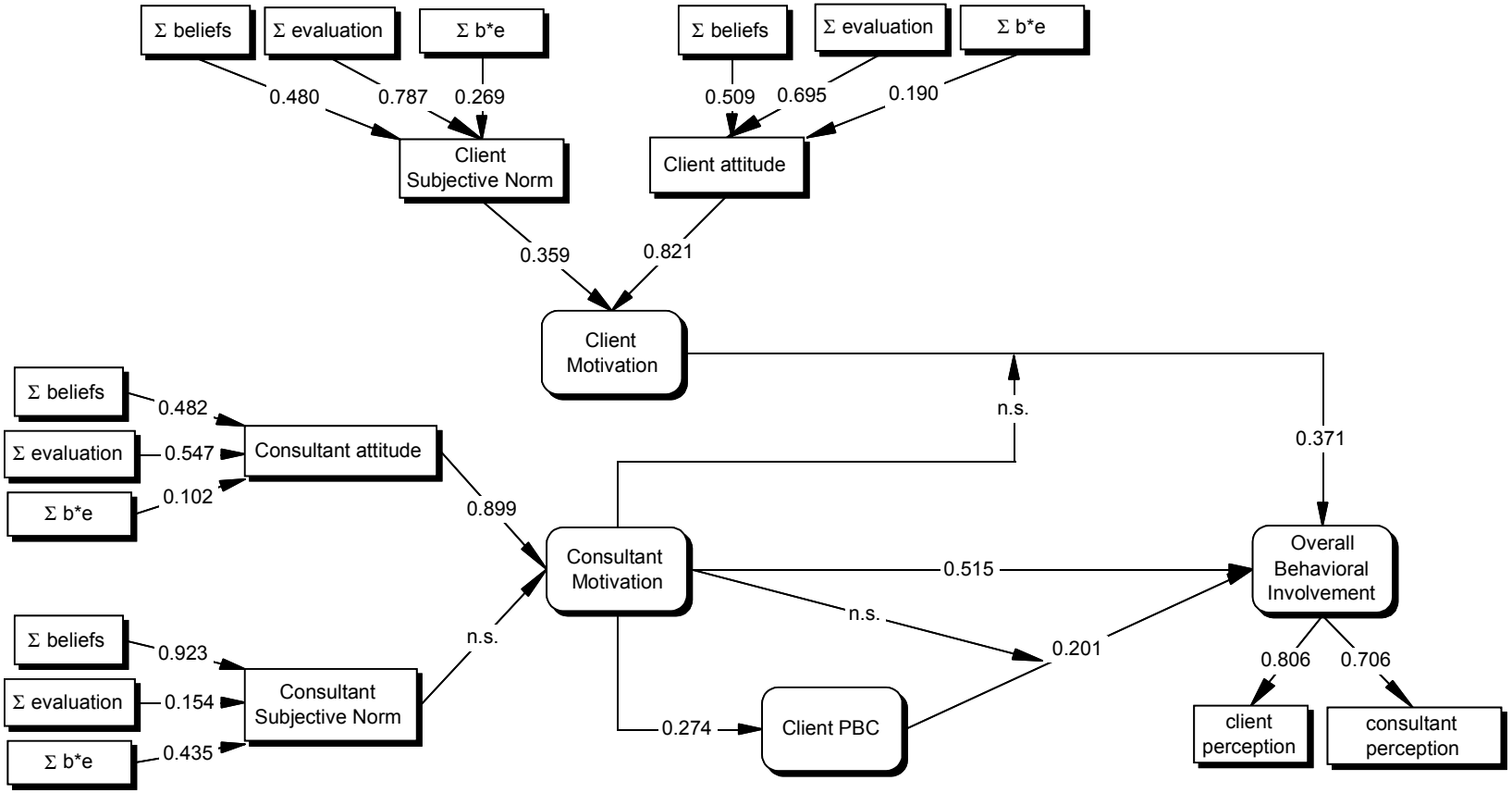

Figure 2. PLS Results for Two Actor Model

The results as shown in Figure 2 indicate that both the client's and consultant's perception of the level of involvement is consistent as evidenced by the substantive convergent loadings of 0.806 and 0.706. What is revealing is the relative impact of the factors on the level of involvement. We find that consultant motivation has the largest impact with a standardized beta of 0.515 followed by the client's motivation and the client's perceived behavioral control at 0.371 and 0.201 respectively. The overall R-square based on these three factors is 0.593. Contrary to our initial hypotheses, we found no moderating effects based on the consultant's motivation. But the consultant was found to have an impact on the client's perceived behavioral control, thus demonstrating an indirect effect on involvement as well as the direct effect.

Also consistent with prior TRA/TPB based IT studies (e.g., Taylor and Todd 1995), we found the attitude component to have a more significant impact than subjective norm on overall motivation. For clients, the attitude was over twice as strong with a path of 0.821 versus 0.359 for subjective norm. In the case of the consultant, subjective norm was not found to have a significant impact and is primarily motivated by his or her attitude. It may well be that the frequency in which important referents expressed a desire for the consultant to involve the client was low. Intuitively, one might expect referents to primarily target the consultant on design goals and doing an overall good job as opposed to a step removed emphasizes that the consultant does a good job involving the client. If the frequency was indeed low, the concreteness or confidence of the consultant's assessment of subjective norm becomes lower, thereby resulting in less impact. Finally, the summed belief items and their evaluations are found to have direct impact in the formation of each of the key antecedent factors (attitude and subjective norm). Furthermore, three out of the four interaction indices (i.e., Σ b*e) show a moderate interaction effect. In the case of consultant subjective norm, the interaction was much stronger at 0.435.[6]

DISCUSSION

The results of this study suggest several implications for further research. The observed importance of control in explaining and predicting involvement lends further support to Ajzen and Madden's (1986) theory of planned behavior. Given the large observed direct effect of control on involvement, further study of this construct and its influence on involvement is warranted.

The study also represents the first known attempt to extend TPB or TRA to include multiple actors. The findings underline the importance of significant others in a dynamic sense, rather than solely as referents whose views are perceived as being important (i.e., through subjective norms). Further study of multiple-actor TPB models in other contexts is suggested. It is interesting that in the test model, we have both de-emphasized significant referents through combining attitude and subjective norm, while at the same time elevating one significant referent—the consultant—to the status of second actor in the model. Though seemingly contradictory this is in essence consistent. It suggests that clients do not have full control and may be unaware that they do not have full control. It is due to this ignorance of the true views of significant others that subjective norm may fail to discriminate between attitude and the influence of others.

We should note that our primary emphasis is on the direct and contingent effects on behavioral involvement. To support both clarity and brevity in this paper, indirect effects of consultant motivation and perceived behavioral control on behavioral involvement through client motivation were not estimated. Methodologically, estimating these effects would not change the direct path estimates we obtained going into involvement. But the point certainly can be made that these indirect paths may indeed exist and they represent additional analysis on our part in the future.

Gable (1991; Gable and Sharp 1992) has demonstrated the value of client involvement to good client/consultant relations and, ultimately, successful consultant engagement. Results reported in this paper suggest that client involvement can also be viewed as partly non-volitional and, therefore, must be facilitated. Our two-actor TPB model demonstrates the significant and substantial influence of the consultant on client involvement beyond what is factored in by the clients themselves. The results suggests that clients should develop an appreciation of the ways in which a consultant may consciously or unconsciously exclude or include them in the project and respond accordingly. Consultants, who appreciate the importance of client involvement for success, will take steps to facilitate constructive and close client involvement in the project. Facilitating steps might include: (1) incorporating in the proposal a clear statement of the agreed client role; (2) deferring major project decisions to the client; (3) facilitating client

[6]We should note that we are able to interpret the paths of the interaction effects as opposed to performing a R-square effects test due to the fact that the PLS algorithm and procedure we employed standardizes each construct and allows for the change in R-square to be approximately equivalent to the square of the interaction path.

presence at regular and substantive project review sessions; and (4) providing the client with regular, timely and thorough project documentation.

Awareness of negative actions the consultant might take is also important. Noted examples, based on previous case studies, to discourage client involvement include: (1) minimizing project documentation, thus making it more difficult for the client to appreciate and be involved in project details; (2) failing to invite the client to information exchanges (e.g., interviews, meetings, demonstrations, etc.) or giving the client little advance notice of such, making it difficult for the client to attend and participate; and (3) presenting only the minimum information necessary at project reviews. Alternatively, the consultant might simply not take any of the measures that would facilitate client involvement, thereby inhibiting client involvement through inaction.

The importance of the client's motivation to be involved in the project was identified. Early assessment may reveal instances of poor client motivation, suggesting the wrong person has been selected to represent the firm's interests on the project. Choosing a staff with a vested interest in the outcome, possibly a staff who will have an integral role in the ongoing management of the systems being implemented, should insure a higher level of positive attitude. Indirect measures of beliefs and attitude (and thus motivation) may yield a more objective result in practice than a direct measure of intention. Items in Appendix C can be adapted for this purpose.

Client involvement will be higher where the client has control over the process and their involvement. Where the firm is inadequately prepared for computerization or inadequate resources are made available to the selection project, client control is reduced. Potential consultant influence on client control and involvement was discussed above. Other less predictable influences on the actual level of client control and involvement include illness, catastrophe, and sudden major changes in the business or its environment. While the firm can do less to prepare for these latter contingencies, the client can attempt to monitor and proactively influence previously mentioned consultant activities, which can block or facilitate client involvement.

CONCLUSION

Although the study suffers in several significant areas due to the ostensibly cross-sectional nature of the data and small sample size, compensating evidence and the strength and robustness of final model relationships offer strong support for further research in the direction taken. As the hypothesized model reflects several variations from established theory, each of these variations is tested and the relative explanatory power assessed, thereby lending further credibility to the final model. The study has demonstrated the explanatory and predictive value of the consultant's attitude toward involving the client, and the level of client control over the process. The findings highlight the non-volitional nature of client involvement and the power of the consultant to block or facilitate that involvement. Client attitude alone has relatively low predictive power. Where the client seeks to have a significant involvement in the project, it is important that they monitor the process, and consciously adjust activities and mechanisms that can influence the level of their involvement. Consultants who appreciate the value of client involvement, and who are not intimidated by it, can do the same.

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Appendix A
Items from the Client Instrument

Client Report on Involvement – using the 1 to 7 scale shown, please indicate your views by scoring EACH OF THE FOLLOWING STATEMENTS relating to your interactions with the consultant.		
C1	How do you rate your participation in the selection project?	Sufficient/Insufficient
C2	How would you rate the amount of your involvement in the selection project?	Substantial/Minimal
Client Perceived Behavioral Control		
C3	How much personal control did you have over the consultant's services?	High/Low
C4	Were there any circumstances over which you had little control, which resulted in your reduced involvement in the computer system selection project? (circle more than one if appropriate)	1) Ill-health 2) I joined the project in the middle 3) Senior management revised my role on the project 3) Other_____

Appendix B
Items from the Consultant Instrument

Consultant Report on Client Involvement – using the 1 to 7 scales shown, please indicate your views by scoring EACH OF THE FOLLOWING STATEMENTS relating to your interactions with the client.		
N1	How do you rate the client's participation in the selection project?	Sufficient/Insufficient
N2	How would you rate the amount of the client's involvement in the selection project?	Substantial/Minimal
N3	Compared to other similar projects, how would you rate the amount of the client's involvement in the project?	Substantial/Minimal

Appendix C
TRA Questionnaire Items

C.1 – CLIENT: Potential Belief Outcomes of Involvement
a) My being better able to manage the computer installation once implemented
b) My becoming more marketable
c) My working overtime
d) Negative recognition of my efforts from my superiors in the firm (e.g. demotion, pay cut, getting fired, etc.)
e) My being closely associated with a successful project
f) My playing a more significant role in future computerization in the firm
g) My undertaking tasks the consultant should be doing
h) The transfer to others in the firm of responsibilities that were mine
i) My other responsibilities suffering
j) My being extremely frustrated by the whole stressful experience
k) Positive recognition of my efforts from superiors in the firm (e.g. promotion, pay increase, etc.)
C.2 – CLIENT: Significant Referents
a) Senior management of your firm
b) Your co-workers
c) The LECP (Advisor and administration)
d) The hardware/software vendor
e) The managing consultant
C.3 – CONSULTANT: Potential Belief Outcomes of Involving the Client
a) Client assumes greater responsibility for the project outcomes
b) Client is better able to assess my/our work
c) Client is better able to identify problems with project progress
d) Client demands additional work of me/us beyond the scope of the proposal
e) I/we spend more time educating the client on the selection process and our methods
f) The client has a better knowledge of market offerings, and thus seeks the optimum rather than a satisfactory solution
g) The client, having a better appreciation of our effort and expertise, is more satisfied with our work
h) The client exercises greater control over the project
i) The project goes over our dollar or time budget
j) We gain good access to inside information on the organization
k) The client assumes responsibility for additional tasks
l) The client facilitates decision making within the client firm and thus expedites the project
m) The client forces through preconceived ideas (e.g. has a vested interest in a preconceived hardware/software solution)
n) The client, having been closely involved, feels they can do it themselves next time
o) My/our authority and expertise is undermined, making it more difficult to get acceptance of recommendations
p) The project is more difficult to coordinate because the client has a direct say in lower level decisions
C.4 – CONSULTANT: Significant Referents
a) Senior management of your firm
b) Your co-workers on the project
c) The LECP (Advisor and administration)
d) Senior management of the client firm
e) The managing client (with whom you worked most closely)
f) The vendors