Modeling on Intention to Increase BPO of Venture

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Abstract
With the increasing importance of BPO for sustainable growth of small venture business, BPO theories have been developed over the past several decades. This study was designed to examine the contextual factors affecting the managerial attitudes towards the BPO of small venture business, as well as the intentions to increase its level. The findings suggest that cost saving was not the primary ingredient positively affecting the attitude towards BPO. However, both specialized resources and quality improvement had a positive relationship with the attitude towards BPO. Finally, this study identified that a positive attitude towards BPO positively affects the intention to increase the level of BPO. This study implies that the survival and success of small venture firms necessitates that they utilize BPO effectively and efficiently in today's highly globalized and severely competitive environments.

Keywords : Attitude towards BPO, BPO(Business Process Outsourcing), Core Competence, Cost Reduction, Intention to increase the level of BPO, Quality Improvement, Specialized Resources.

1. Introduction
In recent years, business process outsourcing (BPO) has been adopted as a prevailing business practices by various types firm across the world, while it is emerging one of the fast growing domains in outsourcing market[1]. As firms search for ways to grow and sustain competitive advantage, outsourcing has been spotlighted as a key strategy[2,3]. This is the reason why reliance on external service provider has become a critical strategic element for enhancement of a firm's flexibility and management of some or all of
the components of a firm’s business process. Outsourcing takes place as a firm subcontracts a part of business function or business process to an outside supplier, in which then this vendor takes responsibility for delivery of the products and services that was supposed to produce within the firm[4]. This wave of business process outsourcing is relatively new and different from the practice of traditional outsourcing in the aspect that it brings change in the high-paying white collar job market where used to be secured its position from the threats of outsourcing[5].

The outsourcing approach can be tactical or strategic. Strategic outsourcing approach seeks business improvement as well as competitive edge rather than merely cutting the cost. Meanwhile, tactical outsourcing approach looks for a short-term approach in order to gain minimal operating costs or maximum productivity out of daily operation[6]. Outsourcing has been developed within three types; manufacturing outsourcing, information technology outsourcing, and business process outsourcing (BPO)[7]. Manufacturing outsourcing indicates the production of a part, component or service by third party based on contract. IT outsourcing indicates outsourcing IT resources including IT processes[8]. BPO is the latest type of outsourcing in that service provider assumes the responsibility for a certain business process; human resource or financial management[7]. There are three levels of outsourcing available in the literature; tactical, strategic and transformational[9]. Tactical outsourcing is relevant for solving short term and regular problems of a firm[10]. Strategic outsourcing is associated with a firm’s core capabilities and organizational structure in the future, cost control, performance and competitive advantage[11]. And, transformational outsourcing means a long-term relationship between the service provider and the client firm for continuous business change as well as attaining operational effectiveness[9].

In BPO literature, relational aspects of outsourcing have been studied in wide-ranged dimensions covering context, contract, structure, governance, interaction, capabilities, and even behaviour[12,13]. Another study by[14] focused on duration of relationship along with a single supplier including the relevant factors influencing on information technology outsourcing(ITO).

However, the antecedents of the BPO decisions have still ambiguous area, and so need to be thoroughly investigated[15]. Furthermore, it is also rare to find the research addressing the key factors affecting BPO decision making process and the intention to increase the level of BPO in domestic studies. As an exploratory research, this study aims at getting better understanding on contextual factors affecting the intention of the client firms to increase the level of BPO, because increasing the BPO combined with repetitive outsourcing contract can be beneficial for the client firms and the service providers in terms of the mid and long term strategic perspective. This research also propose a conceptual model by adopting several core variables on the basis of key theoretical perspectives which may impact on the decision making process for increasing BPO level, modifying the suggested model by[16]. The proposed research model is tested using the data from the sample focused on the personnel of managerial position of venture firms across the country by questionnaire survey method.

2. Literature Review and Hypotheses

2.1 BPO (Business Process Outsourcing)

Business process is defined as a set of coordinated business activities that enables firm to accomplish a specific business goal[17]. Also, [18] depicted it as an integrated sequence of activities that take place over time aiming at improvement of a firm’s performance. Specifically, [19] defined BPO as delegation of a part of IT business process to an outside service provider who possesses, manages and operates the process on the basis of measurable and well-defined set of performance.

[20] introduced the Boos Allen framework that helps
firms avoid risks of strategic outsourcing in making decision and implementing. Along with the guidelines, this framework indicates six steps such as 1) identify strategic priority including risk and evaluate functions, 2) consider market, 3) analyze internal capabilities versus external capabilities, 4) evaluate economic situation, 5) secure an ability to manage the supplier, 6) have ability to manage new processes.

Since BPO has become more permeated, the need for managing a long-term outsourcing relationships has become crucial issue for the client firm and the service provider as well[21]. Outsourcing has evolved beyond simple reconstructing peripheral processes and managing technical infrastructure in the past 15 years[22]. In this approach, BPO has become an effective means to transform business practice to attain sustainable improvement in value chain as well as competitive performance, rather than a simple contracting method[23]. Currently, it encloses even a certain strategic process that used to be a key part of in-house function[24].

There have been huge scholastic effort to identify the elements influencing the outsourcing decision. Above all, transaction cost economics[25] and the resource-based view[26] provide solid theoretical background for the outsourcing decision. These theories have been examined and extended through empirical studies[27,28]. Prior literatures classified three driving factors for outsourcing decision such as 1) economic, 2) strategic, 3) technological reasons [21,29]. "Economic" reason, one of the most important driver in BPO decision is known to be associated with anticipation of cost reduction.[30,31,32,33,34]. Regarding the "strategic" reason, focusing on core competence by divesting non-core domain is frequently mentioned[35,36,34,28], and demand for more flexible business support in the era of rapid change[37,38]. As "Technological" reason, firms tend to anticipate approaching to new technology and skilled experts through outsourcing of specialized service providers[30].

2.2 Attitude towards BPO

There has been general agreement on the attitude; a brief assessment of a psychological object caught in such attribute levels as good - bad, likable - dislikable, and harmful - beneficial[41]. Attitude is defined as linkage in memory between objects and assessment of the objects[42].

[43]suggested that people form an attitude toward executing a given behavior under firm beliefs that executing such behavior would not only result in a certain consequence, but also normative beliefs as to the behavior. Thus, behavioral intention derives from attitudes and then becomes as the immediate determinant of the behavior as follows; Beliefs → Attitudes → Intentions → Behavior[43]. Meanwhile, theory of planned behavior[44] indicates that people act in line with their intentions and perceptions of controlling the behavior. Theory of reasoned action[40] suggested the beliefs about the outcome (perceived benefits) make people shape their attitudes toward performing a behaviour in between the attitude and the intention. Attitude, subsequently, influences intention to execute the behaviour and, in the end, affects the behaviour itself[45]. Thus, a positive attitude would result in positive intention of managerial decision making process[46].

In this study, we define the attitude towards BPO as a general evaluative assessment by a managerial person who is responsible for a specific business process, aiming at outsourcing such process from a outside service provider, in line with theory of reasoned action.

2.3 Cost saving

In neoclassical economies view, all firms as a 'production function' are motivated by profit-maximization[48]. Thus, firms supply products and services to the market in which they have cost advantages. Neoclassical economies estimates that firms justify outsourcing options on the basis of production economies. In production economies, obtaining goods and services is regarded as a
make-or-buy decision, which compares production costs by internal operations to the price offered by outsider in the marketplace[49]. So, a firm would make a choice of outsource or insource comparing the internal costs against the external costs for the same services by outside vendors[50]. A notable study by[29] provides a clear explanation on this issue. The authors suggested a research model that depicted the determinants of a firm's motivation to outsource IS activities; the lower IS and business competence, the more IS outsourcing activities.

Previous studies suggest, for example, that IS outsourcing decision is largely relying on reducing production cost. Namely, outsourcing is beneficial to the client firms by means of transforming fixed cost into variable costs, enforcing cost transparency and programmability as well[52].

Thus, it is very likely that key managers of the firm would highly evaluate the economic value from cost reduction by undertaking BPO, and in return, this will have managers form a positive attitude on BPO. Based on the discussion and suggestions from prior studies, we argue that:

\[ H1. \textit{Estimated cost saving from BPO would influence positively the managerial attitude towards BPO.} \]

2.4 Specialized resources

Firm resources refers to all sorts of assets, information, knowledge, capabilities, organizational processes, firm attributes that are under control of a firm, enabling the firm to create and implement strategy for improving efficiency and effectiveness[53]. [54]classified a firm's resources into three categories absed on the literature: 1) physical capital resources[55], 2) human capital resources[56], and 3) organizational capital resources[57]. Physical capital resources indicates those such as physical technology owned by a firm, plant and equipment, the geographic location, and ability to access to raw materials. [58]depicted human capital as the productive capacities of human beings as income-producing agents in an economy. Finally, organizational capital resources include a firm's formal structure including reporting channel, formal and informal planning ability, coordinating, controlling, and informal relations among team members both inside and outside of a firm. [59]outlined resources are both tangible and intangible assets belonged to a firm in a half-permanent way, while capability is related to attaining different activities based on the available resources. Competence means the integration of firm-specific assets into clusters that enable members to perform distinctive abilities[60].

Micro-firms encounter 'resource poverty' easily, that pushes them under financial, severe time and expertise constraints[61]. Lack of internal resource results in vulnerability of micro-firms and work negatively as an impediment[62]. In practical, it is not likely that micro-firms have enough resources to employ specialists[63]. Therefore, accessing to specialized resources can be a critical benefit to small venture business. Obviously, BPO suppliers are specialized vendors in providing a specific set of outsourcing services to their client firms[64].

Thus, it is predictable that accessing specialized resources will influence positively the attitude of small venture business members. Accordingly, it is hypothesized:

\[ H2. \textit{The access to specialized resources by means of BPO would influence positively the managerial overall attitude towards BPO.} \]

2.5 Quality improvement

Quality is normally defined as fitness for usage or conformance with specification, and the final measure of quality of products or services depend on customer expectation[65]. The idea of meeting beyond customer expectations has constructed the foundation of quality-driven policy of all business organizations[66]. On the contrary, adverse impact derived from poor quality such as responsiveness, cost, and delivery or
seeking solutions for quality problem by customer afterward can be weakened quality image of a firm[67]. Thus, quality is the base where customer satisfaction is built on. It is widely agreed that quality is vital and all firms should have quality management and improvement program in place[68]. Meanwhile, the idea of high quality is high cost is no longer true. Lots of market survey results showed that profit is positively correlating with quality, whatever market size is. In terms of increased market share, quality is much more important especially when market expansion rate is low[69].

Accordingly, it should be vital for small venture business to have well-designed quality management program in place. As to quality improvement, the literature shows why firms keep outsourcing some processes of their business[70,71,72]. It is certain that firms also expect the BPO supplier to provide a consistent quality for process improvements[73].

From the discussion above on the basis of prior studies, it is inferable that small venture firms would take advantage of quality improvement by BPO service, especially when they experience shortage of specialized resources to implement this mission properly. So, it is hypothesized that;

\textit{H3. The anticipation of realizing quality improvements through BPO positively influences the managerial attitude towards BPO.}

2.6 Intention to increase the level of BPO

Intention is defined as a state of mind that emphasizes the attention, experience, behavior of a person toward a particular object or way of behaving[39]. Within the context of entrepreneurial process, [39]argued that entrepreneurial intention regulates crucial strategic thinking and decisions. This thought process plays a critical role in creating solid business plans, analysing opportunity, and goal-oriented behavior. Consequently, a strong relationship forms between the intention to execute a certain behavior and the real execution of that behavior.

In line with the suggestion by[16], the intention to increase the level of BPO is defined as managerial willingness to support outsourcing of the specific business process. And this intention is going to be used as a final dependent variable in this study. [16]found that a number of executives have already undertaken outsourcing service for a minor business process, and he delineated that the increase of the level of BPO is a sort of thing chosen intentionally.

Predicting an actual outcome is not easy when the intended behaviour is used because of the possible changes of influential element at the time between forming an intention and executing actual behavior[40]. [47]found positive relation between attitude and intention. [16]also argued managerial attitude towards BPO has a positive relationship with the intention for increasing BPO level.

From the discussion above, it is arguable that positive managerial attitude towards BPO would influence positively the intention for increasing the level of BPO.

\textit{H4. The managerial positive attitude towards BPO would influences the intention to increase the level of BPO.}

3. Methodology

3.1 Research Framework and Analysis Method

The research design composed of a questionnaire targeting personnels in managerial position of small and venture business. In order to explore the causality between the factors affecting BPO attitude and ultimately the intention to increase BPO, this study adopted the model suggested by[16] and modified it properly for the purpose of this study. The model showed in Figure 1. was examined for the established hypotheses. The data analysis was processed using SPSS version PASW Statistic 18.
3.2 Variables & Measurements

Survey method was used as a data collection in this study. Development of the instrument consisted of the literature review to identify the measures for each variable. Previous researches in BPO domain were fully reviewed so as to specify all the variables including measurements whichever applicable. Thus, each construct was adapted out of prior validated scales and then a little modifications were made to fit into the setting with the purpose of this study. Finally, the initial survey questionnaire was generated with the verification process of those identified items. It included all the measures considered pertinent to this research, as well as demographic information of the respondent firms. In order to assess the accuracy of the terminology used the questionnaire, two professors in domestic business school and another two doctorial candidates whose study focus on ITO and BPO had detailed review process. Before conducting a full survey, we ran a pilot test focused on in-depth interviews with three top managers in small venture business that have undertaken BPO for several years. Interviews through face-to-face were particularly instrumental in terms of capturing relations among key constructs. The initial step towards a survey-based research by conducting face-to-face interviews with top managers has a merit of gaining sound qualitative evidence as to the content validity of the key variables. The final step of the interviews included that each interviewee was asked to fill out the questionnaire. A few rewording were made for a clear understanding of several question items based on the comments from the interviewee. However, no substantial changes were made to the measures in the questionnaire.

All items were measured with a 5-point Likert-type scale from 1(strongly disagree) to 5(strongly agree), unless stated otherwise. Each measure with multiple items was averaged to form an overall score based on the responses per each item so that higher score means a higher standing of the measure.

3.2.1 Attitude towards BPO

we have referred to the study of [47] in the IS area for the construct of attitude towards BPO, who suggested positive causality between attitude and intention, and [16] who outlined that managerial attitude towards BPO has influenced the intention for increasing BPO level positively. The attitude towards BPO is defined in this study as overall evaluative stance by a manager who is responsible for a specific business process in order to get BPO services from external providers. Measuring items included; 'My belief on BPO service is very affirmative', 'BPO is an attractive alternative, replacing a part of internal process under direct operation', 'BPO provides us huge additional values in general'.

3.2.2 Cost saving

Cost saving was referred to the study of [50] that suggested a corporate would choose IS outsourcing by comparing the internal costs of IS to the external costs by outside suppliers. Also this construct adapted a study of [51] outlined that outsourcing can be beneficial to the client firms by means of transforming fixed cost into variable costs. We defined cost saving as the reduction of cost by using BPO including the items such as 'BPO reduces the cost incurred by internal operation', 'BPO works favorably as it allows converting variable cost into fixed cost', 'BPO increases economic efficiency of a firm in general'.

3.2.3 Specialized resources

Specialized resources is defined as a specific set of outsourcing services being provided by BPO suppliers to the client firms, taken from[64]. As the points
from[61] and [62], insufficient internal resource can cause the vulnerability of small venture firms and play negatively in business development and operation, exploitation of opportunities. Some of the items includes; 'BPO allows us to contact specialized vendors who owns expertise that we don't', 'BPO is very beneficial in terms of getting support from expert', 'BPO provide us core competence that is not available to us'.

3.2.4 Quality improvement

Quality improvement refers to all available efforts for a small venture firms including choice of outsourcing several processes of their business[70,71,72], aiming at gaining trust and loyalty from customers. The sample items to measure this construct are; 'Using BPO keeps improving our business performance', 'Quality failure rate can get decreased remarkably by using BPO', 'BPO provides better performance than doing it by our hands'.

3.2.5 Intention to increase the level of BPO

Intention refers to a state of mind that controls the attention, experience, and behavior of an individual person toward a certain way of behaving or an object[39]. The intention of increasing the level of BPO is defined as the willingness to support and adopt outsourcing of the specific business process that a manager is responsible for, taken from[16]. This construct is the final dependent variable in this study including the items of; 'I will use BPO if superior service is available', 'Our firm need to increase the usage of BPO', 'I support additional usage of BPO' etc.

3.2.6 Control variables

In order to remove third variable effects, we have used 5 control variables that included; age of firm since establishment, number of employees, types of business, gender, and duration of BPO usage. Age of firm was measured at a 3 years interval started from 1-3 years to beyond 10 years. Types of industry was measured with six different groups such as computer / electronics / telecommunication, education / service, bio related / environmental / energy, machinery / automotive / medical device, and others. Dichotomous variable(each value of 0 and 1 was assigned to male and female) was used to measure gender of the respondents. Duration of BPO was a control variable because longer period of BPO may get improved efficiency and detect beneficial opportunities more easily and quickly out of BPO.

3.3 Sample Selection and Data Collection

Data for this research were collected on private small venture firms from various types of industry. As identified earlier from the literature review, SMEs(small & medium sized enterprises) including venture business are likely to encounter shortfall in the resources and competencies needed to confront severe competition specially under the global environment. Therefore, we believe that SMEs and venture organizations provide an appropriate research platform for us to examine the established propositions from BPO perspective. All the firms in our sample are registered with Korea Venture Business Association, and they all meet the criteria for SMEs and venture requirements of the government.

During the period of January to May, 31 2016, the questionnaires were distributed with both way of personal contact and mailing to the owners including senior and junior level managerial staffs of small SMEs and venture firms, 500 firms in total selected at random. At the start of survey, we officially noticed individual person that respondent should be treated in anonymous manner and so none of them should be identifiable on the paper. This notice is important because it decreases the possible tendency of providing inaccurate response in the survey questionnaire[74]. As a result, we collected 110 completed questionnaire, out of 500 questionnaires that were sent out, resulting in a moderately low response rate of 22%. Throughout a rigorous screening process, 11 samples were identified as inadequate due to incomplete information and so
discarded from the analysis. Consequently, total of 99 samples were used for the test.

3.4 Sample Characteristics
Summarizing analysis of sample characteristics, male occupied 73.7% which is far higher than 26.3% of female out of total sample. In terms of job position, the sample consisted of 47.5% with top managerial persons (executive level personnel including CEO), 34.3% with upper level managers (department leaders) and then 11.1% with lower level managers (key personnel in a team). 3 years - 10 years took 56.5% for the duration of BPO which indicated majority of the sample have used BPO for several years. Both two groups of computer / electronics / telecommunication, and education / service accounted for 52.5% and other types of industry took the 26.3% of the sample. Table 1 presents the sample characteristics.

<table>
<thead>
<tr>
<th>Table 1. Sample Characteristics</th>
<th>(n = 99)</th>
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<tbody>
<tr>
<td></td>
<td>Frequency</td>
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<tr>
<td>Gender</td>
<td></td>
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<tr>
<td>Male</td>
<td>73</td>
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<tr>
<td>Female</td>
<td>26</td>
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<tr>
<td>Job Position</td>
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<tr>
<td>Top manager</td>
<td>47</td>
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<td>Senior level manager</td>
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<tr>
<td>Junior level manager</td>
<td>18</td>
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<td>Duration of BPO</td>
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<td>Less than 3 yrs</td>
<td>11</td>
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<tr>
<td>1-3 yrs</td>
<td>24</td>
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<td>3-5 yrs</td>
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<td>5-10 yrs</td>
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<td>Beyond 10 yrs</td>
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<td>Types of Industry</td>
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<td>Education/Service</td>
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<td>Machinery/Auto.</td>
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<tr>
<td>Others</td>
<td>26</td>
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</table>

4. Empirical Analysis Results

4.1 Factor Analysis
A simultaneous multi-group exploratory factor analysis (EFA) was conducted first on the 25 items major variables in the questionnaire. The Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy value was .925, above acceptable minimum value .7 [75]. Bartlett’s sphericity test was also statistically significant (2,565.21, p < .00). These two basic results indicate that using the factor analysis is appropriate. Subsequently, five factors of which Eigen values are greater than 1.0 were extracted by principal component analysis with varimax rotation, using the Kaiser normalization rotation method. The items of which factor load value less than .6 were deleted from the analysis such as QI2(.457), CS3(.592) and II1(.555). The total variance explained by these five factors was 71.299%. In order to verify reliability of the measurement that indicates the internal consistency of the instrument, we used Cronbach’s alpha coefficient value. The reliability coefficients of five variables are all exceeded the commonly used criterion of 0.70 [76]. The value of Cronbach’s alpha for SR was .904, QI was .902, BA was .900, CR was .883, and II was .892 respectively. Thus, all the variables had secured internal consistency and could be treated as distinct variables, which indicates that the scales were satisfactorily reliable. Table 2 presents the results of exploratory factor analysis (EFA).

<table>
<thead>
<tr>
<th>Table 2. Factor Analysis Results</th>
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<tr>
<td>SR</td>
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</tr>
<tr>
<td>SR2</td>
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<tr>
<td>SR1</td>
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<td>SR4</td>
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<td>SR5</td>
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</table>

SR: specialized resources, QI: quality improvement, AB: attitude towards BPO, CS: cost saving, II: intention to increase BPO
4.2 Hierarchical Regression Analysis

Table 3. presents the descriptive statistics for means, standard deviations, and inter-correlation coefficients of the key variables. The respondents reported high mean value overall, 4.047 for AB, 4.406 for SR and 4.020 for QI relative to that of II(3.803) and CS(3.848), which was measured on a five-point scale. Inter- correlation analysis shows that QI is the only factor significantly and highly correlated with the rest of all factors(p< .01); II(r= .722), AB(r= .738), CS(r= .725) and SR(r= .738).

Table 3. Descriptive Statistic and Correlation Matrix

<table>
<thead>
<tr>
<th>Vari.</th>
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<th>SD</th>
<th># of item</th>
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<tbody>
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<td>3.803</td>
<td>.644</td>
<td>4</td>
</tr>
<tr>
<td>AB</td>
<td>4.047</td>
<td>.538</td>
<td>5</td>
</tr>
<tr>
<td>CS</td>
<td>3.848</td>
<td>.630</td>
<td>4</td>
</tr>
<tr>
<td>SR</td>
<td>4.046</td>
<td>.538</td>
<td>5</td>
</tr>
<tr>
<td>QI</td>
<td>4.020</td>
<td>.608</td>
<td>4</td>
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</table>

*Correlation coefficients of the key variables. The respondents reported high mean value overall, 4.047 for AB, 4.406 for SR and 4.020 for QI relative to that of II(3.803) and CS(3.848), which was measured on a five-point scale. Inter-correlation analysis shows that QI is the only factor significantly and highly correlated with the rest of all factors(p< .01); II(r= .722), AB(r= .738), CS(r= .725) and SR(r= .738).

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<td>4.020</td>
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Hierarchical multiple regression was employed to test the hypothesized effects of each CS, SR, and QI on AB. In Model 1, four control variables were first included as the baseline models in the analysis. And then, three independent variables were added to the full models. The F statistics for the two models were significant at the p < .01 level(F value for Model 1 and Model 2 are 1.989 and 20.362, respectively), which indicates the models are appropriate for further analysis. Results of regression analyses are presented in Table 4.

As shown in Model 1, none of control variables was significantly related to the AB statistically. This result indicates that any one of these demographic variable does not affect AB. Model 2 demonstrates that the result of direct effect of three independent variables, CS, SR and QI on AB. First we could see a remarkable change in R² value(ΔR²= .558) in Model 2(R²= .673) vs. Model 1(R²= .115). Subsequently, H1 was tested to verify if CS would influence positively AB. As expected, CS was positively related to AB but was not significant in statistic at p< .05(β= .178). Thus, based on the regression result, H1 was rejected. Surprisingly, this result was quite different from our expectation. Second, H2 was examined to see if accessing SR would have positive effect on AB. Regression result showed SR was positively and significantly related to AB at p< .05(β= .245), so H2 was accepted. Finally, H3 was tested to check if QI would positively related to AB. The analysis result suggested that QI had positive and significant effect on AB in statistic(β= .430, p< .01). Thus, H3 was supported.

Overall, these results present that both SR and QI have a positive impact on AB but CS does not give a meaningful impact on AB in terms of statistic significance, which need to address with following study.

Table 4. Results of Hierarchical Regression Analysis

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
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<td>β</td>
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<td>β</td>
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<tr>
<td>QI</td>
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</table>

*Correlation coefficients of the key variables. The respondents reported high mean value overall, 4.047 for AB, 4.406 for SR and 4.020 for QI relative to that of II(3.803) and CS(3.848), which was measured on a five-point scale. Inter-correlation analysis shows that QI is the only factor significantly and highly correlated with the rest of all factors(p< .01); II(r= .722), AB(r= .738), CS(r= .725) and SR(r= .738).

Table 4. Results of Hierarchical Regression Analysis

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Multicoll.</th>
</tr>
</thead>
<tbody>
<tr>
<td>β</td>
<td>S.E.</td>
<td>β</td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of employee</td>
<td>.055</td>
<td>.071</td>
</tr>
<tr>
<td>Types of Industry</td>
<td>.084</td>
<td>.023</td>
</tr>
<tr>
<td>Gender</td>
<td>-.187*</td>
<td>.152</td>
</tr>
<tr>
<td>Duration of service</td>
<td>.050</td>
<td>.066</td>
</tr>
<tr>
<td>Indep. Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>.049</td>
<td>.636</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.057</td>
<td>.640</td>
</tr>
</tbody>
</table>

*Correlation coefficients of the key variables. The respondents reported high mean value overall, 4.047 for AB, 4.406 for SR and 4.020 for QI relative to that of II(3.803) and CS(3.848), which was measured on a five-point scale. Inter-correlation analysis shows that QI is the only factor significantly and highly correlated with the rest of all factors(p< .01); II(r= .722), AB(r= .738), CS(r= .725) and SR(r= .738).

Finally, H4 was examined to verify if BA had a positive effect on II.
As presented in Table 5, AB was positively and significantly related with II ($\beta = .784, p< .01$). $R^2$ value was also high enough so as to give very strong explanation power on the relationship between AB and II ($R^2 = .636$). Thus, $H4$ was also accepted.

5. Conclusion

5.1 Discussion

Along with increasing importance of sustainable growth of small venture business through BPO in supply chain, BPO theories have been developed widely over the past several decades. Conventional theories in BPO field are typically based on the resource-based view[54], and the planned behavior theory[44] as well. Prior studies identified that firms undertake BPO for economic, strategic and technological reasons. The literature also suggested that behavioral intention stems from attitudes and then connected to the immediate determinant of the behavior[43]. Based on the solid theories, this study was designed to get better understanding on contextual factors affecting the managerial attitudes towards BPO as well as the intentions to increase the level of BPO.

The findings of this study are summarized and discussed as followings; at first, the demographic variables such as number of employees, types of industry, gender and duration of BPO service used as control variables are found to have non significant impact on the attitude towards BPO in this study. This result need to be revisited to ensure its background through follow-up study. In terms of the main effect of key variables, cost saving is not significantly related to the attitude towards BPO($p< .05$). This finding is against our expectation obviously, as our assumption for the hypothesis was that BPO would be highly associated with cost advantage. Another solid basis for this argument was based on the prior study of [29] whose suggestion was the high operating costs, IS costs and low IS performance served as the key determinants of IS outsourcing activities. Also, this finding supports the study of [50] who suggested that a firm would choose IS outsourcing by comparing the internal costs to the external costs by outside BPO suppliers. Exceptionally, [16]study revealed that there was a significant and higher value relationship between programmability of cost and BPO case than to actual cost savings. Meanwhile, specialized resources was found to give positive impact on attitude towards BPO. This result supports the study of [64] and [70] who argued that BPO suppliers are specialized vendors in providing a specific set of outsourcing services to their client firms, and the access to specialized resources such as business experts and/or IT capabilities that firms do not own them are the typical benefit of outsourcing respectively. Quality improvement have also significant and positive relationships with the attitude towards BPO. This finding is in line with the previous studies arguing that the ability to improve quality is a constant reason why firms choose to outsource a certain process of their business[70,71,72]. Finally, attitude towards BPO is found to affect the intention to increase the level of BPO positively. This result supports prior study of [16] that delineated the managerial attitude towards BPO has a positive relationship with the intention for increasing BPO level. Overall, above discussions present theoretical contribution of this research, although we have some issues in the findings of this study that need to be addressed in order to provide clear understanding of the background in terms of casualty among critical variables.

In terms of practical contribution of this study, we found first cost saving does not account for the attitude towards BPO well. One possible explanation is for this that cost saving may not be the priority for venture organizations striving for building stable and strong base for generating sufficient sales volume with securing high enough profit out of the sales to sustain its organization. Another focal point is, as argument made by[61], small venture business faces so called,
'resource poverty', which limits its operation under severe constraints of resources such as finance, severe time, and expertise. From this perspective, BPO may not be the adequate tool for cost saving of venture firms but instead, they need to equip necessary resources to strengthen themselves in advance. In the meantime, both specialized resources and quality improvement were working for the attitude towards BPO of venture business positively. This findings can be inferred as accessing to these special resources and so achieving high quality improvement could be the greater interests for venture firms towards better performance than anything else. Thus, BPO suppliers as a specialized vendors can be the best business partners so long as they contribute to produce additional benefits to their client firms. Another contribution of this study is to suggest a clear insight as to the important the quality improvement for venture firms who are struggling for taking bigger piece of market share while keeping current pie of market from competitors. This finding indicates that BPO could be an outstanding alternative substantially, when venture firms have difficulties with quality issue. Also, we found that positive attitude affects the intention to increase BPO. This finding implies the importance of positive attitude formation within client firms towards BPO in order to increase BPO level. Taking into account the elements affecting the attitude positively which was discussed earlier part, BPO suppliers need to keep in mind how to deliver reliable and specialized resources, and then how to convince client firm to use the outsourcing for improving quality of the certain process of the work or products. Consequently, the survival and success of small venture firms could depend on how to utilize BPO effectively and efficiently in today’s highly globalized and severly competitive environments. This model of BPO can be useful by both the BPO providers and client firms for achieving the intended business performance as well as for enhancing the competitiveness.

5.2 Limitation
We have several limitations in this study. First, the biggest challenge is small number of sample in the data collection process. Future research need to replicate and extend the findings of present study by using lager number of sample. Second, sample needed to focus as many as top managerial level personnels possible, since BPO requires a prudent decision making process by executive management team. Therefore, incorporating more members from management team will provide better repercussion on their attitudes and intentions to BPO. Third, the model research included only three independent variables in this study. Capturing comprehensive understanding about the causality among elements affecting BPO decision making process, more variables should be included. Fourth, we have several factors of which loading values are less than .7, as a result of factor analysis result. Future study need to focus on having more sophisticated and refined measuring tool.

References


Modeling on Intention to Increase BPO of Venture

64-84, 1999.
DOI: http://dx.doi.org/10.1016/S0263-2373(98)00064-4


DOI: http://dx.doi.org/10.1080/14792779943000116

DOI: http://dx.doi.org/10.1146/annurev.ps.44.020193.001001


DOI: http://dx.doi.org/10.1080/14792779943000116

DOI: http://dx.doi.org/10.1287/isre.1050.0042


DOI: http://dx.doi.org/10.1016/0024-6301(86)90009-9

DOI: http://dx.doi.org/10.1080/07421222.1994.11518045

DOI: http://dx.doi.org/10.1046/j.1365-2575.1998.00030.x

DOI: http://dx.doi.org/10.1057/jit.1995.26


DOI: http://dx.doi.org/10.1177/014920639101700108


DOI: http://dx.doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

DOI: http://dx.doi.org/10.1016/j.jrurstud.2003.08.006


DOI: http://dx.doi.org/10.1504/IJSTM.2001.001610

DOI: http://dx.doi.org/10.1007/978-3-642-18703-2

DOI: http://dx.doi.org/10.2307/258935


DOI: http://dx.doi.org/10.1080/0954412998036


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<Research Interests>
- Entrepreneurship
- Entrepreneurial process
- Failure of Start-up
- Entrepreneurial motivation & intention
- Entrepreneurial networking activity
- Strong ties vs. Weak ties
- BPO of SME & Venture Firms