

Computer Technology Decided to Outsource Components

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Abstract: *One of the main products of information technology is financial reporting (IT). In order to guarantee the accuracy of financial reporting, the IT audit must be assessed. Even when IT is outsourced, IT Audit review is still required. The purpose of this study is to determine the factors that influence information technology outsourcing (ITO) decisions in Italy and to experimentally test the ITO framework created by Lacity et al. (2011). (2010). We employ a questionnaire that is directed at Italian businesses who are now required to abide by Law 262/2005. Through the review of internal controls, such as IT audit, the objective is to assess the dependability of financial reporting. We take non-response bias into account. For our regression model, we create a panel of data. We discover that the ITO choice for Italian listed businesses is significantly influenced by client firm characteristics, task complexity, and ITO results. The findings are unique since they relate to a nation that has if there is minimal actual study on the subject and certain features.*

Keywords: Information Technology, Auditing, Outsourcing, ITO decision, ITO outcomes.

I. INTRODUCTION

A significant output of information technology is financial reporting (IT). The definition of information technology outsourcing (ITO) is "the practise of shifting the management of IT assets and people, and the performance of IT services including data input, data centre operations, application creation, application upkeep, and network administration to outside suppliers (Hall and Liedtka 2005). The purpose of the research is to identify the factors that influence ITO decisions in Italy and to experimentally evaluate the theoretical ITO framework created by Lacity et al. (2011) using a variable construction that is based on their work (2010). We create a questionnaire for the study and send it to Italian enterprises that must abide by Law 262/2005. These businesses have been looked at because, in order to comply with the law, information technology audits must be evaluated even when the IT is outsourced. The client company characteristics, task complexity, and ITO results are major determinants for Italian listed firms in the ITO choice, according to our research. These findings are intriguing since Italy has unique attributes that make ITO attractive to small businesses, who often perform better, have less debt, and are more internationalised.

II. LITERATURE REVIEW

ITO literature has entered a lot of reviews. Up until the time 2000, Dibbern et al. (2004) covered the applicable literature. They categorised ITO studies grounded on whether they addressed the ITO choice (why, what, which), perpetration, or both (how, outgrowth). one of several of them 46(55) of the studies examined the factors that impact business choices on outsourcing. The most popular propositions in ITO exploration, according to Dibbern et al. (2004), were TCE (19), strategic operation propositions (17), and agency proposition (12). A named evaluation of 29 papers on ITO and strategic decision- timber was done by Fjermestad and Saitta (2005). Their review's ideal was to give a frame essential criteria. The final frame is made up of eight corridor economics, governance panels, contracts, structure and technology, culture, strategic hook-ups, operation support, and alignment of business strategy. 19 ITO publications using TCE, Resource- grounded View (also known as the capability Perspective), Relational View, or any combination of the three propositions were estimated by Mahnke et al. in 2005. The review's thing was to develop an ITO process model grounded on the factual data from these three tested suppositions. They came to the conclusion that there are too many independent variables in the present theoretical explanations. also, they refocused out that studies have used a broad range of criteria to assess outsourcing performance, including outsourcing intensity, expenditure, degree of

outsourcing, technology performance, cooperation quality, exchange performance, and cost savings realised. Gonzalez teal. (2006) conducted an analysis of 131 ITO- related literature written between 1988 and 2005. 82 of the papers' opinions, according to the authors' analysis, are firm- position perspectives. In particular, 49 of the papers took the standpoint of the customer establishment, 16 did the same for the supplier establishment, and 17 allowed about both. the remainder of papers tended to presume either bigger units of analysis (such a country or an IT sector) or lower units of analysis (similar as the effect of ITO on IS staff). Six guru problems were the focus of Laity et al (2009). 's organisation of 191 ITO publications written between 1990 and 2008.(1) The business orders that are most likely to outsource ITO(2) 3) The troubles of ITO and threat mitigation ways,(4) Practices Associated With Successful ITO Deals,(5) The strategic end and counteraccusations of ITO choices,(5) guests and merchandisers 6) The extent to which ITO procedures must be modified for other types of outsourcing, similar as business process outsourcing(BPO) and operation service provisioning(ASP). In 2010, Almutairi and Dwivedi looked into outsourcing exploration in 38 different fields. 315 outsourcing papers from 1992 to 2008 were classified. They discovered that operation had the most papers (136 papers) on outsourcing, followed by information systems (128 papers). The Journal of Information Technology published outsourcing papers the most constantly (23), followed by Information & Management (18). 52 of the papers were written by US authors, while 15 were written by UK authors. Sloan Management Review and MIS Quarterly both published the papers that entered the most citations. The findings of 164 ITO publications published between 1992 and the first quarter of 2010 were enciphered by Laity teal. (2010) with an emphasis on the findings at the position of dependent and independent variables and the connections between them. The most frequently employed theoretical frame for the study of ITO was sale Cost Economics (TCE) (Klein, 2002; Dibbern teal., 2004; Laity teal., 2011). To" match deals, which differ in their features, with governance structures, which differ in their costs and capabilities, in a differencing (primarily, sale bring economising) fashion" is the core principle of TCE (Williamson, 1991,)

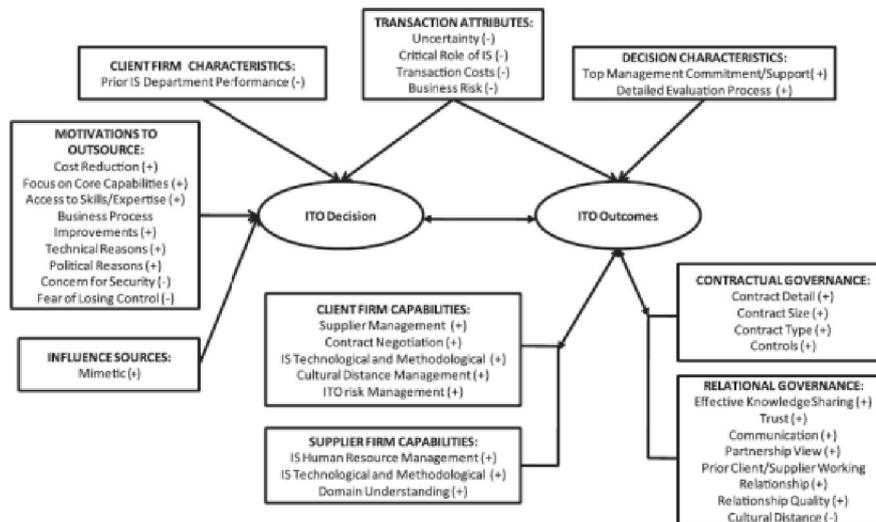


Figure 1: ITO framework

III. RESEARCH QUESTIONS

Our research topic examines the factors that contribute to ITO using the paradigm proposed by Laity et al (2011). The following factors determine ITO: transactional characteristics, client firm characteristics, motive for outsourcing, influencing factors, and ITO results We choose a variable for each of these construct types to include in our regression model. Based on Laity et a variable.'s analysis, we determine the variable (2010). The following qualities of the client company are represented by internationalisation:

1. Client Size;
2. Motivation to outsource;
3. Influence sources;
4. Prior Firm Performance;

5. Financial Leverage;
6. Focus on Core Capabilities;
7. Access to Expertise;
8. Business Strategic Type;

Task Complexity, Task Structure, and Technical Knowledge Required are transaction qualities based on the kind of outsourced service, from the least complicated to the most complex: 1 indicates application services (ASP or licence for usage), 2 indicates nothing. = administration of the front and back offices, documentation, printing, and mailing, 3 = Business continuity management, security, disaster recovery, and IT infrastructure, Full outsourcing, or 4. The results of ITO are determined by a composite index of contract governance, relationship governance, client firm capabilities, supplier firm capabilities, decision characteristics, and transaction attributes. The correlation matrix findings determine how much weight each component has in the composite index. According to the concept developed by Laity et al. (2011), the factor that affects ITO results may also be seen as a factor that determines the ITO decision because the two are correlated. So, we offer the most recent composite. index to take this association into account. The index includes the following variables that have an impact on ITO results:

1. Contractual governance, or the quantum of particularity in the outsourcing contract's terms (e.g., Poppo and Zenger, 2002), which include clauses that establish pricing, service situations, benchmarking, guaranties, and penalties for perpetration;
2. Relational governance, which refers to former customer- supplier working connections;
3. customer establishment capabilities, similar as those related to IS specialized, threat operation, and contract concession as determined by firm age;
4. Supplier establishment capabilities determined by supplier character; and
5. Decision characteristics grounded on engagement of multiple suppliers;
6. Task Complexity, Task Structure, and Technical Knowledge needed are sale Attributes depending on the Type of Service Outsourced as Described Above.

IV. METHODOLOGY

4.1 Questionnaire

We used a questionnaire created in partnership with outside auditors from one of the Big4 for the research. Each construct's components were built using frameworks. External auditors were crucial in assuring that the wording would be accurate. understood by the target companies. The questionnaire asked yes/no and multiple-choice questions on the methods used for the evaluation process; none of the questions called for the use of discretion. The questionnaire was then put to the test on three businesses from the target market: a bank, an insurance company, and a manufacturing company. The questionnaire, the research plan, and the assessment of several components were all somewhat modified in light of their replies and criticisms. The surveys were sent out by email in 2011 and focused on reviewing the year 2010. Responses were only received during a three-month window. Sending a survey package with the questionnaire and a covering letter was part of the distribution process. email highlighting the significance of the study and urging businesses to respond. After three weeks, businesses that had not yet responded were phoned in an effort to raise the response rate. We decided to keep the questionnaire anonymous, so even while we are aware of the respondent firms' names, they are not shared here, and the findings are only shown in aggregate. As a result, we were able to correlate the information gathered through surveys with other sources. Finally, using information manually gathered from corporate websites as well as the website of the Borsa Italian, the Italian Stock Exchange, we compiled information from the consolidated annual reports 2009-2010-2011 of companies adopting International Financial Reporting Standards (IFRS). Additionally, it was underlined that the research was being conducted under the direction of a well-known institution that was widely regarded as reliable, giving businesses peace of mind that confidential information would not be released. The statistical analyses were carried out using STATA and Excel software programmes.

4.2 Sample Selection

The 255 Italian businesses that are listed on the Milan Stock Exchange make up the population. 122 businesses who demonstrated interest in the exploration entered the questionnaire from us 43 of the population responded with 109

responses, or a response rate of 89. Among those surveyed, A procedure for ITC evaluation is used by 50 companies. therefore, this sample roughly corresponds to 20 of the population (50 of 255) We estimated whether our results were impacted by unidentified characteristics that constantly separated repliers from on-respondents, as well as between enterprises without an ITC, and we conducted tests forenoon-response bias and for the connection of the results. process of review and responses from other companies in the population. We varied our sample's profitability and size with that of the control group. Data for the control group was gathered from the DATASTREAM/ WORLDSCOPE fiscal reporting database.

4.3 Model

ITO choice = + 1 Transaction attributes + 4 Client firm characteristics + 6 Outsourcing motivation + 8 Sources of influence + 10 ITO results An ITO decision could be: Making a decision to outsource, purchase, or both - Proportion of Outsourcing (number or percentage). We present the descriptive statistics for each and do the Ordinary Least Square regression using the continuous variables (number or percentage). We provide the Mean, Standard Deviation, Quartile (first/Q1, second/Median, and third/Q3), Minimum and Maximum for continuous variables, as well as the frequency for dummy variables, for descriptive statistics. We provide the coefficient, the t-value in parentheses, and the significance level in asterisks for the Ordinary Least Square regression. Understanding the direction of the relationship between the independent and dependent variables requires that we interpret the sign of the coefficient. if the t-value and stars indicate that the coefficients are significant. In order to account for immeasurable factors, we provide a constant.

4.4 Panel

Given their high costs and drawn-out training process, we expect that ITC's evaluation practises won't alter anytime soon. As a result, we created a panel data set containing survey data for one year prior to and one year following. Consequently, 2010 included information from the three years 2009, 2010, and 2011. For each fiscal year, we compared the survey results with the financial information. 150 observations make up the final samples. The regression includes the fixed effect of the year.

V. CONCLUSION

International literature in the areas of management, information systems, and other disciplines has extensively investigated the choice to outsource IT, but up until recently, little was known about the subject in Italy. Building on previous research, the purpose of this work is to examine the factors that went into the ITO choice. From the standpoint of auditing, we investigate the most important factors in ITO decisions in Italy. The two original components—the Italian context and the auditing point of view—are added to a model in which the client characteristics, the industry, the transaction attributes, the ITO outcome, and the regulation are linked to five classes of potential determinants that can affect the ITO decision, which includes the degree of outsourcing. All other variables, excluding industry and regulation, have substantial connections with the ITO choice at varied levels. In our sample of Italian listed firms, we discover that 64% of them outsource their IT, and they base this crucial choice on Size, performance, leverage, internationalisation (client traits), transactional characteristics, and ITO result. The study supports certain pertinent factors found in earlier research. The findings are unique since they focus on a nation with particular characteristics and little empirical study on the subject. The sample size and the model utilised both have limitations. Our key conclusion is that choosing to outsource or perform internally Italian listed firms use IT while taking into consideration some of the most important factors suggested by worldwide literature under the cost-benefit concept.

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