



Relevance of Agency Theory in Software Development

By Dipendra Ghimire

Abstract - In the Information technology field there has been lots of development. The development of software is increasing every day. IT professional are developing software for different business needs. Software is developed with internal IT professional as well as out sourcing. In many cases the outsourcing has been unsuccessful. In some cases the internal software development has also created some conflict. The relationship between the software developers and the project mangers is undesirable. This paper addresses these failed relationships and suggests a solution to a problem. The solution would be to diagnose the relationship from both sides. Secondly Agency theory can be implemented to resolve the conflict between the two.

Software development has been troublesome for many years. When actual result is compared to the desired and originally anticipated result, a large number of software project tend to run late, exceed the budget or may even be canceled. Now a days large number of organization are moving towards the software implementation either by outsourcing or through the software development department. When a contractor and runs develop software late, exceeds the budget there are often significant dispute between the development organization and the client who is funding the project. There may be the disputes that may lead to litigation for breach of conduct.

Agency theory is directed at the ubiquitous of agency relationship in which one party (principal) delegates work to another who performs the work. Agency theory is concerned with the resolving the problem between the principal and the client. It helps to resolve the two problems that arise in the agency relationship

GJCST-C Classification : D.0



Strictly as per the compliance and regulations of:



Relevance of Agency Theory in Software Development

Dipendra Ghimire

I. INTRODUCTION

In the Information technology field there has been lots of development. The development of software is increasing every day. IT professional are developing software for different business needs. Software is developed with internal IT professional as well as out sourcing. In many cases the outsourcing has been unsuccessful. In some cases the internal software development has also created some conflict. The relationship between the software developers and the project managers is undesirable. This paper addresses these failed relationships and suggests a solution to a problem. The solution would be to diagnose the relationship from both sides. Secondly Agency theory can be implemented to resolve the conflict between the two.

Software development has been troublesome for many years. When actual result is compared to the desired and originally anticipated result, a large number of software project tend to run late, exceed the budget or may even be canceled. Now a days large number of organization are moving towards the software implementation either by outsourcing or through the software development department. When a contractor and runs develop software late, exceeds the budget there are often significant dispute between the development organization and the client who is funding the project. There may be the disputes that may lead to litigation for breach of conduct.

Agency theory is directed at the ubiquitous of agency relationship in which one party (principal) delegates work to another who performs the work. Agency theory is concerned with the resolving the problem between the principal and the client. It helps to resolve the two problems that arise in the agency relationship. The first problem is the conflict in the desire goal of principal and agent. And secondly it may be difficult for principal to verify what the agent is actually doing.

There are many conflicts in regard to the software development regarding the time, its final product and the cost increase in the process of development of the software. Agency theory would be helpful in maintaining the relationship between the principal and the client. In software is a technical field

there are managers at the top level who may know how to use the software but many not be capable of understanding the depth of the software during the software specification process they might point out the requirements that are understand by them in a little different than the software developer. In this case the agency theory can play an important role in defining the requirements of the final product, the timeline needed and the cost required to develop the software.

Software development may contain issue that involves legal, economic, management and managerial and technological. Due to uncertainties about cost or technology the developer faces there is a risk of having to abandon the project at any level. The user may not be able to fully understand the system and might think from their point of view, Given the limited information, the management and the developer may make decision in their own interest. In this case we can relate the importance of the theory like agency theory.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Krishna, S., Sahay, S., and Walsham, G. 2004. "Managing Cross-Cultural Issues in Global Software Outsourcing," *Communications of the ACM* (47:4), 01/04/2004, pp 62-66.
2. Mary S. Logan, (2000) "Using Agency Theory to Design Successful Outsourcing Relationships", *International Journal of Logistics Management*, The, Vol. 11 Iss: 2
3. Petter, S., Straub, D., and Rai, A. 2007. "Specifying Formative Constructs in Information Systems Research," *MIS Quarterly* (31:4), pp 623-656.
4. Raghu, T. S., Jayaraman, B., &Rao, H. R. (2004). Toward an integration of agent- and activity-centric approaches in organizational process modeling: Incorporating incentive mechanisms. *Information Systems Research*, 15(4), 316.
5. Robert D. Austin (2001) *The Effects of Time Pressure on Quality in Software Development: An Agency Model*. [ONLINE]
6. Rustagi, S., King, W.R., and Kirsch, L.J. 2008. "Predictors of Formal Control Usage in It Outsourcing Partnerships," *Information Systems Research* (19:2), pp 126-143.
7. Salger, F., and Engels, G. 2010. "Knowledge Transfer in Global Software Development: Leveraging Acceptance Test Case Specifications," *ACM/IEEE 32nd International Conference on*

Software Engineering, Cape Town, South Africa, pp. 211-214.

8. Sedera, D., and Gable, G.G. 2010. "Knowledge Management Competence for Enterprise System Success," *The Journal of Strategic Information Systems* (19:4), pp 296-306.

