Chapter 4
Understanding How Information Technology Can Help in Contracts Management

ABSTRACT

Contracts management is a multi-stage process involving all parties related to a contract. It ensures that all stated objectives are met, and timelines adhered to corresponding to project execution and delivery. The fundamental premise of contracts management is to ensure quality, compliance, and cost optimization. There are several forms of contract each with its own unique features and applications. In this chapter, the authors focus on how information technology can be used to aid in supervision of contracts, materials management, survey, and design management. They also discuss the role of smart contracts and the underlying blockchain technology that is used as the basis for making smart contracts work.

Constructions contracts are extremely important not only from a financial point of view, but also consider the entire gamut of activities that would need to be undertaken to achieve completion of a construction project. It is a legally enforceable and binding agreement between a construction company and its client, and contains therein related details and costs of the project itself. Construction contracts are can involve from simple renovation jobs and upwards to expensive and complex contracts. The types of clients that use construction contracts are commercial and residential. Depending on

DOI: 10.4018/978-1-7998-5291-9.ch004

client requirements, contracts are prepared accordingly. In general, residential type of construction contracts involves project scope, schedule of work and payment details. A project scope defines what kind of construction work is included in contract. Both parties to a contract must agree to abide by the kind of work that needs to be done. Details of project costs and dates of payments are scheduled and recorded in payment detail section. Payments are paid against percentage of total work completed of a project. It is generally an accepted practice that a deposit not exceeding five percent of the total costs is disbursed by client to the construction company before project work commences. Subsequent payments are disbursed corresponding to scheduled completion of sections of project work defined and agreed upon by the parties concerned. As in every other sphere that Information Technology has today permeated, construction contracts management, too, benefits from inclusion and influence that Information Technology has in terms of scheduling, managing and tracking construction activities. Efficient management of construction contracts management is important for maintaining quality and consistency at all times throughout life-cycle of project.

WHAT IS CONTRACT MANAGEMENT?

The significance of contract management is immeasurable. It is a multi-stage process that progresses along the lines of contract schedule. Its foremost purpose is to act enable all parties involved in a contract to act and deliver stated objectives as specified in terms of contract. The chief objective of contract management, however, is to ensure that all stated objectives as detailed in contract are adhered to at all times and, thus, ensure efficiency and resource optimization (Gustavo, Kasun, 2013). The underlying principle behind contract management is to seek quality and cost optimization throughout project execution.

The aims and objectives of contract management can be detailed as follows:

Effectiveness

The primary objective of contractual management is to execute a contract successfully. In general terms, this involves the following:

1. Timely delivery of goods and, subsequent, installation and/or consumption in the stated manner as per contract details.