

# E-CONTRACTING TECHNIQUE IN CONSTRUCTION PROJECT A LITERATURE REVIEW

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**Abstract** - E-contract is an avail to drafting and negotiating prosperous contracts for consumer and contractor and cognate inns. It is designed to avail humans in formulating and implementing business contracts regulations inside e-contract. Advances in telecommunications and computer technologies in recent years have made laptop networks a crucial part of the financial infrastructure. Increasingly corporations are facilitating transactions over internet.

**Key Words:** E-commerce, E-contract, Click wrap, Shrink wrap, Acceptance, Information Technology

## 1. INTRODUCTION

The fundamental structure of the society runs on the concept of supply and demand, consolation and delectation of lifestyles. Understanding of someone for certain rights or to incur sure responsibilities, while apperceived via law, is called a contract. A settlement is an acquiescent enforceable by using regulation which gives personal rights and imposes private obligations; which the regulation bulwarks and enforces towards the events to an acquiescent. Traditionally, the contracts was paper based, but with the introduction of internet, corporations are departing from the notion of conventional based contracts and are going on line. This shift from paper based contracts to on-line contracts has led to the emergence of new species of agreement i.e. "digital contracts". It means a contract shaped electronically. an e-contract is a settlement modelled, completed and enacted by means of a software program machine. Contract may be described in diverse ways as below: the Indian contract act, 1872, defines settlement as "a settlement enforceable through law. Consistent with black regulation's dictionary, "settlement is a settlement between two or more people which creates an obligation to do or not to do a specific aspect." Written or spoken settlement specifically one enforceable by using regulation."

This paper deals with various features of E-contracting, collected from published papers of various authors.

## 2. LITERATURE REVIEW

Literature survey is a fundamental part of any venture. Literature survey needs to be performed to recognize various aspects of the assignment and it helps within the success of completion of the venture. A nicely planned literature evaluation is characterized by a logical flow of ideas, modern and applicable references with steady appropriate referencing style. It conveys an intensive

records approximately the venture. In reaction to latest and expected future boom in long-distance commerce the use of digital media consisting of the internet, a few commentators have counseled that felony and economic institutions will must trade considerably in reaction to new technologies of change, within the identical manner that they did in reaction to the fundamental technological and organizational innovations of the 18th and 19th centuries. Others have taken a greater skeptical position, arguing that recent developments are higher viewed as adjustments of diploma in preference to of kind, and that they may be accommodated with the aid of extending and editing existing arrangements in a greater evolutionary fashion.

**Amoolya Khurana et.al., (2006)** Today with the recent advancement in the areas of computer technology, telecommunications technology, software and information technology have resulted in changing the standard of living of people in an unimaginable way. The communication is no more restricted due to the constraints of geography and time. Information is transmitted and received widely and more rapidly than ever before. And this is where the electronic commerce offers the flexibility to business environment in terms of place, time, space, distance, and payment. With the growth of ecommerce, there is a rapid advancement in the use of e-contracts

**Ayyappan Palanissamy et.al., (2013)** Contracts have become so common in daily life that most of the time we do not even realize that we have entered into one. In the electronic age, the whole transaction can be completed in seconds, with both parties simply affixing their digital signatures to an electronic copy of the contract. There was initially an apprehension amongst the legislatures to recognize this modern technology, but now many countries have enacted laws to recognize electronic contracts. Malaysia has enacted legislations on e-commerce in compliance with international organizations. This paper seeks to identify the recent trends and developments on electronic contracting globally and in Malaysia and an overview of e-commerce developments in the neighboring land, Singapore, which was the first country to adopt the UNCITRAL model law on ecommerce. The paper also examines relevant Malaysian legislations on e-commerce and the adequacy of the existing law in protecting e-consumers.

**Emily M. Weitzenboeck et.al., (2001)** An analysis is made of the increasingly active role of electronic agents, especially intelligent agents, in the negotiation and formation of

contracts. Among the different doctrinal solutions that might be applicable is to consider conferring some degree of legal personality on agents or, at the other extreme, to treat them as mere communication tools. Another alternative discussed is whether intelligent agents should be considered as agents under the law of agency. Following an analysis of the two main theories of consent – the subjective and the objective theories – it is argued that the objective theory is applicable to the use of electronic agents in contracting. There is then a short examination of some enacted legislation that deal with contract formation through the involvement of electronic agents.

**Anil Upadhyay et.al., (2016)** Delays are very common in maximum construction projects all over in the world. Some delays may take place in the preconstruction phase which is well-defined as the period start from the primary idea of the construction project to the formal acceptance of the agreement among the owner and the contractor; but some delays may occur in the construction period that is the duration between the real construction works is start and end. Construction Project schedules are usually dynamic and uncertain. A number of controllable and uncontrollable issues can seriously interrupt the project strategy and generate a tendency of delays. These all factors are related to Contractor, Owner, Designer, Consultant, Material, Equipment, Labor, Project and External/Environment. Contractor related factors of delay are considered most important factors. In this paper, I have explained various delay factors related to the contractor.

**Jennifer E. Hill et.al., (2003)** An international sales contract writing in the following manner or the purposes of this Convention. writing. Includes telegram and telex accordingly, the term writing deems telegram and telex as acceptable contracting methods, but remains silent on computer-based contracts, such as electronic data interchange (.EDI), the Internet, click-wrap and shrink-wrap agreements, and e-mail. As a result, the CISG, the seminal convention governing international sales, contains a vital gap by remaining silent on electronic or computer-based contracts in international sales transactions.<sup>28</sup> This gap questions legitimacy of Twenty-first Century commercial contracting methods that international commercial parties bound by this Convention currently rely on to facilitate their transactions.

**Christopher N. Preece et.al., (2014)** Numerous types of construction procurement systems have been developed for project implementation. However, previous studies have not focused on subsequent managerial strategies and the project organizational forms to be adopted towards the selected procurement system. This research proposes that further managerial theories are required to enhance the project performance and effectiveness. Therefore, this paper aims to extract the principles of projectized and non projectized organizations and incorporate them with the selected procurement systems at the project level. A mechanism for assessing the key areas of compatibility was developed using the well-established McKinsey 7 S model. The paper shows that the characteristics of the organizational principles are

complementary with the procurement systems. It contributes an insight for future strategic organization and management at the project level in construction.

**Avery Wiener Katz et.al, (2014)** The growth of electronic commerce reflects changes in the relative importance of various institutional transaction costs such as the costs of information and of searching for contractual partners. Accordingly, arrangements that were optimal or at least reasonably satisfactory under previous configurations of transaction costs may no longer be so under those configurations that will develop in the future. This essay, accordingly, sketches out some of the ways in which the doctrines and regulations of contract law might need to change in an electronic setting, and offers an economic framework for evaluating such changes.

**Mariana Nagy et.al., (2011)** Teaching aspects related to the Electronic Contract is a real challenge in the field of education, needing collaboration between jurists, economists and computer specialists. The study aims at designing and testing a didactic approach to the Electronic Contract vs. Classical or Traditional Contract in order to give a comprehensive understanding for traders and students. The target group consists of Long Life Learning students in economics and law. The main result of the work is the related section in the course book itself, including a theoretical part, examples, explanations and practice aid. A preliminary research, by applying a short questionnaire, reveals that after one year of teaching (2 series), 42% of students used at least one of the forms of the electronic contracting - either as one of the contracting parties or in their practice.

**Haitham.N.Nasr et.al.,(2015)** Model Law on Electronic Commerce, Electronic data interchange (EDI) means the electronic transfer from computer to computer of information using an agreed standard to structure the information". The United Nations Commission on International Trade Law which adopted the Model Law on Electronic Commerce saw that the aforementioned identification can be used in all electronic information including contracting and various commercial acts.

**Ahmed Tarek et.al.,(2015)** No doubt that the technological evolution and its wide range usage in various fields became a part of our daily lives, accompanied by this evolution, it's usage between people in civil and commercial transactions grew significantly., And that growth dictated the necessity of issuance laws in order to manage this usage through setting conditions and regulations to avoid the users from becoming victims of electronic fraud and scams, also to criminalize such acts and to set general terms and explicit rules to be legally binding.

**Himanshu Agrawal et.al., (2016)** At present, the construction industry is the second biggest industry in India. Study and knowledge of factors cause schedule delay in construction projects are very essential because they cause losses to the leading organizations and also affect the

economics of the construction trade. Basic knowledge of project schedule delay for the duration of the whole project can save money and time. Contractors should take proper care in the project planning and scheduling. Experienced contractor should be hire in the construction projects for timely completion of project.

**Paul Stephenson et.al., (2008)** This research is primarily concerned with establishing the current status, practicalities and resource effectiveness of e-tendering. Results are provided from an industry survey which includes both quantitative and qualitative data. A case study implementation is also included which assesses the utilization of e-tendering software in practice. The research findings indicated that e-tendering can provide substantial resource savings to a major part of the supply chain, with the key benefits being enhanced communication, time savings and reduced costs.

**Mason. J et.al., (2017)** The idea that there will be intelligent contracts paying for performance upon the sensors signaling compliance is unlikely to be achievable in a vacuum. There is a link with the range of advances required for the collaborative agenda to be re-imagined for the digital age. The advances in BIM, in multi-party contracts, in project insurance can all be seen as pieces of the jigsaw. The discussion has demonstrated the deeply held perceptions and nervousness of key stakeholders towards intelligent contracts. The business case for their adoption must remain the focus whilst technology overcomes the temporary barriers of reliability and interoperability. Ultimately, addressing these concerns is a waiting game for the technology to reach the stage in its maturity where it works and the public have enough faith in the ability to deliver.

**Avery Wiener Katz et.al., (2015)** Demonstrate two main lessons. First, the basic economic analysis of contract law can be extended in fairly straightforward fashion to the problems of electronic commerce. In this regard, our discussion lends support to those commentators who have argued that the rise of electronic commerce poses few new conceptual challenges to existing legal analysis. But second, the relative costs of particular precautions and expenditures are different in electronic settings than in traditional ones, and this difference in relative cost suggest that the balancing of policy considerations may well come out differently, justifying changes at the level of application of law if not at the level of **theory**.

### 3. CONCLUSIONS

The use of Information and Communication (ICT) Technology inside the production enterprise can cause great efficiencies within the management of projects and is drastically used as a means of coping with and recording production initiatives. This report has recognized the felony and security dangers which could rise up when production contracts are shaped, administered and recorded inside an electronic environment and has encouraged steps that events may take to solve or limit those dangers. With the aid

of referring and analyzing the evaluations it's far amply clean that it has to exercise its discretion in any such manner to sell transparency inside the contracting without any discrimination. And so far it has been discussed about the exceptional varieties of e agreement and their evolution.

The conclusion obtain is the electronic switch of information from computers to computer, the use of an agreed settlement to shape the contract. These contracts provide direct change of enterprise data among the parties via computer systems, in computer process capable format and are commonly used by the events having persisted commercial enterprise relationship and how should contracts be regulated, rather than which public licit institutions should be responsible for regulating them.

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