Significance of Contract Management in Projects

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Abstract - The proposed research work has the aim of analyzing the significance of contract management in projects. The methodology adopted has been descriptive. It was noticeable during the literature review that the subject of contract management as it pertains to projects has not been attempted realistically, thus it was found that such a study would be not only enriching and useful but also interesting. Therefore, an attempt to this effect is being made through this research work. The findings will give an insight on to the relevance of practicable methods for dealing with contracts in the context of Projects. These findings may also serve as input in improving efficiency, ensuring transparency in accountability of activities and assist in further research on the subject.

Keywords: Projects, Contracts, Strategic Vulnerability, Potential Competitive Advantage

I. INTRODUCTION

In most of the cases of project management at certain points of time of the life cycle of the project there would a requirement to get your hands on products or services from external agencies to perform the activities needed for successful completion of the project (Chandra, 1998). It is quite apprehensive to state that just about 30% of the projects succeed and amongst the failed projects 55% declare budget overrun as the reason behind it. By the end of 2020 the project management industry has grown to \$6.6 Trillion. (Team Stage, 2023). In the case of construction projects just about 31% were delivered within the original budget and time. The process of contracting covers the activities which commences from formation of a contract to completion of execution and handing over. In clear terms contract management for a project work is the art of planning the essential components of a project to be undertaken by an external agency, which may be part of the project or all of the project, documenting them, controlling the execution by constant or periodical monitoring in order to ensure that the objectives of the contract are completed in a timely and satisfying manner in the desirable quality level. For successful execution of a contract planning is necessary. As projects have risks associated with it during its life cycle, so is the case with contracts. A project for that matter would be specified to be completed in a stipulated time which is the reason that planners adopt path crashing and event crashing methods. An important step is developing the need which can reduce the risk in a contract work especially in

the case of project work is by developing a bid or request for proposal which is one and the same as making a scope of work. Risks associated with a contract starts with proposal risk. Other types of risks are procedures for resolving disputes, performance risks and price risks. As the project moves ahead in the life cycle the opportunities to add value by unknown events reduce but the cost to change increases. Laws of contract in India are formed on the basis of Indian Contract Act, 1872. Contracts of bailment are also a special class of contract. Anglo-American common law covers the contract between parties. English contract law binds contracts made in England and Wales. Whether it is government or private contracts, in India contracts are governed by three statues.

An agreement with consideration undertaken by a person with capacity that can be enforced by law is a contract. There are two parties involved in a contract and these are the client and the contractor. A make or buy decision is of utmost importance before formulating a contract. Thereafter financial considerations and technological competence leads on to the certitude of contracting. Documenting a contract is important not only for the legal and controlling point of view but also for the purpose of falling back in case of issues (Gopalakrishnan, Ramamoorthy 1993). Government contract has careful consideration which follows statutory norms effectively. The process of contracting covers the activities which commences from formation of a contract to completion of execution and handing over. Then the contract is assumed to have been concluded to satisfaction. An agreement can fail or lose the respectability. To obviate this risk a legal bias is given to an agreement. It is at this point of giving legal validity for an agreement that it becomes a contract. So, contract is enforceable by law, whereas the status is not same for agreement.

While contracts for procurement is favourable from the point of risk mitigation by transference point of view but comes along with it a major restriction of freedom of operation by either side. Not deliberating on that issue which would remain a constant challenge, it is practical to consider that good or bad the project manager should be conversant with contract management, which means that contractual implications have to be viewed from all points of view including the consequences of alteration to the original contractual terms and conditions. It implies that

along with scope, technical details quality control, time management, terms and conditions are required to be spelt out in detail to ensure that at any point when a conflicting view appears both the parties can fall back to the document. In clear terms contract management for a project work is the art of planning the essential components of a project to be undertaken by an external agency, which may be part of the project or all of the project, documenting them, controlling the execution by constant or periodical monitoring in order to ensure that the objectives of the contract are completed in a timely and satisfying manner in the desirable quality level. Such a process sets out the rights and obligations of each of the party which have endorsed the agreement.

II. LITERATURE REVIEW

In the book Fundamentals of Project management, Amacom, the author has made the latest book in line with PMBOK (Heagney, 2019). Topics includes stakeholder management, procurement management etc. It is considered as a guide to plan and execute timely projects. In the book Project management, Viva Books, the author deliberates on successful implementation of projects (Haynes, 2012). The book Project management case studies, Amazon covers case studies from important business like Airbus, Motorola, Disney, Airbus etc. The aim is to include these cases so as to provide the reader a unique opportunity to experience project management at highest level (Kerzner, 2020). Main attention of the author in the book Making Things Happen, Amazon is on projects in software industry. He translates the experience gained in working with IT companies. The guiding aspect of the book is on good project management. The book has some practical illustrations to include topics such as 'what to do when things go wrong' (Berkun, 2020).

Katherine Koster in the book titled 'International Project Management' concentrates on the cross cultural management and its peculiarities in the context of international project management. Thereafter the study is linked to the tools and techniques of project management in the global context (Koster, 2015). Subhdeep Dasgupta in his book titled 'The effect of Globalization in Project Management' dwells on the changes in project management due to internet and technological revolution. Main topic under discussion in the book is effect of global culture on various facets of project management. In the book Management Principles, a chapter has been dedicated to Cross Cultural lessons which validates the theory of relationship between culture, societal, organizational and leadership effectiveness (Dasgupta, 2018). Harold Kerzner in his book Project Management makes a study on Japanese management techniques such as Taguchi method and TOM, globalization and cutting-edge technologies. PMI global insight blog titled 'The effect on PPPM community' analyses the project management from the point of technological challenges and virtual leadership. Case study titled Issues in Project management studies on the impact of internet on project management (Kerzner, 2020).

In Administration of Construction Contracts, Notion Press Media Ltd the author addresses large value and complex contracts in the light of globalization and increased regulations. These along with change in technologies as per the author have rendered administration of contract difficult. He desires that undue control and rigid standards should be avoided in contracts (Srivastava, 2015). Handbook on Project reports, Aggarwal Law House is a practical guide for entrepreneurs, project consultants, bankers and operations manager (RK Garg, 2023). In Drafting Commercial Contracts, Oak bridge Publications, the writes about key aspects to be considered while is drafting commercial agreements. New chapters on e-contracts and intellectual properties have been included (Verma, 2020).

A. Research Gap: After a considerate literature review it is evident that a holistic study has not been conducted on the topic, 'Significance of Contract Management in Projects' which is the aim of this research paper. It also identifies role played by contracts in the success of project management from the global perspective and harbours the idea above multi-national approach.

B. Aim of the Study: The proposed research work has the aim of analyzing the significance of contract management in projects.

C. Scope of the Study: It was noticeable during the literature review that the subject of contract management as it pertains to projects has not been attempted realistically, hence making such a study which would be not only enriching and useful but also interesting the aspects of decision making, risks as it pertains to contract and closure of contracts have been considered.

III. OBJECTIVES OF THE STUDY

The study has the primary objective of analyzing contract management from the point of formulation, procedure, decision making in contract, management of risks in contract and refining steps for closure of contract. The findings are aimed at giving an insight on to the relevance of practicable methods for dealing with contracts in the context of Projects and will also serve as input in improving efficiency, ensuring transparency in accountability of activities and assist in further research on the subject.

IV. METHODOLOGY

Descriptive Research has been used considering the various facets of human involvement in the planning and executing of projects. Here the characteristics of contract fundamentals are identified and analyzed from the point of view of project management. Detailed study on the decision making based on Strategic vulnerability and competitive advantage, market orientation and production costs has been carried out. Further analysis keeping in view the logic accepted in the Price water house Cooper model for

outsourcing is undertaken for contact management. The inter-connectivity of project life cycle and stages of contract has been analyzed to identify the fault lines. Suggested steps for formulation of contract, contract process, and risk management in contract are considered to evolve a fool proof method. Closure stage of contract being equally important but often neglected has been considered in detail. In descriptive research the process does not answer questions about how/why/when the characteristics occurred but describe the features of the system under analysis. Analysis is also carried out on the methodology of decision making in respect of contracting, make or buy under contingencies as applicable to realistic scenario of project management. Thrust is on stream lining procedures to reduce projects due to faulty contacts.

V. DISCUSSION

Even though a failed project can provide noteworthy results at the macro level a project can be classified as a failure when it does not meet the objectives set forward or for that matter the deliverables aimed at or there is an issue with timely completion. Most common cause is indistinct or vague objectives. The next important reason is constant change of deliverables resulting in scope-creep. As per a survey by PMI in 2021 alone there had been cases of 34% of the projects experiencing scope-creep. (MacNeil, 2022). It is likely that when there is unrealistic expectations the projects miss deadlines. Unfortunately, this is the most common cause of failure of projects. (Anatomy of Work index 2021). It is likely that as the project progresses limitation of resources is experienced. Complexity of communication and technological transformation is another major deterrent to successful completion of projects. When one deadline is missed there is a rush, we can say a bull whip effect creating further delay and an overall collapse. Sometimes lack of transparency creates unsuitable working conditions and smooth process of the project. 70% of the business and IT executives assume their projects to not make the grade. Ambiguity and lack of clarity has been found to be an important reason. There can be cases where

there is deep-seated top-down confusion on the deliverables. Good leadership and robust executive level sponsorship may be missing. All these can lead to project failure. Unless the projects are properly base lined and constantly scrutinized there are chances of breakdown. Risk is a phenomenon associated with project, so in the event the projects are planned without catering for risk, they may tend to be a failure.

As per a study poor contract management can bring in ineptitude, block transparency, and lead to poor communication, unclear objectives and compliance issues. As per a study by market Watch 90% of spreadsheets contain mistakes, undetected errors. A report indicates that a cut and paste mistake by a Canadian power company resulted in a \$24 million loss. (Global USA, 13 June 2019). important aspects to be remembered are communication and visibility, absence of these results in lackluster collaboration leading to project failure. Symptoms of poor contract management in projects include; inappropriate scope of work, cost and time over runs, conflicts and disputes with stakeholders and contractors, and unwarranted variations. Other key issues are poor contractor selection, absence of stakeholder participation, focus more on price and not the life cycle cost of the project. As per studies centralization model is better suited for contract management.

VI. DATA ANALYSIS

A. Decision Making, Make or Buy

First step in formulation of a contract is to develop the need for a contract. It is by considering a make or buys decision that a project sponsor gets in to the chain of events related to a contract in the context of project management. While analyzing potential competitive advantage in comparison to strategic vulnerability the project sponsor and the project manager would get a fair idea as to the option best suited at various levels to decide whether to go for contract or buy or make (Rao, 1988).

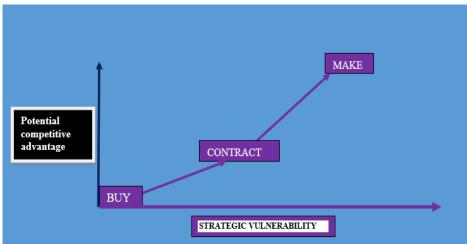


Fig. 1 Make or buy decision 1

This analysis is shown in Fig. 1. When the competitive advantage and strategy vulnerability is weak it is recommended to buy and as these two factors maximize it is recommended to resort to making. During stages midway at various combination, it would be better to consider contracting as a strong option.

B. Outsourcing

Another method of aiding the manager to make this decision would be considering production costs with market orientation. This feature is represented in the schematic diagram Figure 2. One of the elements of production cost is market orientation. The company or the project sponsor

would ideally keep the production costs low but then as the customer accommodation increases through market orientation, the cost increases it peaks and then gradually falls to a point where the market orientation is high but the product costs have stabilized to an acceptable low. Contract would be undertaken to fill the gap between the two when the cost may be higher than buying but at an acceptable rate. It may also be a case when market orientation is very high and production costs are low. This midpoint area may be seen as the zone where the strategic vulnerability and competitive advantage have also been analyzed to be moderate. This analysis may also be keeping in view the logic accepted in the Price water house Cooper model for outsourcing.

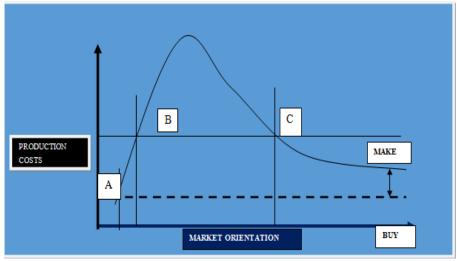


Fig. 2 Make or buy decision 2

When these two graphs are interrelated, the diagram would appear as shown in Fig. 3.

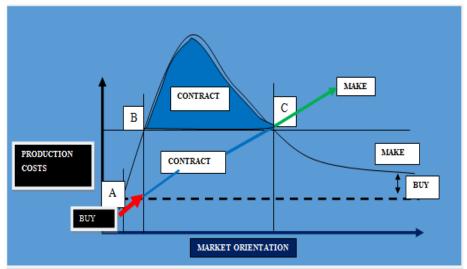


Fig. 3 Make or buy decision 3

In the above diagram, when the production costs are very high and market orientation is from average to above average there is considerable advantage of going in for contracting but then strategic vulnerability is a factor that assumes importance, because the net gain would be marginal by going for a 'make' option. Similarly, when the production costs are very low and market orientation is insignificant, then the option to 'buy' is recommended

because it does not materially differ whether the choice has add-on advantages. Whereas when the market orientation is very high and strategic vulnerability is equally concerning, then option to make or buy needs careful analysis.

C. Importance

Contract becomes the primary document for fall back in case of eventualities. There are some common problems associated with contracts. Contracts often lack clarity as to their terms and conditions. Rights and responsibilities should be clearly laid out in a contract. Pre-made internet contracts need to be validated so that applicability is thoroughly vetted. There should be dispute resolution and default clauses in contracts. Often an inadequate recital can allow arbitrators to interpret in their own way. Details of the

party entering into contract are important to protect from problems down the line (Brandon, 2022). There are essentially six requirements for undertaking an agreement which can then become legally binding to become a successful contract. These are; negotiation and bargaining, consideration, feasibility and capacity, capability to quantify the proposal in specific terms, and transparency developed by unrestricted communication.

D. Stages

The decision to make a contract out a project work would be a consideration made during the initiation, deliberated in the planning stage and finalized while beginning to execute the project. The correlation is as represented in the fig. 4.

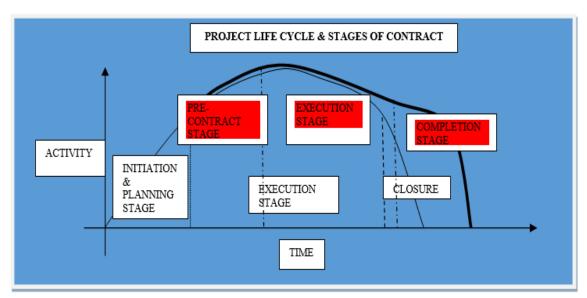


Fig. 4 Project Life Cycle & Stages of Contract

E. Formulation

It is natural that execution and completion stage of the contract will continue beyond the closure stage of project because many a times the client would require training for operating the project during which time the project may be owned by the contracting agency.

When a project has been conceived or taken on as in house basis qualitative and quantitative analysis would identify the strengths and weaknesses. It is a careful balancing of these factors which would lead to decisions such as full contracting, part contracting or sub contracting. Financial analysis along with strategic vulnerability, technological considerations and competitive advantages leads on to making the decision for contracting. It is at that time a proposal for consideration is worked out which is generally termed in contracting parlance as offer. Offer has the detailed specification of the project work and cost considered for fulfillment of the work. Based on the offer when the contracting agency responds in favourable terms

after consultations and negotiations, and this step is called acceptance.

Hence this stage is of vital concern for the rest of the procedure while contract formation is undertaken. An acceptance with conditions is not a legally valid acceptance. Hence the acceptance to form a part of the contract should be in the form of an unqualified acceptance. Same is the status of a counter offer. In authenticity a counter offer may be considered as the rejection of the offer.

Hence in case a counter offer is accepted then the original is abinitio invalid. But an unqualified acceptance of the offer takes the contract formation to the next stage. After acceptance of an offer the next stage is consideration which is a promise. The promise in consideration provides a thing of value, which could be money, goods or services. These steps can be seen with the help of a flow diagram as well as given in fig. 5.

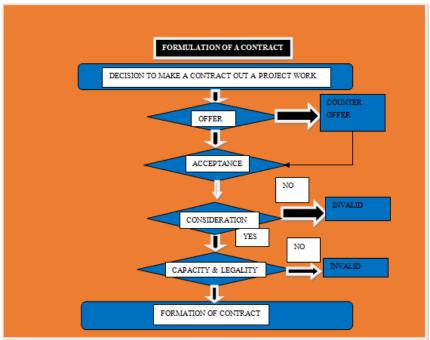


Fig. 5 Formulation of a contract

Consideration is exchange of accepting an offer providing a promise. The validity of a contract impinges that an acceptance should be followed with a consideration which may be concurrently or at a specified later stage. With these two steps having concluded, the next important point is to validate the capacity of the contracting agency or person. A contract to be legally bound requires person or agency to have the necessary power to facilitate a contract (Pinto, 2009). This is as per the laws of the land and differs from country to country. Hence it follows that in case it is identified at alter stage that ambiguity on the capacity or in case the capacity to make a contract does not exist in a

person or organization then the contract becomes void. Finally, the acceptance in response to an offer should be communicated to establish the contract. Once this step is taken the contract is assumed to have been concluded which would be formalized by signing of documents by the dignitaries who are capable of undertaking contract to establish a legal validity. In addition, care should be taken to ensure that the terms of the contract are in clear and definite terms. Because standard forms available cover the most intricate details, opting for other forms in execution of contract should be undertaken with the expert advice of financial and legal experts.

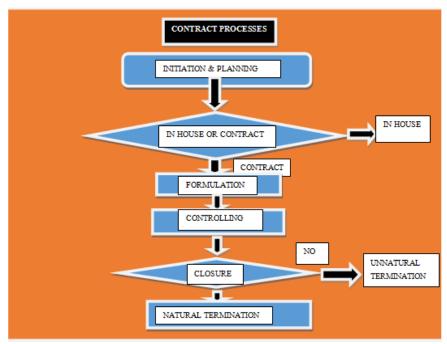


Fig. 6 Contract processes

For contract exceeding one year price variation clause becomes necessary. Terms of contract and payment, SoW, and specification needs should match. Warranty, liquidation and procedure for liquidation such as arbitration or adjudication should be covered in the contract documents as separate clause. Acceptance of an offer is time bound, but the effective date of contract depends upon the date of signing of a contract, furnishing of performance bond and issue of bank guarantee by the seller. Approval of the authority that has the capacity to enter in to a contract is required for undertaking any amendment to contract clauses. A flow diagram in fig. 6 can signify this as a chain of activities.

As and when a breach is noticed in terms of specification, notices are required to be issued to the contractor. Bank guarantee is an important document hence its safe custody and monthly review to ascertain validity is vital. Disputes in the execution of contract requires legal remedy and has the need of due diligence by exercising close scrutiny of documents presented. There may be cases when due to varied conditions the delivery period (DP) requires extension which is a difficult proposition and requires careful handling.

F. Contractual Risks

As projects have risks associated with it during its life cycle, so is the case with contracts. The degree of risks in the case of contracts depends upon those which can be controlled and those over which controls are restricted. Amongst the controllable risks are elements of design and human error. These risks are apparent by care full planning and control. These controls include good management frame works and quality control procedures. By its nature it can be reasonably assumed that these risks can be measured and adequate steps to guard against can be undertaken. On the contrary uncontrolled risks are outside the direct control of the projects. For e.g. a pandemic like covid or lockdown as a result of protocol, a severe cyclonic storm etc. Some of the deep-seated risks associated with contract include defects related to design, risks as a result of eventual cost of the project, health and safety, consequential losses, and meeting the completion deadlines. It is also clear that risk management for black swan events comes under uncontrolled risks.

Design defects may be in the form of obvious designs and largely hidden designs. Hence identifying these during the risk management and planning is important. A patent design risk can be attended to by professionalism and attending to minute details of each activity, and latent defect can be understood by going through the risk log of similarly completed projects in the past. It is common to find that while assigning bus passes to school children the school indemnifies against an accident despite the fact that charges are assigned to provision of this service. Similarly doctors and solicitors indemnify against their probable negligent acts during the conduct of business. In the same way risk

insurance by third party insurance or consequential loss is common in transport sector and industries. Aim is considering an eventuality as caused by previous experience under similar circumstances the event or activity is covered by transference of risk. It is common to hear instance of organizations taking on risk purchase against a contractor. Such steps are taken in the cases of the contractor not meeting completion deadlines. A project for that matter would be specified to be completed in a stipulated time which is the reason that planners adopt path crashing and event crashing methods. So, in the eventuality the projects are completed after the specified time the contractor loses money and in fact so would also be the project sponsor. Sometimes a project which is completed late may outlive its utility.

An important step is developing the need which can reduce the risk in a contract work especially in the case of project work by developing a bid or request for proposal which is one and the same as making a scope of work. A contractor should be able to understand in clear terms the scope of work and it is only then, the contract can be successfully carried out. After having made the scope of work the next stage is specifying the need by making design specifications which involves, specifies in clear terms the qualifications of the work, and indirectly provides bench marks or specific aspects to monitor for in section and testing compliance of agreement. This improves the quality of the work and leads to satisfaction, mutual trust. After design specifications the next stage is identifying performance needs which are related to final functioning of the work when completed or in case of machinery when installed. Risks associated with a contract starts with proposal risk. Proposal risk is generated when the scope of the work, design needs and performance needs are poorly described and contains indistinct statements. Specific area to be considered in this respect is using simple and clear terms in the scope of work. Thereafter risk can be generated in the form of surety risk and schedule risks. A liability risk is supported by certification and bonds which can be established by proper scrutiny in the beginning, where as schedule risk needs continuous monitoring and specific payment program. Other types of risks are procedures for resolving disputes, performance risks and price risks. As risk is natural in all forms of contract, they are eliminated by defining the responsibilities of the client and contractor, which include defining the inspection team and their roles, incorporating change order procedure, termination procedure, dispute resolution, warranty.

Because of these reasons all works undertaken by the contractor are supported by insurance. A contractor is eventually made to undertake the insurance by way of all risk policy. In addition, transfer of risk in the form of poor workmanship and latent risks are covered by a warranty. It is quite normal to find that after completing housing project the contracting agency is bound by certain warranty clauses on electrical fitments, water proofing which may extend to free replacement for the first few years and specific cases up

to ten years. In general, the risks from two sets of damages which are liquidated and unliquidated are undertaken. Liquidated damages are designed to compensate the losses suffered by one party as a result of certain poor workmanship or actions by the other party. They are quantifiable by actual revenue losses incurred. Usually, an electronic item or a vehicle purchased is supported by warranty clauses for complete item during initial few years and specific vital items for some more years which are examples of liquidated damages. Same is the case for industrial equipments, bridges, roads, buildings and other projects (Lester, 1982).

Compensation is based on amount of loss incurred and later on part of the loss or proportionate compensation. On the contrary in the case of unliquidated damages courts take upon the case by case and allocate an appropriate amount as payment for the loss incurred by the party but then unsubstantiated amount cannot be claimed by parties to the contract. There are certain other risk transfer clauses in contract such as performance bond, retention bond, and right to withhold payment, consequential damages, and termination. To protect the interest of one of the party to the contract a portion of the consideration is kept apart, which normally is to the tune of 10%, which can be in the form of bank guarantee. Retention bond is to cater for default by the contractor or the contracting agency and with this amount as and when the contractor abstains from completing the work the retention sum is made use to complete the contract or correct the defect caused by the incomplete or poor execution of contract. In the context of right to withhold payment, it is an option which can be enforced by the client when the contractor fails to deliver the promise based on the conditions laid out in the contract until it is carried out in reasonable time. Consequential damages or losses are occasioned by the breach of contract. For e.g., a contractor builds a hanger and after completion the plane was parked inside and hanger collapses. Finally, termination is the applicability of rescinding a contract because one of the parties to the contract fails to honour the terms of contract. For e.g., as a part of the metro rail project if CCTV's are contracted from a supplier and the latter fails to deliver within reasonable time or provides a material of substandard quality thus not meeting specification, the agency has the right to purchase from other suppliers (Srivastava, 2015).

As component clauses every contract has a set of terms and conditions. These are targeted on specific areas of the contract such as payment terms, obligations of the contractor and client, remedies for non-fulfillment of obligations. They are in the clearly expressed manner form and implied terms. The latter may lead to ambiguity resulting in dispute many a times. A contract can be concluded in many ways and the most obvious and meaningful is by undertaking the contract as per specification by the contractor and making timely payment of consideration by the client. A breach occurs when specified needs of the contract are violated by either or both the parties. The remedy for breach of contract is by paying

the damages. There are times when even in the best of interests or application of mind and effort of both the contracting parties they reach a dead end and cannot be performed legally. During such occasions the contract is frustrated. Rescission occurs due to ambiguous terms in the contract and if not deliberately undertaken these can be rectified to making the meaning clear. A contract becomes void due to many reasons the most important ones are capacity of the contracting agency and legality of the work (Nagarajan, 2012).

As against the performance of work and discharging a contract termination is the other extreme which would be as a result of serious infringement or violations to the specifications or considerations. Usually, these cases end up as legal issues. It is true that natural termination of a project with mutual respectability is evolved when the specifications needs of the project have been suitably met by the contractor resulting in completion of the project successfully resulting in mutual satisfaction. The reverse is when the case of unnatural termination which occurs when impediments make it impractical and beyond economical viability to continue the project. Hence a project work can be concluded with natural or unnatural termination. Identification of the type of closing down can be discerned in advance stages of the project but the concluding stage of the contract is a more opportunistic a time to evaluate the success or failure of a contract. One of the important activities other than the activity of closing down and post project review at this stage is finalization of contract which is also called realization of contract.

A well run project superficially appears unproblematic for which lot of meticulous work in the planning stage is mandatory. When the project moves ahead in the life cycle the opportunities to add value by unknown events reduce but the cost to change increases (Moshin, 1983). An optimum point can be identified during the execution stage where these to curves meet but then there is a zone of indifference which needs careful examination and handling. An analysis carried out on the data available since last twenty years reveal that the success rate of projects are still low, but the encouraging inference is that the percentage of success is increasing over the period of years because of technological and management process improvements.

Overall, just about 20-25% of the projects have achieved desirable termination with equal number failings and balance being challenged in one form or the other. On the basis of financial outlay large projects with outlay more than ₹ 500 Crores have barely 2% of success and as the outlay reduces to ₹ 25 Crores the success rate increase to nearly 50%. These are based on values before covid 19. A flow diagram in figure 7 can examine these issues logically. It is generally seen that success of projects of larger magnitude is less compared to those of lesser financial outlay (Rajeev, 2021). The point which needs to be examined is whether it is as result of planning failure or execution.

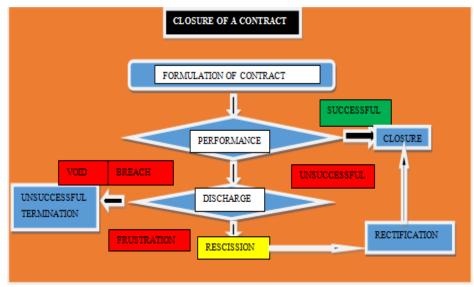


Fig. 7 Closure of a contract

VII. CONCLUSION

Many a time's projects are worked out by contracts. This may be because financial analysis brings out advantages of such a magnitude, or cases where technological requirement necessitates such a decision (Garg, 2023). Whatever may be the reason contracts are undertaken big or small, private or governmental jobs as the case maybe. An agreement by persons of capability to undertake a work keeping in line with the law of the land and enforceable law is a contract. It may be classified on basis of cost effectiveness or for that matter type of work. Broadly they are full cost, cost-reimbursable or time and material and from the objective point of view procurement of spares, stores, equipment, rate or service contract, AMC, works or consultancy contract.

A client who gives out an offer called offeror and a service provider known as contractor are involved in making a contract with an offer and consideration. The procedure involves formulating a contract which includes specifying the needs, working out terms and conditions, executing a deed, monitoring and controlling, and closure on successful termination. A contract may be in full, part or sub contract as the case may be based on the assessment of needs of the organization. It is well documented to cater for eventualities. A financial analysis along with strategic vulnerability, technological considerations and competitive advantage leads on to the decision for contracting.

As projects have risks associated with it during its life cycle, so is the case with contracts. On the contrary uncontrolled risks are outside the direct control of the projects. A contract can be concluded in many ways and the most obvious and meaningful is by undertaking the contract as per specification by the contractor and making timely payment of consideration by the client. Other forms of concluding contract or its discharge include breach, voidable,

rescission. A structured format is available for concluding a contract prepared after careful thought and incorporating financial and legal requirements, however there can be other formats utilized in cases of necessity with the help of legal and financial advisers.

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