

Impact of Liberalization on Project Management

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ABSTRACT

Background

Undertaking projects has been a subject which was of great importance for ages, but the subject drew attention with improvement in global business operations. Construction of Pyramids is a project work, so is a space mission. It has been seen that every project when undertaken for the first time brings with it unique focus, grouping of resources, and knowledge management. The proposed research work has the aim of analyzing the impact of liberalization on project management. Review of literature indicates that the topic has been introduced in various fields of science and related to its usefulness in practical applications.

Methods

A descriptive research methodology is adapted to identify the impact of liberalization in project management.

Results

A project management team with high decision-making capacity and high execution quality would translate in to a good project with very high chances of success, on the other hand, if these two variables are lower in scale, the project would end with average execution and poor projects. Value improvement can be achieved by greater impetus to decision and risk analysis, good project execution planning, business evaluation and funding analysis.

Conclusion

The findings will provide an insight as to the relevance of practicable methods to deal with project management at a global level and may serve as input in improving efficiency, ensuring transparency in business methods and support further research.

Keywords: Project management, Liberalization, Economic aspects, Risk management, Global operations

Introduction

General

The definition of project has a more in-depth understanding of the specific time period, special purpose a project aims to achieve. The salient features of project management are incorporation

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management, time management, financial management, quality management, risk management and contract management. At the outset fragments of the project is worked out which includes, the objective of the project, alternatives available, selecting an organizational structure including a project manager, time frame considered, adequacy of finance at each stage, challenges anticipated, contingencies and countermeasures and outcome. Sometimes a major project may involve a series of minor projects. Time management is a crucial aspect of project management not only because of the cost involved but also with the fact that when a project gets delayed beyond time it may no longer serve the purpose it was intended for. A critical path may identify the reasonable time estimate of completion of a project, but then in case of delay, the project manager may opt for crashing if considered as a viable alternative. Hence, a caution is never go in for too optimistic a time but necessarily using a critical path method identify the longest time the project is likely to take. Deliberation of financial aspects gives out the viability of a project, make buy or contract decision. Organizational planning in a project may not strictly follow the traditional structure. There may be instances of people going from project to project on a time-bound or full-time basis, where special projects are conceived within traditional organizational structure. Often, with advancement in technology, a case in point may be of companies specializing in projects regularly. The project manager is the nucleus of the project on whom the complete project holds on; hence due diligence is required while selecting a person. At times, project managers have not been selected for a project, resulting in the failure of a project like one of the failed space missions. Certain other considerations may be how well the individual worked in other projects and his passion for the impending project for which he has been selected. A commonly forgotten aspect of project management is the communication aspect. Based on the volume of the project, it becomes inherent that risks are associated. In the case of the project management, risks are events which delay the project, incur more expenditure monetarily and provide challenges to quality control. When project work goes into contractual agreements, which is the case in most of the time, they should be incorporated with the support of experts in finalizing a contract.

Team-based Approach

Project management, as we know, is a team-based approach for managing projects. An elementary analysis of the traits of a project manager reveals certain key fundamental characteristics. In comparison to routine activities, a project by its unique identity presents managers with a series of problems. As a large project consists of a series of activities, to ensure that the project proceeds according to a plan, careful monitoring is a must. More often than not, a project is characterized by limitation of time frame with a specific set of activities, which may be altogether new or at large variation from the existing routine activities. Whether the execution of a project is undertaken with the help of a project manager or top management, responsibility remains with the project manager. One of the most important considerations for a project manager is the ability to work as a team. Unlike a traditional organizational structure, projects bring in people with a variety of expertise. The project, being a matter of unique consideration, has a relatively high intensity of ambiguity associated with it. Hence, the project manager should be able to adapt to uncertainties and changes. The objective of the project should be linked to the expertise of the project manager.

Project Manager

A project manager is responsible for each element of the project, such as the work, schedule, human resources, inventory management, financial control, quality and work ethics. Ethical issues and corporate social responsibility are important considerations for the project manager. It is possible that there are cases where along with the project manager, there are project champions. Irrespective of the size of the project and the strength of the team members, all projects follow a pattern or sequence of events which can be termed as the project life cycle. While conceiving the project, the organization identifies necessity for such a project or, in the case of a company engaged in undertaking project work goes into responding to a call, it is followed by a feasibility analysis in terms of costs, benefits and risks associated with the project. It is during this stage, a project manager is identified and developing a project charter. In the next stage of conceptualizing, planning is undertaken to understand the details of the work which would draw out the schedule, scheme and resources required for undertaking the project. It also encompasses a host of other events like working out schedules, budgeting, resource allocation, risk management and human resource requirements. This stage concludes with signing off on the project charter. Having completed these two stages, the actual work commences and accounts for the maximum time and resource utilization for the project. Finally, the fourth stage of concluding the project is undertaken when the project managers and the technical heads reads closure of the project after undertaking a test run to verify it successful working. Any pitfalls during the conceiving stage by way of inaccuracies in contract would have a phenomenal effect at this stage if the executer is a project management company, so we may say bull whip phenomena exists in project management as well.

Literature Review

In his book, the author has made the latest book in line with PMBOK (Heagney, 2019). Topics include stakeholder management, procurement management etc. It is considered as a guide to plan and execute timely projects. In the book Project Management, the author deliberates on successful implementation of projects (Haynes, 2012). The book Project Management case studies cover 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 the highest level (Kerzner, 2020). The main attention of the author is on projects in the 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 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 dwells on the changes in project management due to the internet and technological revolution. The main topic under discussion in the book is the effect of global culture on various facets of project management. A chapter has been dedicated to Cross-Cultural lessons which validates on the theory of relationship between culture, societal, organizational and leadership effectiveness (Dasgupta, 2018). In his book Project Management makes a study on Japanese management techniques such as Taguchi method and TQM, 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 the internet on project management (Kerzner, 2020).

In Administration of Construction Contracts, 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 contracts difficult. He desires that undue control and rigid standards should be avoided in contracts (Srivastava, 2015). Handbook on Project Reports, is a practical guide for entrepreneurs, project consultants, bankers and operations manager (Garg, 2023). In Drafting Commercial Contracts, the writes about key aspects to be considered while it is drafting commercial agreements. New chapters on e-contracts and intellectual properties have been included (Verma, 2020).

After a considerate literature review it is evident that a holistic study has not been conducted on the topic, 'Impact of liberalization in Project Management' which is the aim of this research paper. It also identifies the role played by contracts in the success of project management from the global perspective and harbours on the idea above multinational approach.

Aim

The aim of this research paper is to analyze the impact of liberalization in project management.

Methodology

Descriptive Research

Descriptive research has been used, considering the various facets of human involvement in the planning and executing of projects. Here, the characteristics of organizational behavior fundamentals are identified and analyzed from the point of view of project management. In descriptive research, the process does not answer questions about how/why/when the characteristics occurred but describes the features of the system under analysis.

Review

Liberalization 1991- (Jalan, 2021), begins with the presumption that Liberalization undertaken by the government in 1991 has been a major event since the independence of the country. He brings out the monumental changes in the economic development of the country since the event took place and how it has supported growth. (Bhaduri, 2000), gives an idea of the changes in India ever since 1991. It highlights the advantage of a free market. The book supports the bold step by the Narasimha Rao government's experiment with privatization. (Singh, 1995), covers aspects such as globalization of the Indian economy, Analysis of financial sector, structural reforms as it relates to contemporary world in the Indian context. (Mckinnon, 1993), is a work which attaches itself to the liberalization of financial markets in less developed countries. The importance of moving out from a repressed economy to an open economy has been highlighted. While comparing the economic changes in China and Eastern European countries, the author harps on the financial control and macroeconomic stability. (Hubbard, 2020), has been written keeping the decision makers in mind. The book has a view on the fast-changing world. Events such as natural disasters, data breaches have been dealt in detail. (Sam, 2020), typically deals with project management and results when someone plugs a single number into a spreadsheet to represent an uncertain future quantity. Savage finishes the book with a discussion of the emerging field of Probability Management, which cures this problem through a new technology that can pack thousands of numbers into a single spreadsheet

cell. (Marks, 2020), considers these key questions and provides his insights, focusing on the need to make the management of risk a key ingredient in decision-making and the running of the business. He considers not only how risk relates to objective and strategy-setting, but discusses each activity, from identifying to treating risk – as an integral part of day-to-day management rather than a separate, periodic exercise.

Time Estimates in Project Management

Project planning includes constructing the statement of work, work break - down schedule structure, network diagramming, scheduling and budgeting. Statement of work is a detailed analysis of the project at hand. Work break down structure is a hierarchical representation of project areas, which is then broken down to achievable elements of work into appropriate levels. In effect the project planning involves creating a WBS, considering time duration of tasks both individually and calendar wise, identifying the dependencies, working out the resources required, using a Gantt chart or networking diagram to schedule the activities. As very large projects comprise a large number of activities hence at the planning level, there would be a requirement to make a realistic estimate of the scheme of things to identify the time frame associated with the completion of the project. From here the time and cost estimates are worked out. Time estimation is an important aspect; hence it would be prudent to earmark a person for making the time estimate. Generally, Gantt charts are utilized for project management along with the network diagram. It illustrates the workflow. There are two distinct types of network diagram, namely activities on arrow (AoA) and activities on node (AoN). A commonly used term in network diagrams is a path. A path is the designated and logical route the sequence of activities takes for completion of a project. The cumulative value of the timings of individual paths provides the anticipated duration of the project. The longest path is known as a critical path, and the activities included in such a path are called critical activities. Once the activities have started or finished, the time gap with which the next activity commences or finishes is called 'lag'. Hence, emerges certain computing codes named as computing algorithms such as Earliest Start time (EST), Earliest Finish time (EFT) and Latest Start time (LST), Latest Finish time (LFT) with the restriction that the project would not be delayed. By ascertaining these timings, it would be possible to work out the critical path, slack time etc. CPM is a one-time estimate used largely for construction projects and PERT, on the other hand, uses three timings estimates to work out the most probable time and generally used in software related projects. In both the cases, time determinants are worked out either deterministic or probabilistic. In order to undertake probabilistic time estimation rather than having a single timing for each activity, we take three time estimates. This leads on to the phenomena known as beta distribution, which is used to describe the variability of timing estimates for activities in the path of a project. For a project manager, it would be ideal to keep the variance value lowest because as this value increases, the degree of uncertainty linked to the activity's probabilistic determinant of time increases. For the success of a project, it is essential that it should be completed on time, within the budget and meeting the requirements set forth by the project sponsor and customer.

Risk Management

Despite meticulous planning, a project may at times fail. A project manager and his team should be prepared for such an eventuality. Certain important activities which assume importance are making a feedback plan and completion review, completing close-out review and contract, and finally

providing project completion report. It would be necessary to identify the risk and understand its impact on the progress of the project. While working out path probability, it has been found that at times individual paths do not meet the requirements as specified by the project sponsor. As each path consists of a series of activity crashing, a path involves a logical process. Shortening of activities on the critical path assumes importance because they would have an impact on the total project duration. Crashing activities have been seen to increase direct costs and decrease indirect costs. It is important to crash one period at a time, starting with the least expensive activity on the critical path. There may be in certain cases where a project has more than one critical path, in such cases, look for common activities, compare the crashing cost, choose the least expensive activity. There may be a tendency to focus only on critical activities which may not be correct because many a time, as the project progresses, other considerations may make supplementary paths more critical. Risks in project are manifestations of unwanted interruptions in project path as a result of funding, time management, availability of skilled technicians, refusal to go along with directives, complexity of the project, absence of transparency in communication and many other imponderables as external factors. A potent analysis of risks associated by way of its impact and probability on the project can bring out the overall exposure which a project manager needs to be concerned about. It is incumbent of the project manager to make a risk plan after accepting the potential risks by avoid them, having contingency plan and introduce the technique of transferring the anticipated risk. It has been found that occurrences of risk is higher in the initial stages of the project and as the activities progresses they reduce in intensity, but converse is the case as far as costs related to overcoming risks. Reduction of risks is advantageous for successful execution of any project.

Human Angle in Projects

Delegation is more increasingly incorporated in project management than other work areas, hence challenges at work place becomes more dominant in executing project. In project management the ability of OB as a philosophy to adapt to cultural differences helps managers to work with teams with organizational structures on the matrix and virtual concepts. There would be a constant state of temporariness while working on projects. As projects have time and finance restrictions it may induce the managers and workers to cut corners, break rules and engage in forms of questionable practices, hence the project leader, to achieve success in the project, should create an ethically healthy climate. Suitability of the approach is the key to the effectiveness of the team; in the case, the project is a success. For completing a project in a time-bound manner, it is incumbent on the project leader and his team to willingly take the responsibility. When a project is in the conceptualization stage, the team is new and members, in most cases, are not familiar with each other or with the project leader. Here the nuts and bolts of the project are identified thread bare. As a consequence, the project leader during the planning stage would rather make all attempts to discover the mindset of the team working with him on the project. In project management, unlike a regular work, attributes like the aim of the project, technology used, and work environment are the subject of study to gain insight in to employees for understanding their predictable behaviour in temporary work settings. In project management, the ability of OB as a philosophy to adapt to cultural differences helps managers to work with teams with organizational structures including the matrix and virtual concepts. As projects have time and finance restrictions which may induce the managers and workers to cut corners, break rules and engage in forms of questionable practices, the project leader, in order to achieve success in the project should create an ethically healthy climate.

Leadership in Project Management

Project management being distinct from routine activities, it is necessary to identify the suitable form of leadership in such situations. After considering many of the variations in leadership styles, effectively understanding the nature of activities involved in a project of a large magnitude, situational theory of leadership would suit the project management environment. Appropriateness of the style is the key to the efficiency of the team in the case of a project accomplishment. When a project is in the conceptualization stage, the team is new and members in most of the cases are not familiar with each other or with the project leader, it is natural for the top management to actively involve by identifying the need of the project and set an objective. The project leader in his capacity would then demarcate the role of the team by assigning them their responsibilities, nature and timing of the job. In this period, the project leader, possibly in consultation with the top management or the project sponsor, may undertake the risk management and decision-making.

Findings

Risk Management

One of the important characteristics associated with projects are risks. They are inherent, occurring at a decreasing rate as the project moves from inception to closure stage. The cost associated with risk is an important factor, but then it is generally found that only a small percentage of risk costs phenomenally high. An important quality a project manager should inculcate is the risk-taking approach. There are passably three states of risk acceptance of an individual, and definitely a project manager should be risk seeking. The other two states are risk avoidance and risk neutral. Being unique, a project cannot generally be devoid of risk; hence it would be rather difficult in case a project manager has a risk neutral or avoidance psyche.

Time Management

One of the important considerations in working out a project is time management. Most commonly used methods for scheduling a project work is with the help of Gantt chart or network diagrams. In the network diagram, a critical representation of activities of the project is undertaken. A project can have many paths, and the longest path is the critical path, which is indicated by a thick line. Usually, the activities in the critical path do not have slack time. PERT, on the other hand, is used for complex projects and uses three time estimates which are probabilistic in nature. There may be prerequisite to complete a project within a time frame and the project manager has the option to use crashing, when the indirect costs are more than the direct cost of crashing. Probability of a path depends upon the standard deviation of the activities. Knowing the standard deviation of the path, which is the sum of the standard deviation of the activities and the path mean, a project leader would be able to work out the probability of completion of a project in a stipulated time. One of the most crucial elements of a project plan is to conclude it on time. Hence, estimating resource requirement for each activity and carrying this information forward to create a project plan is the first successful step. Time estimate is important to formulate target starting and ending dates for the project. Using the resource requirement estimates, time estimates can be assigned to each activity. In Gantt chart by representing time on x-axis and activities on y-axis, at one glance the activity time and idle time can be seen as a visual display. Whereas in the schedule charts progress of work is depicted and in load chart the activity time of work centers are shown as to when a particular job starts or finish and where to expect idle time. As a result, managers are on the constant look out for idle times to sift work to

those work centers or in certain cases of contracting work. For simple projects, Gantt charts are a popular tool. Here the manager undertakes detailed planning of the project and schedules it on the chart. Once the execution of the project commences, he compares the planned progress with actual development. Most of the projects have an inherent complexity and uncertainty. The larger the project, the degree of complexity and ambiguity increases. It is for determining the time duration that the network diagram is used. It would generally be possible to bring out a network diagram for project tasks if there is clarity in the direction of the project, which implies that there should be a definite starting activity and closure point. The activities which take the project from the beginning or start activity to the closure should be sequential and follow a definite path. A network diagram is a critical representation of the tasks in a project work. This representation helps the project leader to monitor the project activities. Hence, network diagramming is a critical path scheduling technique used for controlling resources. Critical path scheduling is nothing but identifying the longest path for completion of a project activity, and its order and duration directly affects the closure time of a project. Firstly from the WBS identify the required activities to complete the project. Thereafter, identify the starting activity and final activity and the immediate predecessor and successor activity, which is followed by calculating the expected time for each of the activities which are being reflected in the networking diagram and finally considering the slack time. Identify the convention which is followed by the organization or the project sponsor. The sequence of activities from the beginning node to the closure node is called a path. In a particular project, there would be more than one path. Paths reveal the sequential relationships between the activities. The length of the path can be worked out by the summing up of the anticipated times of activities on that path. There would be varying time for the paths determined for each project by sequencing of activities in different manner, but the project completion time is considered as that of the longest path. Hence, if there are delays in the activities of the longest path, the overall project is automatically delayed. Therefore, the longest path is called as the critical path and the sequence of activities making a chain in the critical path is called critical activities. Time estimation commences with assigning time for each activity on the network or WBS and then, when considered from the complete project angle, it allows the project manager to develop a target starting and closing dates for the project. For a small project Gantt chart may serve the purpose, but when it comes to larger projects, networking may offer certain advantages. In certain complex projects, a combination of Gantt chart and networking is found being used. Prevailing technique which are easily adapted to project management software available in the market are the Program Review Evaluation Technique (PERT) and Critical Path Method (CPM). In CPM, the chain of activities which are controlling on the time estimates of the project are identified. From this analysis, the project manager is able to identify float and slippage. Float is the cushion available for a delayed start of an activity without compromising on the schedule of the project, and slippage is the difference between actual and planned progress of the project. It is clear that critical activities which are considered allow no float, hence to cater for float and slippage while planning and scheduling contingency time allowance is catered in to the project plan. It is designed to provide a periodic report of the project covering intense details, which helps in project manager to control the project implementation. With due considerations like float, slippage and contingency it is possible to arrive at Latest Finish Time (LFT), which is the cut-off time of an activity by which an activity is required to be completed without delaying the whole project. In reality, networking is largely on relative timing of activity and making time frame within the overall plan. When two

activities have the same slack and on the same path, they have shared slack and in case one activity utilizes the complete slack the other activity will not have any slack and become a critical activity.

Mitigation of Risks

Whether it is a project undertaken at the domestic level or international level, subjectivity in terms of success depends to some extent on risk mitigation plan. Risk management thus provides a hands-on realization of an important element contributing to the success of a project. Ability to anticipate risk by correct analysis and identifying methods which are cost-effective to overcome them would contribute to the success of the project. Risks have a variety of causes, and they follow a pattern in relation to the life cycle of a project. The lowest point of quantum of risks and cost potential falls in the execution stage of a project. Having identified the likely risks which come across in a project, qualitative and quantitative analysis take precedence. Risk management policy should be made in consultation with the management and project sponsors, keeping the objectives of the project in mind. Qualitative analysis aims at characterizing and analyzing risks and prioritizing their effects on project objectives, and quantitative risk analysis involves measuring the probability and consequences of risks. Frequent interaction and flexibility in communication would contribute to the identification and response to risks associated with the project. It is quite natural for a project sponsor or a project manager and his team to postulate that the project being undertaken is without any risks of a magnitude to give deliberation. As in the case of any other business activity, risks can be by way of time, manpower, technology, finance, and political uncertainty. An assessment can also be carried out on the basis of each activity which forms the path of the project and definitely those which are on the critical path. It is likely that when certain risks are not attended to in a time-bound matter, the seriousness spreads to other areas and may impact on the whole project, leading to premature closure or termination of the project. As evident, the chances of risks are more in the initial stages of the project rather than later stages. Risk management is a proactive step which involves in developing planned responses to meet unfavourable situations. Developing a project risk breakdown structure is an excellent tool for identifying the risk whether it is technical, external or organizational. Sharing risk is undertaken by involving partnerships. Like every other aspect of risk management, risks related to a project also follows the Pareto principle or 80-20 principle. It has been found that the majority of the projects do not undertake risk management. Considering the impediment these risks can cause to the success of the project, its management is a good investment. During the planning stage, the team selected for the project should give necessary brainstorming on potential risk areas and methods to overcome them. Responding to the risk is after all a satisfying feeling for the project teamwork. In the context of projects, risk management involves understanding prospective problems in the life cycle of the project. Risk management is timely analysis of risks, its intensity and how to overcome them by timely involvement. A risk management plan goes into assessing the probability of risk in each activity, the impact such an event has on the execution of the project. These two factors together form the overall exposure of a project. Risks in a project manifests in various forms, scale and time. Many a time, it is possible that an infrastructural project can result into many forms of risk. There can be a level playing ground in case certain parameters are identified to visualize or anticipate risks in a project by giving relative importance for factors. It is possible to correlate risk probability and life cycle of a project. The inference is that a stage of high probability and high-cost risk does not appear to be a reality, but it follows the Pareto principle that few of the risks which occur during the closure stage of the project have prohibitive

cost and needs closer attention than the risks during the inception and planning stage. At the outset, the project manager should come out clearly to his team as to what approach is to be adopted on identifying a risk. After having made a decision on this account, the team proceeds to identify possible risk at each stage of the project, its cost and potential payoffs. Having identified the risk and undertaken analysis, the next step is to carry out SWOT analysis to meet the risks by reducing its effect as an impediment to the project facilitation and enhance it as an opportunity for the potential augmentation of the project work. The next step of risk monitoring and control is essentially the most important step in risk management, where the effectiveness of all the above-mentioned activities is validated. An effective risk management provides a risk management plan. With that being the aim of the project risk management plan, the key personalities to be included are the project manager, project champions and project sponsors. Risk has a vital and important relation with the objectives of the project. The primary decision involved is to identify whether taking a risk or avoiding the risk is advantageous from the objective point of the project and the concurring opinion of the organization sponsoring the project or project manager in case it is a project which is initiated through a sponsor and project champions.

Risk Management Plan

Once the risks are thus specified, weighing up is done on steps planned for lessening of risks. Having identified these key determinants for making a risk management plan, the project leader and his team should have a sitting or as many sittings required with the organization involved in the project or the project sponsor to identify their approach to risk mitigation. When these two, namely; the project sponsor's approach and those which have been conceived by the team are rationalized, a risk management plan can be given final shape. Yet, there may be occasions during the various stages of the project life cycle for the team to review the plan, keeping time and resources in to consideration. There would be certain risks which will have a high impact on the project as a whole. For mitigate these risks, the team should develop fallback plans. There may be at times that the objective of the project is kept vague. Errors in cost estimation are often found to hamper the progress of the project, and certain projects have been prematurely terminated owing to this factor. Management of the team is a significant issue the project leader should take notice of. A complicated and difficult project may require continuous motivation. There may be instances when projects are assumed to be without risk and the team fails to plan for risk and its mitigation, which would eventually lead to no-go situations or develop in to prohibitive cost. It would be prudent for the project manager, project facilitators, champions and the team leaders to understand these aspects for facilitating successful completion of the project. For identifying the risk, the manager or person who has been entrusted with the responsibility of risk management should have access to the project narrative, planning documents, historical information on past projects of similar nature. Risk breakdown structure (RBS) can streamline the mitigation process of a risk in project work. In a project of bigger magnitude the risks would be greater, but at the same time in a smaller project their importance in the overall context cannot be left unnoticed. Some of the strategies for responding to risks include, using WBS and networking, transparency of information, encouraging crosswise communication, increasing the authority of project manager, emphasis on team work, increasing the regularity of project monitoring. Even though there would be cases where the knowledge and experience of project manager would be an important factor in risk response, nevertheless the whole exercise of risk planning and mitigation strategies should be worked out as a team and not stand-alone event,

even in case the structure is a virtual organization. Sometimes, the risk mitigation strategy may involve creating bottlenecks; hence contingency time buckets should be provided, and possible parallel paths can be created. A good monitoring and control plan would result in timely mitigation of risk without heavy involvement of time, resources and finance. In case the result is not a contract violation, a proposal for modification of the project may be sought. Foreign exchange exposure is an indicator of the prospective change for a firm's profitability, net cash flow, and market value because of the change in exchange rates. Operating exposure, deals with the value of a firm on account of future operating cash inflows. Both transaction exposure and operating exposure exist because of unexpected changes in future cash flows. Some of the firms attempt to arrange the foreign exchange exposure through hedging. Only unexpected changes in exchange rates, or an inefficient foreign exchange market, should cause market value to change. Transaction exposure is concerned with the uncertainty of future cash flows which are already contracted, whereas operating exposure focuses on expected future cash flows. Tax outcome of foreign exchange exposures includes creating realized foreign exchange gains and removing realized foreign exchange losses for income tax purposes. By hedging, the firm reduces the risk of such an exposure due to challenges in the form of interest rates, exchange rates and commodity prices. In case the hedging cost is taken in to consideration, hedged transactions will decrease the expected cash flow. Another method is entering into foreign exchange or foreign currency derivative contracts. Contractual hedge employs forward, futures, options contracts to hedge transaction exposure. Currency options are assertive in the management of currency risks, and others are based on forward contracts and money market hedges. For exceptionally conventional and risk-intolerant firms, hedge all existing exposures with forwards and a variety of backlog and anticipated exposures with options. Based on experience, proportional hedging has been prevalent in addressing transaction exposure risks. Generally, the major share of the exposure of this nature is hedged using forwards contract hedge and the balance is hedged on the basis of firm's risk tolerance, confidence level and foreign currency exchange rate movements. Average option is also called as derivative contract which is used by companies to hedge with lower hedge costs.

Contractual Risks

In project work, contract procedure involves identification of the necessity, floating of tenders, formulation of contract, controlling and monitoring and successful termination. Contractual risks include controlled risks, uncontrolled risks, surety risks, performance risks and price risks. The process of contracting covers the activities which commences from formation of a contract to completion of execution and handing over. Contract in business management is an agreement enforceable by law. 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. It is generally included in the planning stage of the project while considering make or buy decisions to contracting. From the financial execution point of view contracts are broadly classified as fixed price, cost-reimbursable, time and material contracts. Fixed price or lump sum contract is undertaken when the nature of the project is not very clear in specific terms, hence the project sponsor or project team identifies the overall objectives of the project and engages in a procurement contract, may it be for product or services. 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. Formulation of a contract is to develop the need for a contract. Offer has the detailed specification of the project work and cost considered for fulfillment of the work. For successful execution of a contract planning is necessary. The steps involved can be categorized as pre-contract stage, execution stage and after completion stage. 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 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 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. Thereafter, risk can be generated in the form of surety risk and schedule risks. Other types of risks are procedures for resolving disputes, performance risks and price risks. The same is the case for industrial equipment, bridges, roads, buildings and other projects. Risk purchase is a term commonly used in government contracts. It is true that natural termination of a project with mutual respectability is evolved when the specifications need of the project have been suitably met by the contractor, resulting in completion of the project successfully paving way for mutual satisfaction. 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. 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

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. There are various types of contracts from parties and process involved and these are; unilateral contract, bilateral contract, contracts under seal, executed contract, implied contract, and voidable contract. The process of contracting covers the activities commencing from formation of a contract to completion of execution and handing over.

Global Projects

Operations Management's contributions to global strategy are differentiation, cost control and response. A global project has resources and members gathered and organized from many countries. While undertaking global projects it is of great importance to understand and develop business goals which would be the prime objective kept in mind while undertaking such projects. Mainly

technological superiority, availability of cheap resources and man power are important reasons for undertaking global projects. In a normal project cycle the closure of the project would not be complicated by detailed testing of pilot project, initial production and training of manpower of the host country. But these things assume greater importance in the case of a global project. Standards achieved in a global project are undoubtedly world class and is generally undertaken in a shorter period of time with better quality control. Laws for contract differs as per the countries involved in contract, hence while contracting with countries legal sanctity of the contract with the help of experts who are conversant with international law should be taken to prevent the contract becoming voidable or in worst case scenario void. Monetary aspect of foreign contract assumes greater importance as a result of foreign exchange exposure in terms of transaction and operation exposure. Companies involved in global projects may consider forward contracts, futures, money marketing or hedging for reducing the exposure. While mitigating financial risks in global project management the steps taken are considered as a capital function involving costs and not profit. Based on experience proportional hedging has been prevalent in addressing transaction exposure risks. Global projects fail due to poor planning, changing requirements, and conflicts for resources, unclear risk management, poor team work and ambiguity in terms and conditions. An international project management provides a unique opportunity for global companies to venture in to greener areas of project. Global project management involves planning, implementing and controlling the execution of project as well as services with a criterion that the point of origin and consumption are different countries. Global project management occurs when projects are undertaken by contractors or companies located anywhere in the world. Different modes of global project operations include part contracting or subcontracting or specific equipment contracting, project in the form of foreign governmental aid to developing or underdeveloped countries sourcing through direct investment. Major activities in international project management are political stability, availability of skilled labour and foreign exchange policy. Whatever may be the reasons, before entering global project contracts a STEP/PEST analysis is recommended. It is a practice of hiring a foreign firm to undertake a project to its specification. Ultimate decision to undertake a project in a global market is by establishing a facility for undertaking projects in the foreign country. As a result, there is cost advantage, coordination of activities is more and there is rapid pace in closure or termination of the project. Certain key global project management decisions include goods and service design, quality, location selection, layout design, human resources, scheduling and maintenance. An important consideration in this context is the challenges and risks faced by an international firm undertaking projects which can be understood with the help of Greiner growth curve, even though it is for products but can be understood in greater details for projects. With difference in technological development global projects are a means to that end. Sub contracting and part contract may involve technology transfer. In global projects defining the business goals discreetly is an activity which will show the path to success. In comparison to the project life cycle in normal project the project management process in global process management comprises five stages which are; identifying, selecting, developing, executing, operating and identifying new opportunities. A global project executing agency is believed to provide a world class project, faster, cheaper, better and safer. A project management team with high decision making capacity and high execution quality would translate in to a good project with very high chances of success, on the other hand if these two variables are lower in scale the project would end with average execution and poor projects. Value improvement can be achieved by greater impetus to decision and risk analysis, good project

execution planning, business evaluation and funding analysis. Types of hedging are forward contract, futures contract and money markets. In forward contract two parties engage in a contract for a specific date at a specific price whereas futures are standard contract and money market is for short term activities for periods less than a year. In cases where there is high risk associated with expected cash flows, high discount rates are used to calculate present value. A lower present value is generated by hedging and the firm reduces risks in the form of interest rate changes, exchange rate volatility and commodity price variation. Currency options are aggressive in the management of currency risks and others base on forward contract and money market hedge. Based on experience proportional hedging has been prevalent in addressing transaction exposure risks. While in most of the cases of projects of larger magnitude the contractor has the responsibility of training client human resources but a turnkey project is a project when the contract is assigned to design, construct new facilities and definitely train personnel. It also suggests those turnkey projects are aimed with short term vision of the foreign company. A turnkey project differs from an EPC contract from certain points. In a turnkey project contract a firm agrees to design, construct and equip a facility in a ready to operate condition in exchange for a consideration, but in the case of design and build there is a clear separation between design from construction and implementation process. A turnkey project has only one process instead of two separate ones leading to saving of time and lower costs. Demerits include higher costs, more assumed risks, restricted competition. Global projects fail due to poor planning, changing requirements, and conflicts for resources, unclear risk management, poor team work and ambiguity in terms and conditions. A global project has resources and members gathered and organized from many countries.

Conclusion

A global project has resources and members gathered and organized from many countries. These are becoming more common in these days with the development of internet and communication facilities. By such an action the companies are able to save money in more than one account, but then it is associated with difficulties of precise coordination because of time zones, language and cultural barriers. Success depends upon building team work and encouraging interaction between members, setting clear goals, adopting virtual meetings, and using global sourcing and business procedures. Despite that, the time differences can be used in a favourable manner by allowing team members in various countries to adopt flexible timings, which will result in increasing productive hours. There are certain difficulties faced due to the absence of one-to-one interaction. The technological advantages include utilizing the best of the human resources, most advanced technology and latest equipment, procurement from the best vendor, and ensuring global quality standards.

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