All businesses irrespective of IT incorporation are threatened by natural disasters, lack of human capabilities and human prone errors, loss of funds and many unexpected events that bring uncertainty to any business development. But, since the dawn of computer age and recent advances in computer technology and software Moore’s law has been very much certain. IT is now advancing at rapid pace and every industry in valley has its inclusion. IT has now become prominent fragment of any business and it acts more than a mere touch point to every aspect of the industry. Subsequently, IT projects are now growing larger and budgets surpassing new records. Thus, they pose inflated risk to an organization in case of failure. IT projects are now threatened with over budget and extended time lines that impact negatively on company’s overall doings in market. Research shows half of all IT projects with initial prices tags of $15 million explode their initial budget and on overage large IT projects run 45 percent over budget and 7 percent over times delivering 56 percent less value than predicted [paper1]. Software has now become fundamental layer of so many products that it now imposes biggest threat on failure, there are events when large IT project faces cost overrun of over 200% and schedule overrun of over 70% called as ‘black sawn’ [paper 2] which also drives companies to file bankruptcy.

Thus, in order to deliver estimated value of the product in time and within allocated budget, risk management becomes paramount component in any IT project. Risk management process comprises of identifying pressure points i.e. expected risks, assessing those risks, comprehensive understanding of its impact on cost and timelines, performance risks to overall system and adopting proactive and well-structured approach in order to suppress its overall effect on IT deliverables. Following are some of the major risk factors that highly impact project success and needs to be on top priority for leadership.

Inaccurate requirements: Complete understanding of project requirement plays a paramount role in the success of any IT project. Ability of Business analyst, data scientist and other business representatives of comprehending various aspects and requirements of end users from project decides the fate of the project. Since it’s such a complex process there is always a possibility of requirement gap to creep in at later stages thereby resulting in failure of project. Thus, inaccurate requirements is a major factor for project failures accounting for almost 39% of project failures in total. In 2008, Qantas-Australia’s national airline abandoned its $40 million Jetsmart project due to lack of understanding of requirements. This pitfall occurred due to failure of involvement of end users and understanding their requirements thereby spending three more years for alternative solution. [ https://www.askspoke.com/blog/it/reasons-for-it-project-failure/ ]

Strategic risk: High performing project is the one that has crystal clear view of its business objectives, project timelines, intended team effort, overall cost and clear strategic planning to meet all this efforts and lesson the gravity of risk on system. It also means the company has some strategy planned to mitigate risk, achieve timelines and deliver high quality projects. A poor strategy comes from improper planning and negligence of constraints. One of the negative impact of poor strategic goals can be seen from bank’s transformation effort, where bank involved financial officials in very later stage that resulted in numerous complex changes in performance management system. Thus, in order to incorporate this changes and making system live the project was delayed for more than three months infusing more than $8 million of additional cost [paper1].

Technological complexity: A high performing project is the one that focuses on every aspect of business and technical layers. All technical aspects such as IT architecture and infrastructure, functionality, quality assurance, information security, releases and project scope etc. needs to be well planned and addressed by the subject matter experts. In 1993, Foxmeyer Drugs was the fourth largest pharmaceuticals company, worth $5 billion. They purchased SAP system and a warehouse automation system in order to increase their efficiency but with shortage of subject matter experts handling this complex ERP system, Foxmeyer heavily relied on consultants. Consultants on the other hand also lacked potential understanding of the system. Thus, with aggressive timelines and lack of understanding of complexity of the system the project failed and Foxmeyer had to file for bankruptcy in 1996 and was eventually sold to competitor for a mere $80 million[add some foxmeyer paper]. Thus, proper planning with subject matter experts is needed in order to improve throughput and avoid technological failures.

Inefficient team: Success of any IT project is defined by its skilled team and its efficiency. A project team must be competent enough to deal with any jeopardy situations and mitigate it in order to suppress its consequences. In order to build systematic team, top management should indulge skillful people who have same frequency and motivation of solving problems associated with the project. They should be incentivized in order to meet project goals on their own and thereby exhibiting their own growth in the organization. All this factors, results in highly motivated environment thereby increasing efficiency of the team. A Germany company toll collect a consortium of DaimlerChrysler, Deutsche Telekom, and Cofiroute of France— suffered defeat during implementation of technology designed to collect tolls from heavy trucks passing German roadways. Company had deployed inefficient team of developers that failed to integrate different software systems thereby causing loss of revenue of more than $10 billion [paper 2]. Thus, building efficient team with desired skillset is needed in risk management in order to manage and troubleshoot project failures.