CHAPTER - 7

CONCLUSIONS AND FUTURE SCOPE

7.1 CONCLUSION

Failure of software human risk management is a common problem reported from various organizations across the world. These failures can be attributed to various human risk factors present in the software development projects. Experts in the area recommend that human risk associated with software development project must be identified and managed throughout the project.

In the present work we have proposed additional risk areas that create risks to the human factors in software development life cycle. Humans are the team members who are all geographically distributed by the work location environment. This system finds the possible risk areas and their risk description. Each of the risk areas are taken in account to find the problem of the corresponding areas. Risk assessment and Control techniques are applied to the problem identified in each risk areas. In addition the Risk resolution techniques and frame work are also proposed to minimizing the human risk factors in software development environment. Managerial techniques, Risk managerial techniques, Configuration management techniques are the three important resolution techniques in the distributed software system. Now a days the software developments are usually done by the distributed software development environment. So the team members were distributed in several zones. Coordinately distributed humans can work together by the virtual communication techniques by using the Internet workings. The Coordination, Communication, Time zones and Skill developments are considered as the high risk areas. The change management board allows the user to satisfies their additional requirements through their onsite coordinators who propose the changes.

There are many risks involved in creating high quality software on time and within budget. However, in order for it to be worthwhile to take these risks, they must be compensated for by a perceived reward. The greater the risk, the greater the reward must be to make it worthwhile to take the chance. In software development, the possibility of reward is high, but so
is the potential for disaster. So in order to successfully manage a software project and reap our rewards, we must learn to identify, analyze, and control these risks. The important conclusion from the present work is summarized as follows

- The Project Manager (PM) can able to understand the task flow and task management of the teams.

- The task is monitored by the work sheets. Each task is separated and provided to the proper persons of the teams.

- By implementing the human risk management framework the minimization of people risk in distributed team is concluded.

- Bayesian based risk assessment process model is introduced in the present study.

- A program is developed to simulate a risk management in software development processes according to the proposed methodology.

- Bayesian network is used to calculate the joint probability distribution.

- By using the Bayesian network the optimum weight is obtained and also the overall human risks are reduced.

- The proposed risk assessment technique performs better because the factors considered to evaluate the risk have great influence on the productivity of the system.

- The various risks attached to human factors were analyzed and studied.

7.2 SCOPE FOR FUTURE RESEARCH

Future work will concentrate on many unfounded risk and risk areas in distributed software development environments. A detailed results for the risk management strategy in the distributed system will be described on the upcoming works. In addition, Corrective measures will be carried out for the better evaluation of the distributed software system. Moreover the
future works will concentrate on the developments of the organizational standards and team work efficiency. Reducing the risk of humans will increase the business productivity of software organization. Whenever the human support increases in turns it decreases the complexity nature of the system. The additional focusing of the human risk is needed for the better software product.

7.3 RESEARCH FINDINGS

In the present study four more risk areas are included in addition to the existing risk areas. They are RE (Risk Exposure), work flow assessment, teamwork balance and ongoing education of new developers. It is noted that to reduce the human risk in the following steps are taken in to consideration

- The interaction between the team members and RE’s increase user satisfaction.

- The workflow assessment is an important feature which would able to determine the path of the activity of distributed team. Hence, the project manager could able to know the flow of the system construction by arranging periodical meetings. The team work activities should be recorded in the database of project management. Here the task is monitored by project manager. He has the responsible person for schedule the work and work progress.

- Ongoing education of new developer should be conducted on the basis of the skill of the participants. The Bayesian based risk assessment process model is introduced in this research to identify additional risk factors associated with human resource. A software is developed using MATLAB probability to calculate the joint probability distribution. This risk assessment technique performance better because of the factors considered to evaluate the risk have great influence on the productivity of the system.