**Initial Post**

Having gone through the article by Hijazi et al. (2014) I have listed below what I believe are the top 5 overall causes of risk.

1.     Inadequate estimation of project time, cost, scope and other resources.

2.     Continually changing requirements

3.     Unclear Project Scope

4.     Too much complex system

5.     Poor Regression Testing

The major goal of software development phases lies in it’s ability to produce a high quality performing software with lowest cost possible and be delivered in the shortest time possible. Having this in mind there is every need for a thorough assessment of all risk factor involved in this process and how they can be mitigated against.

For Inadequate estimation of project time, cost, scope and other resources, this is a common factor across projects and can be mitigated against by proper planning. Project can be broken down into chunks or components. This approach helps managers to determine project feasibility in terms of cost and resources and duration. Risk can be identified early, and inputs are taking from all stakeholders.

Continually changing requirements. The issue with constant change in requirement is not entirely strange as it is sometimes subject to constantly changing customer needs. It is vital for organisation to have the flexibility to incorporate changes into SDLC process. Adopting methodologies like Agile will help reduce the risk associated with this.

Unclear Project Scope. Again, we have seen organisation getting into the middle of project to realise that they are not meeting expectation. Approaching project iteratively can help. In case of where it appears that the wrong things has been done it will be limited to that particular iteration or component.

Too much complex system. Organisation can use framework like microservices for software development which helps to develop a particular component at time thereby reducing the risk associated with designing large and complex applications.

Poor Regression Testing. The risk of losing the existing features when a new one is released is one thing every organisation must avoid as the cost might be unbearable. So, organisation should have automation testing framework in place to rerun the existing features and validate the behaviour with respect to the new changes or releases.

References:

Hijazi, H., Alqrainy, S., Muaidi, H. & Khdour, T. (2014) RISK FACTORS IN SOFTWARE DEVELOPMENT PHASES. European Scientific Journal. 10(3): 1-20. Available from: [**https://www.researchgate.net/profile/Thair-Khdour/publication/266144501\_Risk\_Factors\_in\_Software\_Development\_Phases/links/542806610cf2e4ce940c36cc/Risk-Factors-in-Software-Development-Phases.pdf**](https://www.researchgate.net/profile/Thair-Khdour/publication/266144501_Risk_Factors_in_Software_Development_Phases/links/542806610cf2e4ce940c36cc/Risk-Factors-in-Software-Development-Phases.pdf) [Accessed 01 April 2022].