GLOBAL SOFTWARE ENGINEERING

Memo

DATE :           December 6, 2021  
TO :              CEO of XYZ Inc.  
FROM :        A senior employee  
SUBJECT :   Hiring subcontractors

Global software engineering is a powerful tool for companies to expand in different frontiers to achieve an increase in resources, knowledge, and speed of development. It helps companies to stay closer to their customer base and to reduce development cost thanks to a signiﬁcant difference in labor cost around the world. In the case of XYZ Inc. - a small web software development company with 20 employees, I would welcome the suggestion to outsource some tasks to India or Poland. However, adopting such a major decision without looking at the pros and cons ﬁrst could risk the existence of the company. There are several aspects that need to be taken into consideration.

“Do we really need it?” would be the foremost question. Global software development is fruitful when the number of people working on a project is high. In a scenario where we only work on small and medium-sized projects, then there will not be any need to transfer the development to other countries because it is not on the scale which such outsourcing is necessary and would bring in more problems likes communication, commitment, security, etc. If the team works on large and complex projects, then it would be worthwhile to outsource.

Where to hire the subcontractors the other main aspect that should be considered. This aspect is very much dependent upon the number of employees (or resources) that we intend to hire from India or Poland. The biggest advantage of Indian developers is that hiring them is much more economical compared to their Polish peers. Nevertheless, those from India may present some challenges to be dealt with, such as cultural clashes, language barriers, etc. There is also a significant security concern as India is not in the European Union (EU), making legal issues much harder to resolve. On the other hand, Polish developers might alleviate these problems. Given the fact that the Polish are EU citizens, paperwork such as taxes, permits and contracts will be much simpler. On top of that, if a subcontractor from Poland is given an opportunity to become a full-time employee of XYZ Inc., he can move to Finland with relative ease.

Communication would be the next point to be considered as work done in India and Poland would need mentoring and constant monitoring from Finland. The time difference between Finland and Poland is only 1 hour, compared to 3 hours between Finland and India. The Polish subcontractors would have no problems working alongside XYZ Inc. However, the Indian developers need to utilize their time very efﬁciently. It is necessary that both the sites have dedicated meeting rooms with necessary infrastructure, tool support, and a good internet network. We can use strict time-boxed meetings to avoid late-night meetings. To make the meeting effective, the team members can post their questions or backlog before attending the meeting. Due to short overlapping hours, we can plan meetings of local scrum teams at each site and then practice “scrums of scrums” to ensure inter-team communication. If we adopt outsourcing, we need to have a rich communication environment to avoid slow and unreliable transmission. We can implement various kinds of communication tools such as phones, web cameras, virtual meetings, emails, shared mailboxes, instant messaging apps, etc.

The next thing to consider is team collaboration and mentoring. Socio-cultural distance between the two teams can cause affect the team collaboration process and may cause ineffective scrum meeting practices. Polish subcontractors usually will have no conflicts with the Finnish team thanks to similarities between the two cultures, but their Indian peers might need some adjustments. To deal with this problem we can adopt a method where a scrum team gathers and performs a few initial sprints at one site before the distributed development starts. This will help reduce the socio-cultural distance as well as provide some training to the new employees from India. By maintaining planned rotation among the onshore and offshore team, we can reduce the cultural differences, increase mutual trust and at the same time increase project vision. Also, providing various collaborative tools such as wiki, expertise ﬁnder, etc. will help to increase project transparency, visibility and support our scrum practices.

It would be worthwhile to consider the team management as well. To manage a large distributed team, it would be beneﬁcial to split the teams into smaller sub-teams. This way our project would be distributed among several scrum teams out of which some could be relocated onshore and the rest offshore. Creating autonomous scrum teams should be the main idea to ensure that each team is allocated independent architectural subsystems. As a result, we can reduce inter-team dependency and increases the overall development rate.

For the reasons presented above, I believe that we should hire Polish subcontractors if our upcoming project is small or medium-sized, and Indian subcontractors if it is large and complicated. But only if we can successfully tackle the mentioned challenges, then it would be a clever idea to invest in the practice of outsourcing, since it would beneﬁt us by effectively reducing the overall development cost and delivery time.