Date	30.8.2020
Type of interview	Focus Group (Face to Face)
REF ID :	IT
Case ID	C4

First section: General Demographic Information

1. **What is (are) your current position(s)?**
   Senior QA
2. **How many years of work experience do you have in IT and software development industries?**
   8 years
3. **How many years of work experience do you have in software testing, in specific?**
   5 years
4. **What type of business is it ?**
   Education, Video streaming, Financial system.
5. **What is your highest academic degree?**
   Bachelor (Computer Science)
6. **What is the size of your company (number of employees)?**
   35
7. **How many team members are working on a single project?**
   6 members

Second section : General Demographic Information

8. **What is (are) your current position(s)?**
   Senior QA
9. **How many years of work experience do you have in IT and software development industries?**
   8 years
10. **How many years of work experience do you have in software testing, in specific?**
    5 years
11. **What type of business is it ?**
    Local services, Intel, Financial system, Economy system.
12. **What is your highest academic degree?**
    Master (Computer Science)
13. **What is the size of your company (number of employees)?**
    30

14. How many team members are working on a single project?

6 members

Third section : General Demographic Information

15. What is (are) your current position(s)?

Senior QA

16. How many years of work experience do you have in IT and software development industries?

8 years

17. How many years of work experience do you have in software testing, in specific?

4 years

18. What type of business is it ?

Billing system, HR system, Financial system, Multimedia system.

19. What is your highest academic degree?

Bachelor (Computer Science)

20. What is the size of your company (number of employees)?

30

21. How many team members are working on a single project?

5 members

RQ1: To what extent do testing approaches influence the success rates of outsourced projects?

1. **What is the nature of outsourced software projects in this company ?**
Our Projects are financial platforms for specific people, stock. System takes a lot of financial data and makes analysis. Data gives induction on who can use money investments, financial analysis and compare data. Further, system target is the private market.

2. **What are the testing requirements/expectations by the customer/ client ?**
Systems have many levels such as: manual on branch, automation in API, testing aggregation manual and Sanity testing. Systems have many features, features have many stories, stories should be completed on all stages, each story has many stages.

   Features ideas initiative came from the CTO, QA and management teams. QA speaks with the product manager who speaks directly with the client . Moreover, the QA team should approve each testing release.

3. **Is there any standard/formal testing requirements asked by the customer ?**
Requirements come from clients, management and business team. some important requirements such as security should be taken into account. There are some testing standards from teams , code convention and code standard.

4. **Can poor/inadequate testing processes jeopardize project success ?**
Yes , it's an important phase. Any Feature has many stories, the story should be completed and closed. Sometimes stories may not be closed in special cases, so it is closed in next stories but after approval from managers and developers.

RQ2: What are the currently applied testing methods and how effective they are?

1. **What are the processes in the software testing phase ?**
Our projects use agile methodology, especially scrum methods. Our process begins with featured stories. Product managers write all of the details in each story. Developer and QA select stories, then QA writes a roadmap for manual testing, API testing then integration testing and writing test cases, then Execution time.
Each two week, planning and retrospective meetings and sprint review. There are daily scrum meetings with the Product manager, scrum master, developers, QA. and take feedback.

2. **What are the methods that are applied in the Software testing phase in your teams?**
    *   Unit testing
    *   Greybox : Blackbox + Whitebox (API testing)
    *   Integration testing
    *   Sanity testing
    *   Smoke testing
    *   Performance testing
    *   Stress testing
    *   Load testing
    *   Security testing
    *   Code review for automation code .

3. **Which test frameworks/tools do you use in your company ? (explain)**
    *   Test Plan, test cases, management: Testlink:
    *   Open bugs, Documentation : Jira
    *   Communication : Microsoft teams
    *   Github: codebase code review merge
    *   Sourcetree
    *   Postman

4. **Which test automated frameworks/tools do you use in your company? (explain)**
    *   Platform : Web app, C#
    *   Selenium UI C#
    *   Restcharm API testing C#
    *   25% Automation, 75% Manual
    *   11 thousand test cases

5. **What are the prevention techniques you use to enhance team quality ?**
    There are many prevention techniques to enhance such as increase communication between teams and good Knowledge transfer. Further, reduce the gap between IT and business. Qa engineer should do code review for API automation and increase integration testing because it is weak.

RQ3: To what extent do graduates of local universities possess the required knowledge in software testing techniques?

1. **Do the Students Who come from university have good skill or knowledge of software testing ? (explain)**
    No, students are weak, they don't have any experience. I had an interview in the last six month with 40 fresh students, just one university who focused on testing. Students who are related to this university are good and others are so weak and don't know anything.

2. **Does your organization have a training program ? Are there any challenges for providing software testing training ?**

   No training , just self-learning .

3. **Are there any special courses in university software testers should take ?**

   No courses, one university who give course called "verification and validation"

   There should be a lot of courses such as Software engineering ,analysis and design and Software testing. Also , I advise about the ISTQB foundation level.

4. **Do you have any recommendations for the future testers?**

   Any QA should have development skills due to QA is easier than development but is more responsible. Companies are looking for skilled people.

   Outsourcing from outside cares more about testing but local and governments and startups projects no. Moreover, no research and community about testing, there should be research and collection testing data. Companies now are increasing their visions towards Devop and CI/CD. Outsourcing companies almost work in QA and verification and development.