ANALYZING CASE STUDY

HUM 4441:Engineering Ethics Assignment for week 1

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January 21, 2024

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1   Case Study

Rachel works as a **Quality Assurance Engineer** at a large electronics company. She is responsible for the final testing of her company's servers and is part of a team which decides when new products will be shipped to distributors for sale. Rachel's company has a third-party contract which makes the chips which are incorporated into the servers Rachel's company makes.

The business model for this product is to release a new generation server approximately every **six months**, meaning Rachel has a **limited timeframe** to conduct her Quality Control tests. Because there is such a short amount of time between the releases of each next new product, the QA department **cannot perform** every possible test on the servers to ensure they are defect free.

Rachel will not ship a product if there is any possibility that the server could malfunction and **cause physical harm** to the customer. However, she will ship a product that has minor likelihood of failure resulting in **data loss** for the customer, because she knows that if she doesn't, her company's competitor will.

2   Problem Statement

Analyze the Case Study given in your Lecture-1 and come up with a solution to that problem. Try to compare among different solutions and give proper reasoning for your chosen option.

Do not exceed the 200 words limit.

3   Probable Solutions

- **Convince the higher executives to extend the time period of new releases** so that they have more time to think about customer safety;because customers must always come first.But renewing the contract could cost a lot more money.

- **Hire more quality assurance engineers**.This would improve productivity and they would meet the timeline more smoothly.But this also could impact the budget of the company.

- **Invest in advanced testing technologies**.Given the importance of data integrity, investing in security testing tools can help Rachel identify potential threats to the servers. This ensures that the products safeguard customers against data loss.

- **Establish a more connected collaboration with the third-party chip manufacturer**. Work together to enhance the testing procedures at the chip level, ensuring that the components integrated into the servers meet the required quality standards, thereby reducing the risk of defects.

- **Include customers**.Take surveys from the customers beforehand to know how they can develop data security on a higher level.

I think,though extending the time period or hiring more engineers can help solving the issue but it could strain the company's budget.Investing in the initial testing the servers seems like the comprehensive solution to me.

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