To: Professor Krasso

From: Jonathan Disla

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Subject: From Legacy to SOA

We have had great success for a long time with our old system. The type of customer as well as our services have changed drastically since adoption of the new company standards. We now offer services to a larger audience and integrating new markets has put strain on both ticketing and service impacting efforts. Recently there have been options to modernize legacy systems that will allow us to successfully migrate. I will outline seven options to modernize legacy systems as noted by Susan Moore from Gartner, a migration company.

With step one we must evaluate the current systems and outline the concerns and impediments that have been created by the legacy application as a result of its technology, architecture or functionality (Moore). While the legacy system could handle a smaller amount of customers, the system does not fit current business agility. We are now moving too fast after the pandemic and acquiring clients at double the pace than before. Our business has new requirements which include: new equipment, new type of consumer (work at home), more strain on the network (study at home). The cost of migrating will pay for itself once the new system allows us to implement new equipment with the advent of DOCSIS 3.1, we will migrate equipment from the previous 3.0 versions. This means that the new system will need to cater to that new equipment something which the current system simply cannot do.

According to Gartner, evaluating the modernization strategy has some of the following processes of implementation: Encapsulation, the need to extend features making them available as separate services. Refactoring to optimize nonfunctional attributes and improve the code base (less spaghetti code). Rebuilding while preserving the scope and specifications of components. Lastly to replace and eliminate the former legacy application (Moore).

Our modernization approach shall be less cost effective as the parent company will bring the new system already marketed to some areas. While the new system will take time for customer of certain divisions to get used to, those growing pains will secede quickly with customer and employee education. Rewards are also important for those that move ahead of the curb and attain greater mastery faster. Modernizing legacy applications means choosing between rearchitecting and rebuilding or replacing. Rearchitecting has medium costs and risks, whereas rebuilding or replacing provides best results with higher costs and risks.

Lastly, there are some considerations to look at to justify migration. While it is a given the need to migrate, such things as application usage, where different components must be evaluated is key. Cost reduction and reuse of components will also be considered when rebuilding the system. The time to market will be a bit long but this must also be evaluated along with the cost of the process. One of the first concerns with legacy systems is the risk of outdated technology and software, making it extremely vulnerable when the system is exposed to more parties and technologies then currently required (open group).In conclusion the system will be a success with our customer and employees but much training will need to happen as well as education on both ends.

References

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