### **COVER PAGE**

# SS ZG622 – Software Project Management 2023-24 Semester I

Individual Assignment #1 (10 marks)

[Project topic – Build or Buy decision making]

I certify that this report submitted towards the Software Project Management course assignment is my own work. I also certify that I have not copied the work of other students or the material from any other sources (books, online documents, etc.) and/or other students' work.

I understand that if this report scores a similarity score above 50% then zero marks will be awarded for this assignment.

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## 1 - Real-life Scenario

#### 1.1 Company and the projects

ABC Solutions DMCC is an information technology company. Provide the most comprehensive very advance software solutions in Financial and Core banking sectors, digitalizing the banking and financial sectors.

Strategic objectives are reduced cost, increase speed and keep financial service save and simple. Build strong close relationship with partnership with future IT leaders.

Solutions includes software development, Mobile/Tablet biometric digital onboarding, Core banking system, Agent payment services, Network and IT security solutions ...etc. Company also provides the consultancy services to the other software firm. Company has expertise in the Infrastructure and database development as well.

Company has Vision to digitalize the financial sectors. Values of the Company is Commitment, Clarity and Transparency, Respectfulness, and Social Responsibility.

List of services of ABC Solutions DMCC.

Domain	Service
Software development	End to End IT project development. New
	application development and Modification
	or rebuilding application.
Database development	Development, performance enhancement,
	Configuration, and Query performance.
Network, IT infra and security	Security solution, Advance network
	solutions, and support.
Consultancy	Software consultancy service.

**Project1:** <u>Customer on boarding</u> – Onboard new customer digitally by mobile and customer tablet device. Feature includes Scan and upload documents, Capture photo, Biometric finger print capture, Face Id recognition, and send digital receipt to WhatsApp and Email id. This solution will enable financial institutes to onboard new customer or update KYC of exiting customer through the Tablet application. It will help company reduce paper use and follow go green initiative.

**Project2:** <u>Core banking system</u>- Core banking system provide the capability to perform debit and credit transactions. CBS daily banking transactions, post entry to the account, and other financial entries and records. Company has T24 core module banking system. Customer can open account, deposit money, withdrawal money, bill payments, transaction ledger, send remittance, corporate banking,

receive remittance, ...etc. This project enables financial institutions to focus on expand their branches in short time without waiting for long time.

CBS system has an interface to general ledger system and the report system. System has separate admin and customer portal to perform the operations and other transactions. Also have COB (closing-of-business) module is most important T24 activity that brings all the events of the days and process them on daily basis.

CBS system also having a front-end mobile application in android to ease customer to perform their transactions from any ware.

#### 1.2 Build or Buy decision making

**Build or Buy decision making** in software developments is a crucial decision, it has direct impact on company growth, cost, other expenses, and time to market. It is all depends on your development team capability, project complexity, available infrastructure and budget. There are three major parameter problem, resource and cost.

**Build** means building a software solution in-house. Build a software development team, infrastructure, hire a specialist with respect to project type and complexity.

**Buy** means purchasing a software solution from vendors or solution providers. Buying a solution generally need less time and money with compare to building an in-house software. Off-the-shelf solution already develop and ready for use with small changes.

Advantages of Build and Buy the software solutions as follow.

Build	Buy
Full Code ownership	Tested software solutions
Easy to customize	Easy to integrate
Compatibility with system	Rapid prototype and POC
Application support	Less time to market, Fast development

**Disadvantages** of Build and Buy the software solutions as follow.

Build	Buy
Huge upfront money and expense	Less upfront money and expense
Take lot s time to build	Faster development & implementation
Development risk – Final output	No development risk

In <u>Customer on boarding</u> company stakeholders and C-level executive has few meetings, brainstorming and consolidated a listed of advantages and limitations of In-house development and then listed same advantages and limitations of outsourced or buy the solutions options.

Based on the final discussion and considering the projects dynamic requirements and unique complex solutions. Mr. Panday (CTO) strongly suggested to develop in-house solutions. Therefore, everyone was agreed

with him to "Build" in-house generic solutions. This project has potential to sell in market as well.

<u>In Core banking system</u> company stakeholders and C-level executive has few meetings, brainstorming and consolidated a listed of advantages and limitations of In-house development and then listed same advantages and limitations of outsourced or Buy the solutions options.

Based on the final discussion and considering the projects deliverable timing. Mr. CEO were suggesting to go with the readymade solutions as core banking is a huge system, will required big team and required lots of testing. It was decided to go with the "Buy" option to reduce time to market.

#### 1.3 Typical results

(present details of results or outcomes from performing <X> in those projects)

In <u>Customer on boarding</u> project by building in-house in results company has their own solution and easy to customize. Explore new client and sell this solution. Complete ownership of code, Easy to customize as in-house solution, take less time to add new features, Open new vertical as product base company. Follow Agile for fast development process.

<u>In Core banking system</u> project by Buy in results, got ready made solution that helps company to release in short time. Time to market were less, Cost were less, Tested solution and market trust on T24 system. Company has enough time focus on marketing and other operations related arrangements and expansion.

#### 1.4 Challenges

Based on discussion with managers, team leaders and other stakeholders. We have identified the difficulties or hurdles encountered in performing Build or Buy decision making for the given projects in section 1.1.

#### **#Project1:** Customer on boarding

Company were exited to build in-house solutions, Hire new tech team. However, Company is facing many difficulties while started developing In-house **Customer on boarding** project. Please find as follow.

#### Difficulties:

- a. Building the team. Lack of resources in market.
- b. Taking much time to have POC (Proof of concept).
- c. Challenges and uncertainty which using new technology.
- d. QA, UAT testing taking more time.
- e. Agile development issue as most of team members are new in Agile.
- f. Client keep changing the requirements.

#### **#Project2:** Core banking system

Company decided to buy readymade solutions from external vendor. However, Company is facing many challenges while buying **Core banking system** project along with mobile application in packages. Please find as follow.

#### Challenges:

- a. For new change request development dependent on vendor.
- b. Hardware compatibility issue.
- c. Billing is very high sometime.
- d. Software maintenance is at higher side.
- e. Performance is not up-to the mark when transactions increases.
- f. Mobile application performance is poor in slow internet.

# 2 - Analysis

<one or two pages; your critical analysis/assessment of the scenario in the above section; identify and discuss/describe three to four key weaknesses/drawbacks associated with the practices described in section 1 focusing on X>

# 3 - Recommendations

<max one page; your recommendations for improving X related to key weaknesses/drawbacks described in section 2 with justification; your recommendations are based on concepts/topics covered in the course and specific to your the scenario and your analysis; you may use some ideas/solutions from other sources such as books and online documents for this purpose; but they should be related and specific to the material in sections 1 and 2>

## References

https://www.thesoftwarereport.com/the-pros-and-cons-of-building-or-buying-software/

https://www.seersolutionz.com/