Business Case Study – Exam

A bank offers the service of buying and selling mutual funds to their customers. When they started offering domestic mutual funds, they built their own software system. As the market grew and new products were introduced, the bank decided to offer foreign mutual funds as well. For various reasons, the bank decided to buy a new software package for support of foreign mutual funds.

There are therefore two software solutions managing the mutual funds at the bank today. One is for domestic (DOMF) mutual funds and one for foreign (FOMF). The costs of having two solutions are costly but the products are not that different from each other. Early this year, the bank implemented another system called EQSY, which has all the basic functions needed for processing mutual funds. The idea of dismantling DOMF and FOMF and move the mutual fund processing to EQSY has been discussed but never examined in more detail. The managers liked the idea but wanted to know if it made financial sense in terms of NPV, IRR, ROI and Payback time. They investigated the matter and found the following results.

DOMF is a stable system that has been tailored for the needs of domestic mutual funds processing. It is very reliable but it is getting very old. The revenues from this business are at a stable level of 3 500 000 EUR per year with cost of revenue being 45 %. In addition there are IT costs. Currently, 1.5 consultants are working with the maintenance of the DOMF. They bill in total, 150 hours a month at an hourly rate of 80 EUR. In addition, 2 persons from the IT department work full time with the development of the system. The cost of an IT staff is 60 000 EUR per year. In addition to the maintenance and development, there are other costs of 1 000 000 EUR per year.

The foreign mutual fund business generates an annual revenue of 2 500 000 EUR but as this unit involves international costs, the cost of revenue is at 55 %. The IT support of FOMF is different as it is a software package bought from a vendor. The system is like a black box and requires the expertise of the vendor. The IT costs of FOMF is 600 000 EUR annually but additional 200 000 EUR are required for services from the vendor. In addition there is a 50 000 EUR annual license fee. Furthermore, in 2020, the FOMF must be upgraded and the cost of that project is estimated to 250 000 EUR.

If the processing of mutual funds were moved to EQSY, it is estimated that the total IT cost (for the mutual funds part) would be 700 000 EUR annually. This would include hardware costs, maintenance and development. Furthermore, in 2019 a new governmental regulation will be enforced. In order to comply with this regulation, DOMF would need to invest 150 000 EUR and FOMF would have
to invest 250 000 EUR. But in EQSY, the cost of investment would be only 150 000 for both domestic and foreign mutual funds as the cost would be shared among several products. The project would involve 30 IT people and 10 business people at a cost of 1 800 000 EUR and 420 000 EUR respectively (half upfront and half in 2017). In addition, 1 000 000 EUR will be paid upfront to cover costs for modules, travels, specialists and so on.

Currently, the revenues are expected to be at the same levels. With the mutual funds in EQSY, it would be possible to offer package deals to customers. Such an offer would increase the revenue by 5 % annually one year after the implementation of the project. The cost of revenue is expected to remain the same. In addition to this, if the mutual funds are moved to EQSY, it is possible to connect them to the banks online and mobile services and it is estimated that would generate 300 000 EUR in revenues per year starting from 2018. The operating costs are assumed to be the same with the exception of a reduction of 420 000 EUR per year due to working in only one system as opposed to two.

Calculate the NPV, IRR and the Payback Time given that the project goes live 1st of January 2018. Use 11% as discount rate. 2016 is the initial year and do the calculation for 4 years (ending with 2020). Please make your calculations structured and clear so it is easy to follow your reasoning.