Buy-a-Boat case for Week 4 breakout

Buy-a-Boat is a startup company that has set up an online application to allow boat buyers and boat sellers to advertise and buy boats. They’ve invested in hiring a skilled team of developers to build an online purchasing application and an on-prem CRM package to track customer contacts and opportunities, hoping that this would improve sales

Buy-a-Boat’s purchasing application has been deployed successfully on the cloud for two years. Unfortunately, the CRM package has been more difficult to maintain. Upgrades to enable specific features required a high level of customization and lead to frequent and lengthy outages. They are now considering moving to a cloud environment to avoid having to deal with the infrastructure issues, and reconfiguring the application to run in that environment.

Here’s the current expenditure:

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Year 1** | **Year 2** | **Year 3** |
| Disk Storage | 500,000 | 550,000 | 550,000 |
| Disk Maintenance | 100,000 | 100,000 | 100,000 |
| Facilities | 30,000 | 30,000 | 30,000 |
| Full-time Equivalent Labor (FTE) | 500,000 | 500,000 | 500,000 |
| Firewall and Load Balancers | 10,000 | 10,000 | 10,000 |
| Network switches | 10,000 | 10,000 | 10,000 |
| Server Hardware | 150,000 | 160,000 | 160,000 |
| Server Maintenence | 15,000 | 15,000 | 15,000 |
| Software licenses | 50,000 | 50,000 | 50,000 |

If Buy-a-Boat moves to the cloud, they would reduce costs through scalability and from the resource sharing offered by cloud providers. They would like to retain their existing 5 employees, but believe they can move one to work on other programs in Year 3.

Because the cloud vendor could raise prices after three years, Buy-a-Boat wants to limit its analysis to a 3-year horizon. The estimated expenditure under a 3-year cloud contract is given below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Year 1** | **Year 2** | **Year 3** |
| Disk Storage | 250,000 | 250,000 | 250,000 |
| Disk Maintenance | 50,000 | 50,000 | 50,000 |
| Facilities | 15,000 | 15,000 | 15,000 |
| Full-time Equivalent Labor (FTE) $100,000/year | 500,000 | 500,000 | 400,000 |
| Firewall and Load Balancers | 10,000 | 10,000 | 10,000 |
| Network | 75,000 | 75,000 | 75,000 |
| Virtual machines | 65,000 | 65,000 | 65,000 |
| Software licenses | 62,000 | 62,000 | 62,000 |

The company estimates that it will take an initial investment of $700,000 to make the transition from on-premises to cloud.

Calculate TCO for on-premises vs cloud for each year and for the total period, the NPV, payback period, IRR and the total ROI for the three years.

Note that the cash flow for Years 1-3 will be the savings each year from shifting to the cloud (subtract TCO for cloud from TCO for on-prem). There is no new revenue expected, so we don’t need to consider revenues, just cost savings.

Cash flow for Year 0 will be -700,000 (the up front transition to cloud).

Evaluate whether Buy-a-boat should stay with the legacy system or go for the cloud solution. Explain the thought process behind your decision making. What factors other than these financial calculations should they take into account in making the decision? Are there other metrics they should use?

Write up your group’s answers and complete the spreadsheet—then submit to me by e-mail.