Investment Analysis-Case study

Question1-Incremental Cash flows after tax

To calculate increments cashflows after-tax, two cashflow tables were made With and Without which can be seen in the excel sheet.

With-represents the cashflow table with Alternium

Without-represents the cashflow table without Alternium

The incremental cash flow table was calculated only by considering International Participants for Alternium.

- Initial cost of R&D expenses and Introductory costs is applied in year 1
- Cost of Serving: 60% of the cost of servicing an international participant which is $28.8 per participant. In year1, 5 million international participants are considered.
- Server cost will be applied in year 4 as the current server will reach its maximum capacity. This will be $600 million +inflation rates of 4 years.
- Operational costs increase at a constant rate of 10% over 10 years.
- Cost for advertisement with the new product will increase by the rate of 20% counting the initial $500 million
- Revenue is calculated by multiplying the number of participants each year by the price
- Cost-saving increase by the rate of 3% over the years
- Net CFS pre tax & post tax =Total revenue-Total costs
- Then working capital is calculated with cash outflows and inflows given in the data sheet
- Then the FINAL CFs is calculated
- Salvage value of $200 million is taken into consideration for year 10
- Inflation rate is applied to all the calculations over the years of 1.5%

Question 2-NPV&IRR

NPV&IRR is calculated using the excel sheet Incremental CF2

NPV formula =NPV = F / [(1 + r)^n] where, PV = Present Value, F = Future payment (cash flow), r = Discount rate, n = the number of periods in the future is based on future cash flows

IRR formula =using excel function

Question 3

Assumptions made to make the cash flow table

- Total life of project 20 years
- All costs will be increasing at the same rate used for 10 years
- Additional server cost will be added in year 14 also like the new server added in year 4 which will reach its maximum capacity by year 14.
- Rate of Inflation is kept at 1.5% only
- Tax=10%