Feasibility Study

- **Technical Feasibility**:-

1) Users' and analysts' familiarity with the business area:
   The business area is the auction process in the auction house. The team's members have good information and enough experience about this business area but they are not experts in it.

2) Familiarity with technology:
   The technical tools we are going to use:
   - Programming languages such as JavaScript and Python.
   - Database Management System such as SQL Server.
   - Web languages such as HTML.

   Most of the team's members are familiar with Python, while they are not expert in SQL Server, JavaScript or HTML.

3) Project Size:
   From estimation, it is about 3 persons for 9 months. The team have 4 persons for 2 months.

4) Conclusion:
   The risk in this stage is high. The reasons are listed below.
   - For business area, all members have online shopping experiences but no one is an expert on auction. The team runs the risk of not being able to fully meet user needs.
   - For technology, members are not familiar with the language needed for the project. There is a risk that the team will not be able to complete certain function points.
   - For effort, the team have only 8 person months, and it is expected 27 person months. There is a risk that the team will not deliver on time.

❖ Economic Feasibility:-

Costs	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Total
Salaries	10	10	10	10	0	0	40
H/W & S/W	20	0	0	0	0	0	20
Training	2	0	0	0	0	0	2
Support & maintenance	0	0	0	0	10	10	20
Total Costs	32	10	10	10	10	10	82
Benefits							
Increase # of users	0	0	0	0	400	400	800
Decrease Costs (venue and auctioneer's commission)	0	0	0	0	33	33	66
Total benefits	0	0	0	0	433	433	866
NCF	(32)	(10)	(10)	(10)	423	423	784
CNCF	(32)	(42)	(52)	(62)	361	784	1568

Numbers are in thousands of DHS
NCF: Net Cash Flow
CNCF: Cumulative Net Cash Flow
One period corresponds to two weeks
H/w and S/w correspond to Hardware and Software respectively

- The return on investment (ROI):
  ROI= Total Benefits - Total Costs
  Total Costs

  = 866 - 82 = 784 = 956.10%
  82 82

- The break -even point (BEP):
  BEP= period. net cash flow - Cumulative net cash flow
  Period. Net cash flow
  = 423 - 361 = 0.12 = 15%
  423
  0.15*1*14= 2.1 ≈ 2 days
  So the Project will take 8 weeks and 2 days.

- Conclusion:-

The ROI is very good for this new system as it will make full use of the Internet, and the BEP is reasonable, so the risk is low.