

Feasibility Study

❖ Technical Feasibility:-

1) Users' and developers' familiarity with the business area:

Since this system serves mainly for the region of the UAE, both the users and developers are familiar with this business area. The users will be unemployed expats in the UAE to register vendors and local residents to order from those vendors. The development teams consist of 4 undergraduates from NYU Abu Dhabi. Therefore, both ends possess certain familiarity with the situation in the business area.

However, apart from the development stage, team members are not experts in neither local laws nor business management. This means that when it comes to local regulation issues or business issues, the team needs to come up with alternative solutions such as hiring experts accordingly.

2) Familiarity with technology:

The technical tools the team is going to use:

- Programming languages such as Python, C++, and Visual Basic.
- Database Management System such as SQL Server, and Oracle.
- Web languages such as HTML.

Most of the team's members have experiences working with Python, C++ and Visual Basic. One team member has experience in frontline development using HTML.

However, the team lacks a background in SQL Server, Oracle and app development.

3) Flexibility of the schedule and efficiency:

All team members are currently enrolled undergraduates in NYU Abu Dhabi, instead of full-time employed people. This means that the schedule of their time is restricted and vulnerable to changes. Moreover, due to the 2020 pandemic situation, one of the team members is currently outside of the UAE so the work of the team has to be conducted remotely. The remote working mode, in general, is less efficient than working in person.

4) Project Size:

The estimation of project duration is about 4 persons for 4 months.

5) Conclusion:

The risk in this stage is high due to the team's lack of familiarity with the technology tool, the remote nature of the work and the time constraint described above. Also, this is exacerbated by our lack of knowledge of local laws and regulations.

❖ **Economic Feasibility:-**

Costs	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Total
Salaries	0	0	0	0	0	0	0
H/W & S/W	0	0	0	0	0	0	0
Training	200	0	0	0	0	0	200
Support & Maintenance	0	0	0	0	100	500	600
External Compensation	0	0	0	0	1000	1000	2000
Training Vendors	0	0	0	0	100	150	250
Total Costs	200	0	0	0	1200	1650	3050
Benefits							
Increase # of vendors (reduction in unemployment)	0	0	0	0	50	100	150
Income from Vendor Fees (50AED per vendor)	0	0	0	0	2500	5000	7500
Total benefits	0	0	0	0	2550	5100	7650
NCF	(200)	(0)	(0)	(0)	1350	3450	4600
CNCF	(200)	(200)	(200)	(200)	1150	4600	9200

Note:

Numbers are in DHS

NCF: Net Cash Flow

CNCF: Cumulative Net Cash Flow

H/w and S/w correspond to Hardware and Software respectively

Description of the above economic feasibility chart:

For cost estimation, since team members are students and volunteered for the project, no salaries are paid. Hardware and software are not required to purchase in the process. Training for certain development tools might be a cost at the start stage. Support and maintenance costs are expected to emerge at the later stage. External compensation refers to external activities such as consultation from experts, marketing partnership, etc. We will also need to invest in training vendors to use our application to encourage uptake. Training will be offered on a voluntary basis by team members but we will need to provide some physical training material which will have associated costs.

For benefit estimation, the team expects to see an increase of registered vendors along with their registration fee flowing in. However, this estimation is highly dependent on the quality of the work product and marketing effect.

- The return on investment (ROI):
 - $ROI = (Total\ Benefits - Total\ Costs) / Total\ Costs$
 - $ROI = (7650 - 3050) / 3050 = 1.51$
 - 51% ROI
- The Break-Event Point (BEP):
 - $BEP = (Period\ Net\ Cash\ Flow - Cumulative\ Net\ Cash\ Flow) / Period\ Net\ Cash\ Flow$

- $BEP = (1350 - 1150) / 1350 = 0.15 = 15\%$
- $0.15 * 1 * 30 = 4.5 \approx 5$
- Therefore, project will take about 4 months and 5 days

Conclusion:

The ROI looks good for this system, and the estimated BEP is reasonable, so the economic risk is low.