

Investment Appraisal For Foodstuff Supplier

Basis of Preparation

This appraisal has been prepared in order to provide Foodstuff Supplier with the potential financial implications and investment returns arising from the proposed solution.

It is based upon a number of stages that together provide an assessment of the investment returns likely to be delivered as a result of project acceptance. It compares specific, identifiable financial returns that arise against the cost of this solution.

This assessment is based upon information and explanation from Foodstuff Supplier and is indicative only. It is therefore not a part of the contractual offer from ERP System Provider.

Background to Investment Appraisal

The sales proposal for this solution is submitted separately – and should be cross-referred to this appraisal.

In order to complete the investment appraisal Foodstuff Supplier has requested the use of the following appraisal methods:

- Net Present Value
A financial measure of whether a proposal delivers a “profit” or a “loss” using an annual cost of money applied to the timing of spend and savings. It includes the initial cost of the equipment / services, the monthly cost of maintenance, compared to the financial benefits accruing. The result is the change in shareholder value to be anticipated from project acceptance.
- Internal Rate of Return
The return rate per annum to Foodstuff Supplier taking into account: initial cost of the equipment / services, monthly cost of maintenance, and comparing these to the timing of benefits identified as a result of implementing the project. The “percentage” answer is compared to the minimum requirement specified by Foodstuff Supplier for approval.
- Payback
This is a comparison of the initial outlay of monies, to buy equipment or services, against the time taken for the savings to cover the initial outlay. This derives an answer which is a time measure, and is usually quoted in months / years.
- Discounted Cash Flow – to NPV and IRR
A detailed statement of all the cash flows and timings that underpin the results provided for Internal Rate Of Return and Net Present Value analysis.

Cash Cost of Solution		
Cost Type	Cost	Month
Installation	25,000	0
Hardware / licensing etc	175,000	0
Cash cost of solution	200,000	

Monthly Costs		
Cost Type	Cost	Months
Service charges	2,000	1-36
Average monthly cost	2,000	

Benefits Evaluation

Selection of the savings / benefits modules arising supporting this appraisal :-

Avoid Penalties, Returns, Credit Notes	
Current monthly value of returns or credit notes	50,000
Percentage reduction after implementing solution (%)	3
Monthly savings (£)	1,500
Impact Life (months)	1-36

Returns are high due to late arrival of goods. Often shelf life is shortened. The system will allow better delivery planning and monitoring leading to fewer returns.

Reduce Cost per Sales Transaction	
Number of transactions per annum	70,000
Current cost per transaction	0.75
New cost per transaction	0
Monthly savings (£)	4,375
Impact Life (months)	1-36

Cost of communication of invoices is avoided. This is conservatively estimated at 75p.

Improve Cash Collection	
Current annual turnover	35,000,000
Debtor days - current	58
Debtor days - post solution	56
Debt outstanding	5,561,644
Cash freed up	191,781
Annual interest cost (%)	7.5
Monthly savings (£)	1,199
Impact Life (months)	1-36

A small decrease in debtor days is anticipated by electronic invoices avoiding “paper trail”.

Reduce Labour Costs	
Number of staff currently engaged	30
Efficiency improvement from implementing solution (%)	10
Staff resource freed up	3
Annual average loaded cost per staff member	28,000
Monthly savings (£)	7,000
Impact Life (months)	1-36

Labour saving is a result of improved efficiency in delivery, administration and manufacturing staff.

Avoiding existing support costs		
Benefit Type	Benefit	Months
Current service contract avoided	700	1-36
Total monthly benefits (£)	700	

The support costs for the existing system can be avoided.

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Total Benefits Summary

A summary of the individual Evaluators :

Benefits Summary	
Avoid Penalties, Returns, Credit Notes	1,500
Reduce Cost per Sales Transaction	4,375
Improve Cash Collection	1,199
Reduce Labour Costs	7,000
Avoiding existing support costs	700
Peak monthly benefits	14,774

Return On Investment Appraisal Elements

NPV Calculation	
Period (months)	36
Cash costs of solution	200,000
Total one time benefits	0
Peak monthly benefits	14,774
Average monthly costs	2,000
Discount (interest) rate %	10
NPV (£)	198,376

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Discounted Cashflow Analysis - NPV

Month 0	-200,000					
	Year 1	Year 2	Year 3	Year 4	Year 5	
Month 1	12,673	11,521	10,474	0	0	
Month 2	12,573	11,430	10,391	0	0	
Month 3	12,473	11,339	10,308	0	0	
Month 4	12,375	11,250	10,227	0	0	
Month 5	12,277	11,161	10,146	0	0	
Month 6	12,180	11,072	10,066	0	0	
Month 7	12,083	10,985	9,986	0	0	
Month 8	11,988	10,898	9,907	0	0	
Month 9	11,893	10,812	9,829	0	0	
Month 10	11,799	10,726	9,751	0	0	
Month 11	11,705	10,641	9,674	0	0	
Month 12	11,613	10,557	9,597	0	0	
				Total	198,376	

IRR Calculation

Period (months)	36
Cash costs of solution	200,000
Total one time benefits	0
Peak monthly benefits	14,774
Average monthly costs	2,000
IRR %	88.8

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Discounted Cashflow Analysis - IRR

Month 0	-200,000					
	Year 1	Year 2	Year 3	Year 4	Year 5	
Month 1	12,115	6,418	3,400	0	0	
Month 2	11,490	6,087	3,224	0	0	
Month 3	10,898	5,773	3,058	0	0	
Month 4	10,336	5,475	2,900	0	0	
Month 5	9,803	5,193	2,751	0	0	
Month 6	9,297	4,925	2,609	0	0	
Month 7	8,818	4,671	2,474	0	0	
Month 8	8,363	4,430	2,347	0	0	
Month 9	7,932	4,202	2,226	0	0	
Month 10	7,523	3,985	2,111	0	0	
Month 11	7,135	3,779	2,002	0	0	
Month 12	6,767	3,584	1,899	0	0	
				Total	Negl.	

Payback Calculation

Cash costs of solution	200,000
Total one time benefits	0
Peak monthly benefits	14,774
Average monthly costs	2,000
Payback (months)	15.75

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Summary of Project Returns

Cash Cost of Solution (£)	200,000
Average Monthly Costs (£)	2,000
Period (months)	36
Peak monthly benefits (£)	14,774
Net Present Value (£)	198,376
Internal Rate of Return %	88.8
Payback (months)	15.75

Based upon an assumed cost of capital of 10%

Final Project Appraisal Summary

The Investment Appraisal outlined above is based upon identified benefits that would accrue to Foodstuff Supplier as a result of project acceptance.

The investment evaluation of these costs and savings has been completed using the Shark appraisal tool. The output from this tool is fully visible and can be audited by Foodstuff Supplier if so required.

This indicative analysis stands separately from the contractual elements of the ERP System Provider solution and is necessarily dependent upon the benefits identified jointly with Foodstuff Supplier.