FEASIBILITY ANALYSIS MATRIX WITH COST BENEFIT ANALYSIS

FOR

POINT OF SALES INFORMATION SYSTEM DEVELOPMENT PROJECT

REQUESTED BY

MR SALAD

COMPILED BY:

Group 10 - "Leaf Green IT Solutions"

COENRAAD HUMAN	28410629
HEINO NEL	26056984
PIETER BRAND	28633512
SAVANNAH FRITZE	29158710

DATE : 17TH SEPTEMBER 2018

TABLE OF CONTENTS

1.0 FEASIBILITY ANALYSIS MATRIX

Feasibility Criteria	*Weight*	*Candidate 1*	*Candidate 2*	*Candidate 3*
Description		Purchase an existing system.	Write a new in-house application using C# and Microsoft Office Access for a database.	Improve the current system to fit the user's needs.
Operational Feasibility	15%	Lack of integrated features. Does not fulfil complete business' requirements. Score: 65	Fully supports user-required functionality. Score: 100	Due to the manual system and lack of technical and real-time information system this could pose a problem. Score: 100
Cultural Feasibility	15%	Same as candidate 2, however since the program is commercial it should have better documentation for training purposes. Score: 85	Users could possibly find the new system challenging and frustrating to learn and deal with. Score: 80	Users may find the existing system to be slow and ineffective. Score: 90
Technical Feasibility	30%	Purchased system will only be more suited by making add-on for the software. This requires constant development as updates are released and will cause unwanted down-time within the system (risk in loss of profit). Score: 70	Proposed solution requires coding an application in C# (.Net). The technical staff has extensive background in C# (.Net), due to its popularity for GUI based applications, external resources are widely available . Score: 95	The current users of they are comfortable and knowledgeable with the existing system, however management is concerned about the current analogue system in terms of flexibility to grow and adapt to possible business expansion. Score: 85
Economic Feasibility Payback: Net Present Value:	20%	After the second year R7400 Score: 80	After the first year R7500 Score: 85	After the first year R3900 Score: 65
Schedule Feasibility	10%	Less than 4 months. Score: 85	5-12 months. Score: 65	5 months. Score: 75
Legal Feasibility	10%	No foreseeable problems. Score: 100	No foreseeable problems. Score: 100	No foreseeable problems. Score: 100
Weighted Score	100%	78	89	84.5

.2.0 COST BENEFIT ANALYSIS

Cash Flow Description	*Year 0*	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Total*
Development cost:	34000	0	0	0	0	
Operation & maintenance cost:	0	2000	2400	2800	3200	
Discount factors for 4%	1.0	0.96	0.92	0.89	0.85	
Present value of annual cost:	34000	1920	2208	2492	2720	43340
Total present value of lifetime costs:						
Benefits derived from new system operation:	0	15000	17500	20000	22500	
Discount factors for 4%:	1.0	0.96	0.92	0.89	0.85	
Present value of annual benefits:	0	14400	16100	17800	19125	
Total present value of lifetime costs benefits:						67425
NET PRESENT VALUE OF THIS ALTERNATIVE:						24085

Lifetime ROI = (67425-43340) / 43340 = 0.556 X 100 = 55.6%	*Yearly ROI* = 55.6 / 4 = 13.9%