Company A

Company A Return on Investment Analysis

Project Name:	Client Poultry Processing Expansion
Project Location:	Smithtown
Vendor:	Company C Automation
ROI Completion Date:	
Proposed Implementation:	

Project Description:

Install and operate a conveyor system for preprocessed product

(Reference Attachments for Detailed Information)

General Description of Benefits:

1) Increased Safety
2) Increased Quality
3) Increased Productivity
4)
5)
6)
7)
8)

Initial Investment	$ 1,600,000
Cost Savings (Average/Year)	$ 511,617
Return on Investment (Average/Year)	32%
Return on Investment (7 Year Gross):	224%
Return on Investment (7 Year Discounted at 8%)	166%
Payback (Years)	3.15

$$ROI = \frac{\text{Cost Savings (Less Delta Variable)}}{\text{Original Investment}}$$

Manager Signature:

Manager Signature:

Company A Return on Investment Analysis

Cost Savings Summary

Labor (Cost)

Labor Hours	MHR/Unit Status Quo		MHR/Unit New Rate		MHR/Unit Reduction	Hours Saved/Unit		Total Quantity	Unit		Man Hours Saved	Operator Rate		Total Savings Annually
Install rollers 8 rollers/section	320.000	-	128.000	=	192.000	192.0000	X	9	MHRS	=	1,728	$ 50.00	=	$ 86,400
Remove rollers 8 rollers/section	320.000	-	128.000	=	192.000	192.0000	X	5	MHRS	=	960	$ 50.00	=	$ 48,000
Install Rings 4 rings/section	96.000	-	64.000	=	32.000	32.0000	X	55	MHRS	=	1,760	$ 50.00	=	$ 88,000
Remove Rings 4 rings/section	96.000	-	64.000	=	32.000	32.0000	X	35	MHRS	=	1,120	$ 50.00	=	$ 56,000
Vertical assembly (40hr/ea)	40.000	-	20.000	=	20.000	20.0000	X	80	EA	=	1,600	$ 50.00	=	$ 80,000
Transportation mechanism & Repair (>120") (VERTICAL) (10%)	0.400	-	0.360	=	0.040	0.0400	X	21,845	lbs	=	874	$ 50.00	=	$ 43,690
Roller/plank/spring 24-48"	22.000	-	16.000	=	6.000	6.0000	X	219	EA	=	1,314	$ 50.00	=	$ 65,700
Roller/plank/spring >48-72	30.000	-	24.000	=	6.000	6.0000	X	51	EA	=	306	$ 50.00	=	$ 15,300
Transportation mechanism & repair 24"-48" (10%)	0.500	-	0.450	=	0.050	0.0500	X	8,467	lbs	=	423	$ 50.00	=	$ 21,168
Roller/plank repair 48"-72" (10%)	0.400	-	0.360	=	0.040	0.0400	X	4,937	lbs	=	197	$ 50.00	=	$ 9,874
		-		=		0.0000	X			=	-		=	$ -
						Total Estimated Labor Savings/Year							=	**$ 514,132**

Company A Return on Investment Analysis

Investment Summary

Investments	Year 0	Year 1	Year 2	Year 3
Assembly mechanism + main control cabinet (+Install Sup	**$1,261,898**			
Additional Forecasting Cost	**$110,647**			
Equipment Installation & Rearrangement Equipment	**$62,000**			
Spare Parts	**$20,000**			
Maintenance		**$8,000**	**$8,000**	
Investment				
Investment				
Total Costs (Above the Line)	*$1,454,545*	*$8,000*	*$8,000*	*$0*
Contingency (10%)	**$145,454.55**	**$800.00**	**$800.00**	**$0.00**
Total Costs (Below the Line)	**$1,600,000.00**	**$8,800.00**	**$8,800.00**	**$0.00**

Company A Return on Investment Analysis

Cash Flow and ROI Statement								
BENEFIT DRIVERS	**YEAR**							
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Total Annual Cost Savings (Page 2)		*$514,132*	*$514,132*	*$514,132*	*$514,132*	*$514,132*	*$514,132*	*$514,132*
Projected Volume		**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Total benefits realized		*$514,131.50*	*$514,131.50*	*$514,131.50*	*$514,131.50*	*$514,131.50*	*$514,131.50*	*$514,131.50*

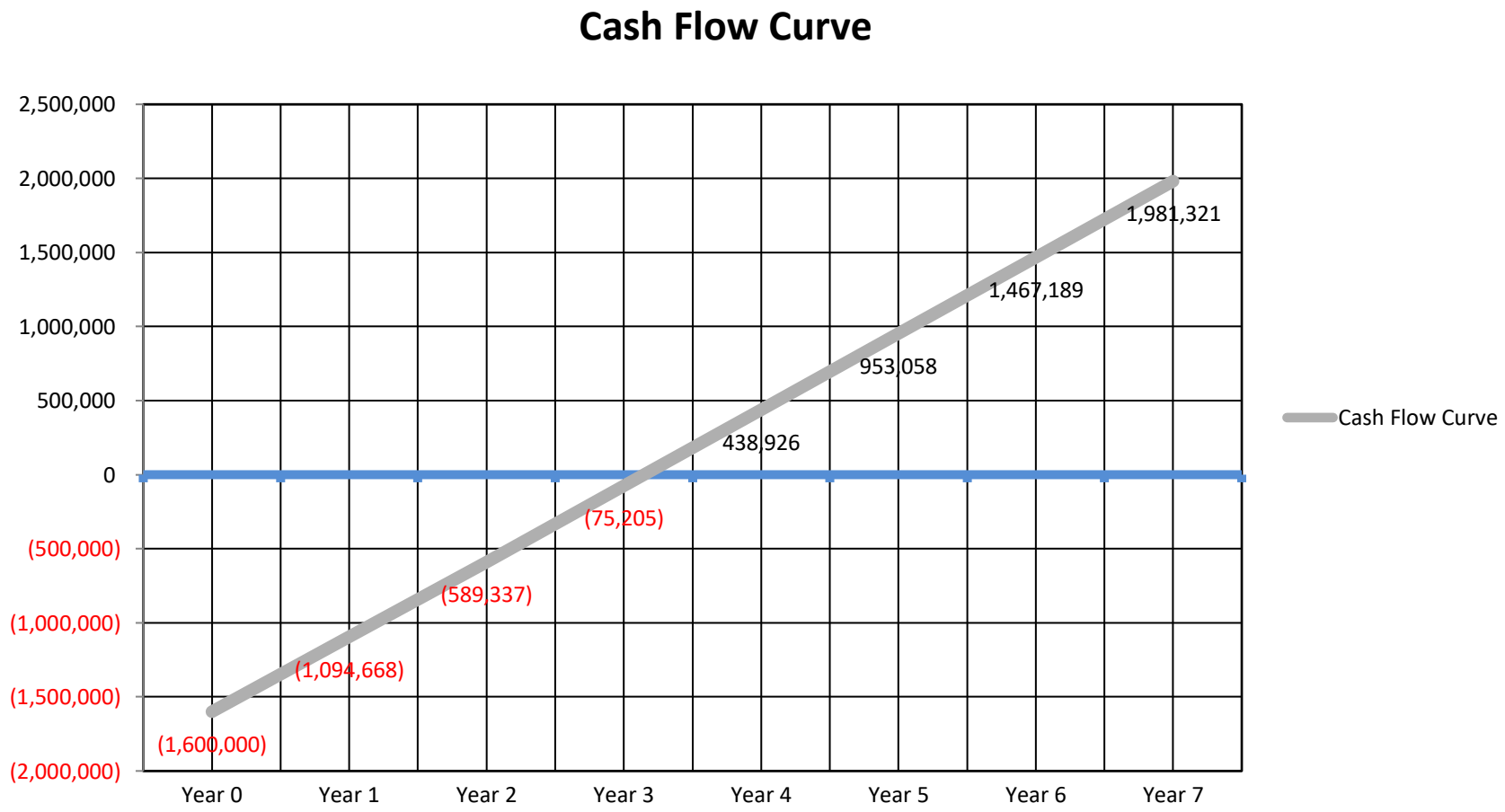
Costs	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Total	*$1,600,000*	*$8,800*	*$8,800*	*$0*	*$0*	*$0*	*$0*	*$0*

Benefits	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Annual Cash Flow	*($1,600,000)*	*$505,332*	*$505,332*	*$514,132*	*$514,132*	*$514,132*	*$514,132*	*$514,132*
Cumulative Cash Flow	*(1,600,000)*	*(1,094,668)*	*(589,337)*	*(75,205)*	*438,926*	*953,058*	*1,467,189*	*1,981,321*

Discounted benefit flow	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Discounted Costs	*$1,600,000*	*$8,148*	*$7,545*	*$0*	*$0*	*$0*	*$0*	*$0*
Discounted Cost Savings Flow	*0*	*476,048*	*440,785*	*408,134*	*377,902*	*349,909*	*323,990*	*299,991*
Total Discounted Cost Savings Flow	*(1,600,000)*	*467,900*	*433,240*	*408,134*	*377,902*	*349,909*	*323,990*	*299,991*
Total Cumulative Discounted Cost Savings Flow	*(1,600,000)*	*(1,132,100)*	*(698,860)*	*(290,726)*	*87,176*	*437,085*	*761,075*	*1,061,066*

Investments	**Year 0**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Total Investment (Page 3)	*$1,600,000*	*$8,800*	*$8,800*	*$0*	*$0*	*$0*	*$0*	*$0*

ROI measures								
Cost of capital	**8%**							
Net present value	*$1,061,066.12*							
Internal Rate of Return (Cumulative Benefit Flow)	*25%*							
Internal Rate of Return (Cumulative Discounted Flow)	*16%*							
Return on Investment		*30%*	*57%*	*82%*	*105%*	*127%*	*147%*	*166%*
Payback (in years)	*3.15*							


Cash Flow Curve
2,500,000
2,000,000
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1,000,000
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0
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(1,000,000)
(1,500,000)
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Year 0
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
(1,600,000)
(1,094,668)
(589,337)
(75,205)
438,926
953,058
1,467,189
1,981,321
Cash Flow Curve

Company A Return on Investment Analysis

#	✓	ROI Checklist
1	✓	Identify Possible Applications for ROI Analysis
2		Research Application for ROI Analysis
3		Document Application (Photos,Current Method, Time Study)
4		Brainstorm and Identify Solutions (With Discipline Experts)
5		Identify Cost Saving Drivers for ROI (Rough Order of Magnitude)
6		Identify Investments and Ongoing Costs (Rough Order of Magnitude)
7		Projected Volume to be received from Upper Management (Default at 100% until altered by Management)
8		Produce Initial ROI Package
9		Review with Vice President
10		ROI Produces an Initial Go-No-Go
11		Firm Up Cost Savings Drivers
12		Firm Up Investments and Ongoing Costs
13		Produce Final ROI Package
14		Produce ROI Package and Review with Management
15		Receive Go-No-Go from Management
16		Move Forward with Implementation
17		Identify parties for Implementation and Coordinate responsibilities. Follow up with team and track progress.