Project Na	ime: Printe	r Fleet Mana	agement		Pro	Dject ID: TN2186PF		
Leadership	o Group: Info	rmation Techn	ology Steer	ing Committee				
Departmen	t: Informatio	n Technology		Division: Technical Systems and Networking				
Project Sp	onsor: Joe Ta	abor	Date Requ	lested: 06/10/2022	PM Custom	er No. 186		
Request Ty	ype: Ne	w Developmen	t					
IT Team Na	ame: Worksta	tion Services		IT Team No: N				
Project Ma	nager/Leadeı	r: Mike Zemina						
Account Number:	17030	Account Description:		cal Systems and king	Customer Name:	Information Technology		
Grant Funded? No			Mandate?					
				Νο				
				Mandate Source:				

Project Goal

To manage Oakland County printer fleet under a single management platform so that significant reduction of operational hours can be realized.

Business Objective

The objective of this project is to expedite customer related requests by utilizing a SaaS platform that streamlines the effort for printer lifecycle management (e.g. printer driver deployments for new and replaced devices, printer driver versioning updates, and configuration updates and modifications). This project will also reduce the operational spend for printer fleet maintenance and support.

Major Deliverables

- Create RFP and associated processes
- Evaluate vendor responses
- Establish contract with awarded vendor
- Implement selected solution
- Create DR toolkit
- Migrate existing printer fleet into SaaS solution

Approach

- Create RFP and evaluation criteria
- Negotiate scope of services
- Contract finalization
- Review solution through architecture hours
- Create communications plan
- Create ECM package for client
- Workstation printer reconciliation reporting

Project Name: Printer Fleet Management

Project ID: TN2186PF

- Pilot IT devices
- Departmental rollout
- Provide post implementation support as needed

Research & Analysis

IT Research & Advisory Services Recommendation (select one)

• No Research Required

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	All IT issued workstations (5200)
Divisions	All
Leadership Groups	All

<u>Risk</u>

Business Environment

HIGH - Project will dramatically change existing business processes or will negatively affect the business environment if implementation is unsuccessful.

Technical Environment

High – Previously implemented technologies with new aspects and/or new requirements.

Project Na	me: Printer Fleet Management	Project ID: TN2186PF
<u>Assumpt</u>	tions	
Staffing	IT Staffing: resources will be available for th	e hours indicated per the attached

Staffing IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

Role:	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:	Joe Tabor	As Needed
App Services Stakeholder:	Tammi Shepherd	As Needed
CLEMIS Stakeholder:	Jeff Nesmith	As Needed
CTO:	EJ Widun	As Needed
IT Director:	Mike Timm	As Needed

Facilities

• None

Technical

• Workstations are online and connected to the internet for client installation.

Funding

• Information Technology

Other

• None

Priority TBD

Constraints

• Workstation connectivity

Exclusions

• Specialized print output devices (e.g. locally connected printers, dot matrix printers)

Project Name: Printer Fleet Management

Project ID: TN2186PF

PROJECT PHASE AUTHORIZATION

Phase(s):				
Total Estimated Application Services		Hours:		
Total Estimated Technical Systems		Hours:	1,188	
Total Estimated CLEMIS	I	Hours:		
Total Estimated Internal Services	5			
IT Application Services Division Manager Approval	Date:			
IT Technical Systems Division Manager Approval:				Date:
IT CLEMIS Division Manager Approval:				Date:
IT Internal Services Division Manager Approval:				Date:
IT Management Approval:				
Approved:	Yes		No	Date:
Reason:				
Project Sponsor Approval:				
Title:				Date:

PROJECT SUMMARY

Authorized Development (see above)	Hours: 1,193
Previously Authorized Development	Hours:
Preliminary Estimated Development for Future Phases	Hours:
Crand Total Estimated Davelonment	Hourse 4 402 Coots \$406.945
Grand Total Estimated Development	Hours: 1,193 Cost: \$196,845

Project Name: Printer Fleet Management

Project ID: TN2186PF

PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:						
Title:	Date:					
Project Office Review:	Date:					

Туре	ID	Task Name		Estimate Notes
			Hours	
Phase	000000	PROJECT ADMINISTRATION - PRINTER FLEET MGMNT	343	
Phase	100000	PRINTER FLEET MANAGEMENT	688	
Phase	200000		112	
Phase	300000	POST IMPLEMENTATION SUPPORT	50	

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	109,912	109,912	109,912	109,912	109,912	351,824	901,384
Costs:							
Development Services Subtotal:	203,445	6,600	6,600	6,600	6,600	6,600	236,445
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	63,000	66,150	69,458	72,930	76,577	0	348,115
Infrastructure Subtotal	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	109,912	109,912	109,912	109,912	109,912	351,824	901,384
Annual Total Costs	266,445	72,750	76,058	79,530	83,177	6,600	584,560
Annual Return on Investment	(156,533)	37,162	33,855	30,382	26,735	345,224	316,824
Annual Costs/Savings Ratio	242.42%	66.19%	69.20%	72.36%	75.68%	1.88%	· · ·
Project Cumulative Statistics:							
Cumulative Total Savings	109,912	219,824	329,736	439,648	549,560	901,384	901,384
Cumulative Total Costs	266,445	339,195	415,253	494,783	577,960	584,560	584,560
Cumulative Return on Investment	(156,533)	(119,371)	(85,517)	(55,135)	(28,400)	316,824	316,824
Cumulative Cost/Savings Ratio	242.42%	154.30%	125.93%	112.54%	105.17%	64.85%	64.85%
Year Positive Payback Achieved						Year 6	Year 6
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			
				Bato.			

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Operational hours savings	Cost Avoidance			1,249	88	109,912	
MFD fleet replacement effort	Cost Avoidance			2,749	88	241,912	
						0	
						0	
						0	
						0	
						0	
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Return on Investment Analysis

Savings Detail

		A	Affects Project ROI?				ROI?	Potential Savings Extensions					
Benefit/Savings Description	Project Savings Category		Y2						Y2	Y3	¥4	Y5	Y6
Operational hours savings MFD fleet replacement effort	Cost Avoidance	Х	Х	Х	Х	Х		109,912.00	109,912.00	109,912.00	109,912.00	109,912.00	
MFD fleet replacement effort	Cost Avoidance				<u> </u>	1	Х						241,912
				<u> </u>	<u> </u>	1	1						
				į	<u> </u>	1	1						
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Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Operational hours savings	109,912	109,912	109,912	109,912	109,912	109,912	659,472
MFD fleet replacement effort						241,912	241,912
Cost Avoidance Subtotal:	109,912	109,912	109,912	109,912	109,912	351,824	901,384
Intangible Benefit:							
Savings Total:	109,912	109,912	109,912	109,912	109,912	351,824	901,384

Return on Investment Analysis

					Affects Project RC			t RC) ?				
	Project Cost		Unit		Rate per		Annual		Ì	Ì			
Cost Description	Category	Budget Category/Funding Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	Information Technology		1,193	165	196,845		х					
IT Hours - System Maintenance	Development Svcs				165	0				ľ	[
IT Hours - Customer Support	Development Svcs				165	0							
IT Hours - Planned Maintenance	Development Svcs	TSN Information Technology PMU		40	165	6,600		х	х	х	х	х	Х
User Hours - New Development	Development Svcs					0							
User Hours - PTNE/OT	Development Svcs					0							
Contractor Professional Services	Development Svcs					0							
PC System - Acquisition	Hardware				639	0							
PC System - Maintenance	Hardware				3,352	0			ĺ				
Laptop - Acquisition	Hardware				922	0			!	!	!		
Laptop - Maintenance	Hardware				3,352	0							
Tablet Notebook - Acquisition	Hardware				1,069	0							
Tablet Notebook - Maintenance	Hardware				3,352	0			l	l	l		
File Space (100GB)	Hardware		ANN		23	0							
Package Software - Acquisition	Software	Information Technology		1	63,000	63,000	1.050	Х	Х	Х	Х	Х	
Package Software - Maintenance	Software					0			1				
Business Objects Access	Software					0							
Term Emulation SFTW-Acquisition	Software					0							
Term Emulation SFTW-Maintenance	Software					0			ĺ	ĺ	Ì		
Oracle Enterprise Software Purchase -													
Per Processor (4 Cores) - Requires													
Annual Support Below	Infrastructure				42,280	0							
Oracle Enterprise Software Support -									1				
Per Processor (4 Cores)	Infrastructure				9,293	0							
SQL Server Enterprise Software													
Purchase - Per Processor (4 cores) -													
Purchased Sept 2019-Aug 2020 -											l		
Includes Support thru Aug 2022	Infrastructure				16,985	0					l		
SQL Server Enterprise Software													-
Purchase - Per Processor (4 cores) -													
Purchased Sept 2020-Aug 2021 -													
Includes Support thru Aug 2022	Infrastructure				12,724	0							

Date: 06/10/2022

Return on Investment Analysis

								Affects Project		ROI?		
	Project Cost		Unit		Rate per		Annual					
Cost Description	Category	Budget Category/Funding Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5 Y6
SQL Server Enterprise Software												
Purchase - Per Processor (4 cores) -												
Purchased Sept 2021-Aug 2022 -												
Includes Support thru Aug 2022	Infrastructure				8,463	0					l	
SQL Server Enterprise - Support, Per												
Processor (4 cores) - Sept 2022 and												
5	Infrastructure				4,261	0						
SQL Server Standard Software												
Purchase - Per Processor (4 cores) -											ļ	
Purchased Sept 2019-Aug 2020 -												
Includes Support thru Aug 2022	Infrastructure				4,429	0					İ	
SQL Server Standard Software											ļ	
Purchase - Per Processor (4 cores) -												
Purchased Sept 2020-Aug 2021 -											1	
Includes Support thru Aug 2022	Infrastructure				3,317	0						
SQL Server Standard Software												
Purchase - Per Processor (4 cores) -											į	
Purchased Sept 2021-Aug 2022 -												
Includes Support thru Aug 2022	Infrastructure				2,205	0						
SQL Server - Standard Support, Per												
Processor (4 cores) - Sept 2022 and												
Beyond	Infrastructure				1,112	0					ļ	
Websphere Basic Per Processor												
Single/Dual Core - Includes Year 1											1	
Maintenance	Infrastructure				3,769	0						
Websphere Basic Per Processor											İ	
J	Infrastructure				754	0						
Websphere ND Per Processor											ļ	
Single/Dual Core - Includes Year 1											į	
Maintenance	Infrastructure				14,170	0					į	
											į	
Websphere ND Per Processor											ļ	
J	Infrastructure				2,835	0						
SSL Certificate	Infrastructure				910	0						

Return on Investment Analysis

								Af	ects	s Pro	oject	RO	1?
Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	V1	v 2	V2	VA	V5	VG
-	0,	Budget Category/1 unuing Source	Desc	Units			Multiplier	• •	14	13	14	13	10
Internet Access	Infrastructure				190	0							
Imperva Web Application Firewall	1		A N I N I		500	0							
(External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated	In fine a true a true				140	0							
IIS Server (Virtual)	Infrastructure		ANN		446	0							
Extra Small - 2 Core 8GB RAM, 500GB									l		İ		
Drive, 10 GB NIC - Cloud/Virtual = \$601													
On Premise Physical Server = \$2,735	Infrastructure		ANN			0							
	Initiastructure		AININ			0							
Small - 4 Core 16GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual = \$951										1			
On Premise Physical Server = \$3,057	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB						v					1		
Drive, 10 GB NIC - Cloud/Virtual =													
\$1,702 On Premise Physical Server =													
\$8,715	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB													
Drive, 10 GB NIC - Cloud/Virtual =										Ì			
\$3,167 On Premise Physical Server =													
\$10,758	Infrastructure		ANN			0				1			
Extra Large - 40 Core 192GB RAM,													
500GB Drive, 10 GB NIC - Cloud/Virtual													
= \$7,564 On Premise Physical Server =													
\$24,137	Infrastructure		ANN			0				İ			

Return on Investment Analysis

		Potential Cost Extensions						
	Project Cost							
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	
IT Hours - New Development	Development Svcs	196,845.00						
IT Hours - System Maintenance	Development Svcs							
IT Hours - Customer Support	Development Svcs							
IT Hours - Planned Maintenance	Development Svcs	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	6,600.00	
User Hours - New Development	Development Svcs							
User Hours - PTNE/OT	Development Svcs							
Contractor Professional Services	Development Svcs							
PC System - Acquisition	Hardware							
PC System - Maintenance	Hardware							
Laptop - Acquisition	Hardware							
Laptop - Maintenance	Hardware							
Tablet Notebook - Acquisition	Hardware							
Tablet Notebook - Maintenance	Hardware							
File Space (100GB)	Hardware							
Package Software - Acquisition	Software	63,000.00	66,150.00	69,457.50	72,930.38	76,576.89		
Package Software - Maintenance	Software							
Business Objects Access	Software							
Term Emulation SFTW-Acquisition	Software							
Term Emulation SFTW-Maintenance	Software							
Oracle Enterprise Software Purchase -								
Per Processor (4 Cores) - Requires								
Annual Support Below	Infrastructure							
Oracle Enterprise Software Support -								
Per Processor (4 Cores)	Infrastructure							
SQL Server Enterprise Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2019-Aug 2020 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Enterprise Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2020-Aug 2021 -								
Includes Support thru Aug 2022	Infrastructure							

Return on Investment Analysis

		Potential Cost Extensions						
Cost Description	Project Cost	Va	Vo	Va	N/A	VE	VC	
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	
SQL Server Enterprise Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2021-Aug 2022 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Enterprise - Support, Per								
Processor (4 cores) - Sept 2022 and								
Beyond	Infrastructure							
SQL Server Standard Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2019-Aug 2020 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Standard Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2020-Aug 2021 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Standard Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2021-Aug 2022 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server - Standard Support, Per								
Processor (4 cores) - Sept 2022 and								
Beyond	Infrastructure							
Websphere Basic Per Processor								
Single/Dual Core - Includes Year 1								
Maintenance	Infrastructure							
Websphere Basic Per Processor								
Single/Dual Core - Year 2 and Beyond	Infrastructure							
Websphere ND Per Processor								
Single/Dual Core - Includes Year 1								
Maintenance	Infrastructure							
Websphere ND Per Processor								
Single/Dual Core - Year 2 and Beyond	Infrastructure							
SSL Certificate	Infrastructure					•		

Return on Investment Analysis

		Potential Cost Extensions						
	Project Cost			No			× 0	
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	
Internet Access	Infrastructure							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137	Infrastructure							

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	196,845						196,845
IT Hours - System Maintenance							
IT Hours - Customer Support							
IT Hours - Planned Maintenance	6,600	6,600	6,600	6,600	6,600	6,600	39,600
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	203,445	6,600	6,600	6,600	6,600	6,600	236,445
Hardware:	,				,	,	,
Hardware Subtotal:							
Software:							
Package Software - Acquisition	63,000	66,150	69,458	72,930	76,577		348,115
· ······g- · ···· · ··· · ··· · ···		,		,	,		0.0,1.0
Software Subtotal:	63,000	66,150	69,458	72,930	76,577		348,115
Infrastructure:	00,000	00,100	00,400	12,000	10,011		040,110
Infrastructure Subtotal							
Training:							
Training.							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	266 445	72 750	76.059	70 520	02 177	6 600	E04 E60
Costs Total:	266,445	72,750	76,058	79,530	83,177	6,600	584,560

Return on Investment Analysis

Assumptions

Date	Assumption Description
240	423 MFDs & 720 single function devices - client app would be installed to all 5,200 OC computers.
	Cut down on personal computing service center incidents and reducing Change Orders
	309 change orders relating to printer issues for all of 2021 and 364 incidents ($\frac{1}{2}$ is related to drivers).
	Using a ratio of one to 5 (by using a config mgr verses by hand). For CO, that would be 309*5 = 1,545
07-Jun-22	Nominally 30 minutes per incident of savings and 45 minutes per change order of savings.
	Benefit #1: 182*.5*88 = \$8,008/yr + 1545*.75*88= \$101,970/yr = \$109,978/yr.
07-Jun-22	\$82,499 * 6 = \$494,893 for 6 yr project
	Benefit #2: 423 printer policies. Every 6 years MFD replacement would show the savings of 5200/423 = 12.293 (workstations per MFD). Rounded to 13.
07-Jun-22	423 (policies) * 13 (workstations) * .5 (1/2 hr per instance) = 2,749hrs * 88 (\$/hr) = \$241,912 every 6 years