



FLORIDA
AUDIT
FORUM

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HIGH COSTS OF LEGACY IT INFRASTRUCTURE

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Quality Matters

HIGH COSTS OF LEGACY IT INFRASTRUCTURE

- What are the **costs / risks** of legacy IT Infrastructure?
- What are the **barriers** to implementing **current technology**?
- Moving towards solutions!



Costs and Risks of The Status Quo

- Availability Issues
- Cybersecurity vulnerabilities
- Legacy Applications
- Human Factors



High Availability

Costs and Risks
of The Status Quo

- Unsupported Hardware
- ~~Replacement Parts~~
- Fault tolerance
- DRP Sites
- Backup and Recovery



Cybersecurity Vulnerabilities

Costs and Risks
of The Status Quo?

- Intrusion Detection?
- ~~Security Patches~~
- Hackers using the latest tools vs. Decades old
- ~~Smart Cities?~~





Legacy Applications

Costs and Risks
of The Status Quo?

- Improperly documented
- Difficult to Maintain
- Limited Functionality


Human Factors

Costs and Risks of The Status Quo?



Who wants to be...

- ~~Repair personnel~~
- ~~Legacy programmers~~
- ~~Computer operators~~



**Barriers to
implementing
current technology**

- Conversion Costs
- Legacy Applications
- Fear of Cloud's Cybersecurity

Capital Expenditure (CAPEX) Example

Straight-Line Depreciation		20%	5 Years	2014	2015	2016	2017	2018	2019
Opening Balance	Expense	\$		850	1,000	1,350			
CapEx									
2014	Equipment upgrade	500		(100)	(100)	(100)	(100)	(100)	
2014	Software upgrade	350		(70)	(70)	(70)	(70)	(70)	
2015	New machinery	800			(160)	(160)	(160)	(160)	(160)
2015	New vehicles	200			(40)	(40)	(40)	(40)	(40)
2016	New building	1,350				(270)	(270)	(270)	(270)

Conversion Costs

Barriers to implementing current technology

- Better higher operating costs than...
- Capital Expenditures
- Fear of size of Capital Expenditures

Legacy Applications

Barriers to implementing current technology

Poor documentation = Need for Reverse Engineering = Extremely manual process
VERY COSTLY PROGRAM CONVERSION =
Opportunity for ↑ functionality =
BITE THE BULLET!!!

```
000024  
000025 PROCEDURE DIVISION.  
000026 0001-MAIN.  
000027     INSPECT FUNCTION REVERSE(STR-1)  
000028         TALLYING WS-LEN1 FOR LEADING SPACES.  
000029     COMPUTE WS-LEN = LENGTH OF STR-1 - WS-LEN1.  
000030     DISPLAY WS-LEN.  
000031     MOVE 1 TO I.  
000032     MOVE WS-LEN TO J.  
000033     PERFORM REV-PARA WS-LEN TIMES.  
000034     DISPLAY STR-1.  
000035     DISPLAY STR-2.  
000036     GOBACK.  
000037 REV-PARA.  
000038     MOVE STR-1(J:1) TO STR-2(I:1).  
000039     SUBTRACT 1 FROM J.  
000040     ADD 1 TO I.  
000041     EXIT.  
***** Bottom of Data *****
```

Fear of Cloud's Cybersecurity

**Barriers to
implementing
current
technology**

- ~~But, but, outsourcing = loss of control!~~
- Seriously???
- Opportunities for much enhanced:
 - Cybersecurity
 - High Availability
 - Conversion & Then
Operating Costs
 - Regulatory Compliance
 - Programming Ease
 - Functionality



FedRAMP



Moving towards solutions!

Changing Paradigms

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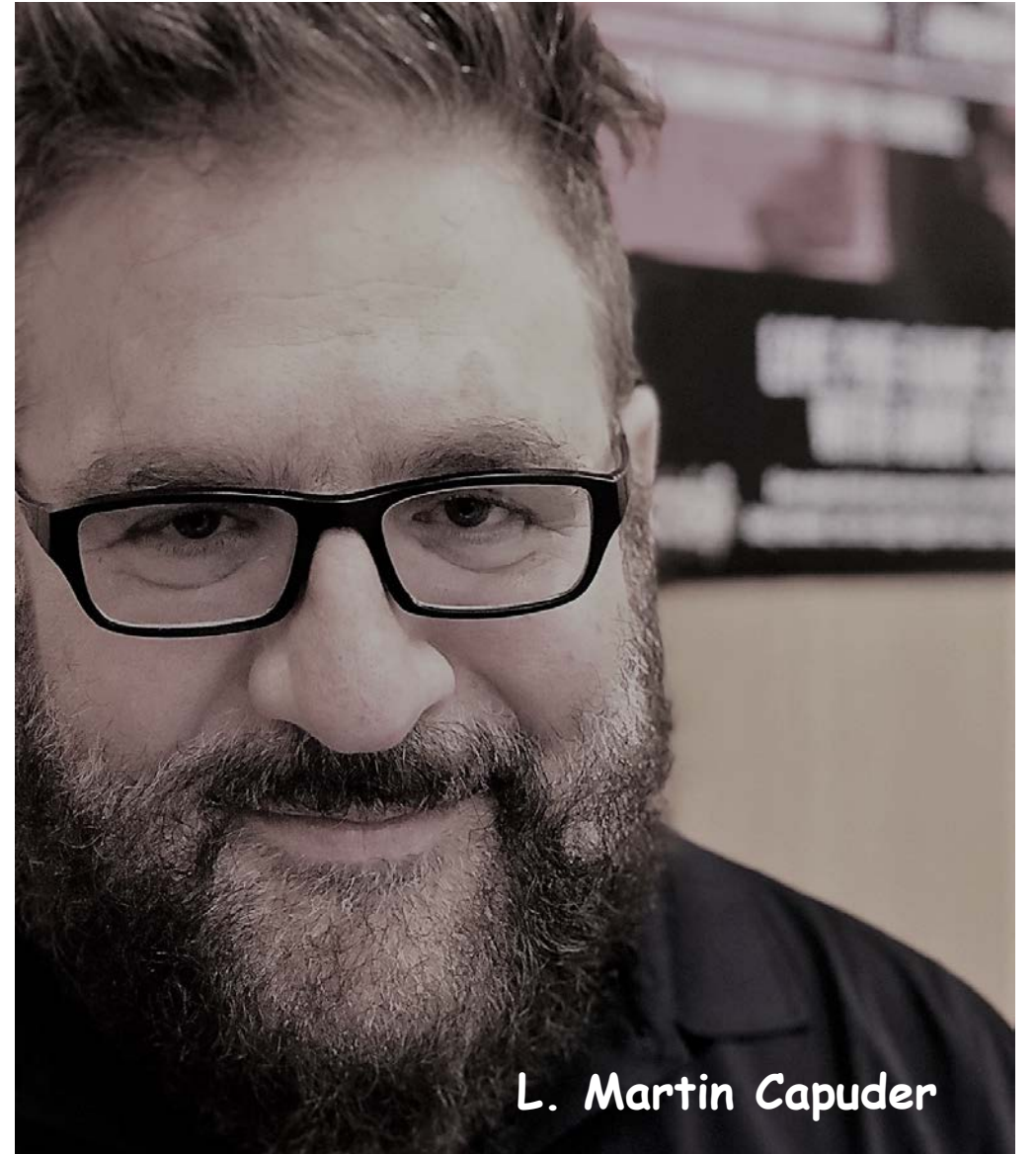
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Uniting stakeholder disciplines
In combatting human and wildlife trafficking



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