Final Presentation

Technical Intelligence Solutions (TIS)

IT492 Capstone

Meet the Team

Anam Ahmad	**Jas Gosalvez**	**Erica Hoots**	**John Lavoie**	**Melat Muluneh**	**Daniel Wondifriw**
Quality Assurance	Communication and Outreach	Project Management	Team Lead	Business Analyst	Solution Engineering
IT - Cybersecurity Fall 2022	**IT - Cybersecurity Fall 2022**	**IT - Programming Fall 2022**	**IT - Cybersecurity Fall 2022**	**IT - Cybersecurity Fall 2022**	**IT - Programming Fall 2022**

Agenda

Business & Competition   Proposed Solutions

Processes Described & Quantified   IT493 Planning

What can Be Improved

Business & Competition

Business Overview

Technical Intelligence Solutions (TIS)

Small, disadvantaged, LLC business (18-20 full and part-time employees) located in Herndon, VA providing cybersecurity consulting services for the Federal Government.

Mission

- Site Reliability
- Information Assurance
- System Integration
- Configuration Management
- Big Data Integration
- Cloud Orchestration

Business Overview (cont.)

State Corporation Commission
Clerk's Information System

Entity Information

Entity Information

Entity Name: Technical Intelligence Solutions, LLC
Entity Type: Limited Liability Company
Series LLC: No
Formation Date: 02/16/2013
VA Qualification Date: 02/16/2013
Industry Code: 0 - General
Jurisdiction: VA
Registration Fee Due Date: Not Required

Entity ID: S4418226
Entity Status: **Active**
Reason for Status: Active
Status Date: 03/24/2016
Period of Duration: Perpetual
Annual Report Due Date: N/A
Charter Fee: N/A

History
Pyi and Than started the business in 2013 and kicked off in 2016

Story
Raymond Page has been with TIS since nearly the beginning. He discussed with us how all the employees are close and familiar with each other and their work

Financials
Around 5 contracts -> ~$750k per contract

Strategy
CMMC compliance, apply for 8(a), & grow to 50 employees   *CMMC = Cybersecurity Maturity Model Certification*

What is CMMC?

CMMC = Cybersecurity Maturity Model Certification

Competition

SOFTRAMS	IT CONCEPTS INCORPORATED | DRIVEN TO DELIVER.	i3 Inform | Innovate | Integrate
❏ ~200-500 Employees ❏ Software Dev/Healthcare	❏ ~100 Employees ❏ IT Services/Consulting	❏ ~11-50 Employees ❏ IT Services/Consulting

⭐CMMC compliance is required to be competitive in the defense contracting industry

Areas of Competition

❏ Sub-contracts
❏ Partnerships with primes

❏ Talent retention
❏ Recruiting firms

Speaker: Anam

Business & Competition

Processes & Quantification

What can be improved

Proposed Solutions

IT493 Planning

Processes Described & Quantified

Business Processes & Impact of Processes

technical intelligence solutions

Asset Management

Training Management

CMMC Self Assessment

Overall Impact

- Not CMMC Compliant
- Manual Processes are not scalable
- Inefficient use of time

- Lack of automation
- Ineffective use of funds
- Lost business opportunities

areas of planned improvement

Asset Management

Asset Management

Context

5-10 Laptops per year

$100 for executive pay

$100 Quickbooks per year

Time	**6** hours per Laptop
Cost	**$100** per hour
People	Pyi Maung - **CEO** Than Maung - **VP**
Equipment	Excel Quickbooks Label Maker
Total	**$4,300** per year

Speaker: Anam

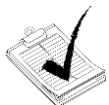| Business & Competition | Processes & Quantification | What can be improved | Proposed Solutions | IT493 Planning |

areas of planned improvement

CMMC Self Assessment

CMMC Self Assessment

Context

CMMC Level 2 has **100** practices

Jira Cloud for **10** users

$100 for executive pay

$80 for contributor pay

Time	**1** hour per practice

Cost	**$100** per hour

People	Pyi Maung - **CEO** Than Maung - **VP** Raymond Page - **Director of R&D**

Equipment	Google Drive Email Phone

Total	**$10,000** per year

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areas of planned improvement

Training Management

Security Officer

Start → Gather Assessment Information → Prepare Training → Contact Other Executives → Notify Employees → Employee Complete Training? —Yes→ Log Employee Training as Complete → End

Employee Complete Training? —No→ Notify Employees

Training Management

Context

1 training campaign per year

Jira Cloud for **10** users

$80 for contributor pay

Time	**72** hours per campaign

Cost	**$80** per hour

People	Pyi Maung - **CEO** Than Maung - **VP** Security Officer

Equipment	Excel Email

Total	**$5,760** per year

What can be Improved?

Asset Management

Client Criteria

Utilizing a manageable tracking process with tickets. Favor cloud-based SaaS solutions.

Solution

Use a management tool to organize and track work, manage projects, and processes

Improvements

- Visibility
- Documentation
- Metrics
- Organization

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Asset Management

Implementation Requirements

Context
5-10 Laptops per year
$80 per hour for contributor pay
$100 Quickbooks per year
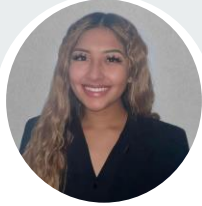
Time and Tools
5-7 weeks to implement and ensure operational success.

SaaS offering

Roles and Tasks

Jas (Outreach)
Anam (Quality Assurance)

Ensure everything is running smoothly and keeping the client in the loop. Build and configure Jira workflows so it makes communication smooth

Quantification

Time	**1** hour per asset purchase
Cost	**$80** per hour
People	**Contributor**
Equipment	Project Management Tool (Jira **$1,450**/yr)
Total	**$2,250** per year

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CMMC Self Assessment

Client Criteria

An overall tracking management system to monitor the tasks, audits, internal controls; Needs visibility into the compliance progress. Solution that is financially feasible and practical

Solution

Using a software tracking tool to manage multiple projects. Access all the processes at once and simplify their management system. In addition to following the CMMC 2.0 guidelines.

Improvements

- Easily export data to an excel SSP document for auditing
- Minimize miscommunications
- Improve role-based access controls

CMMC Self Assessment
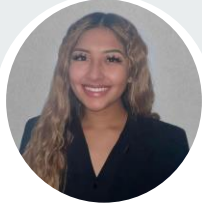
Implementation Requirements

Context

CMMC Level 2 has **100+** practices
Jira Cloud for **10** users
$80 for contributor pay

Time and Tools

12 weeks research, training, development and implementation

Access to SaaS service and CMMC policies

Roles and Tasks

John (Lead)
Jas (Outreach)
Anam (Quality assurance)
Daniel (Solutions Engineer)
Erica (Project Management)
Melat (Business Analyst)

Team to understand CMMC policies and familiarize themselves with SaaS tool.

Quantification

Time	**10** minutes per practice
Cost	**$80** per hour
People	**Automated**
Equipment	Project Management Tool Jira (**$1,450**/yr) Google Drive
Total	**$2,810** per year

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Training Management

Client Criteria

Tracking system implemented for improvement of the process. Easy to integrate with current systems in use

Solution

Using a tool tracking system that would be manageable for training progress and document all processes in a centralized system.

Improvements

- Saves time
- Training accessibility
- Documentation
- Improve efficiency
- Organization
- Easier to keep track

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Training Management

Implementation Requirements

Context

1 training campaign per year
Jira Cloud for **10** users
$80 for contributor pay
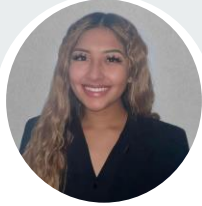
Time and Tools

6 weeks to implement and transition.
Access to SaaS service and employee lists with training needs

Roles and Tasks

Daniel (Solutions Engineer)
Melat (Business Analyst)

Team to understand current training policies and develop integration with current employee database.

Quantification

Time	**48** hours per campaign
Cost	**$80** per hour
People	**Security Officer**
Equipment	Project Management Tool Trainual (**$1,548**/yr)
Total	**$5,388** per year

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Proposed Solution

Client's Solution Criteria and Requirements

- Easy to integrate with current systems used within TIS, not looking for a standalone solution
- Solutions that are both financially feasible and practical for their company's scale
- Favor cloud-based, Software as a Service (SaaS-based), or containerized apps, not interested in purchasing or managing any bare metal infrastructure.
- Put TIS on the right path of becoming CMMC compliant

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Proposed Solutions

- CMMC compliance is foundational
- Research indicates large effort necessary for implementation (**12** weeks)
- Team 2 to focus on CMMC Self Assessment for greatest value

Innovative 3 in 1 Solution

Why Jira is right for our sponsor

- ● Multi-industry global presence in over 65,000 businesses

- ● Budget friendly for small businesses

- ● SaaS and self-hosted on premise options

- ● Known migration accommodation for future growth

- ● Intuitive user interface for all users and administrators

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Proposed CMMC Self Assessment Process (Jira)

As-Is vs To-Be

Context

CMMC Level 2 has **100+** practices

Jira Cloud for **10** users

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	AS-IS	TO-BE
Time	**1** hour per practice	**10** minutes per practice
Cost	**$100** per hour	**$80** per hour
People	Pyi Maung - **CEO** Than Maung - **VP** Raymond Page - **Director of R&D**	**Automated**
Equipment	Google Drive Email Phone	Jira ($1,450) Google Drive
Delta	**$10,000** per year	**$2,810** per year

$7,190

Speaker: Melat

Business & Competition

Processes & Quantification
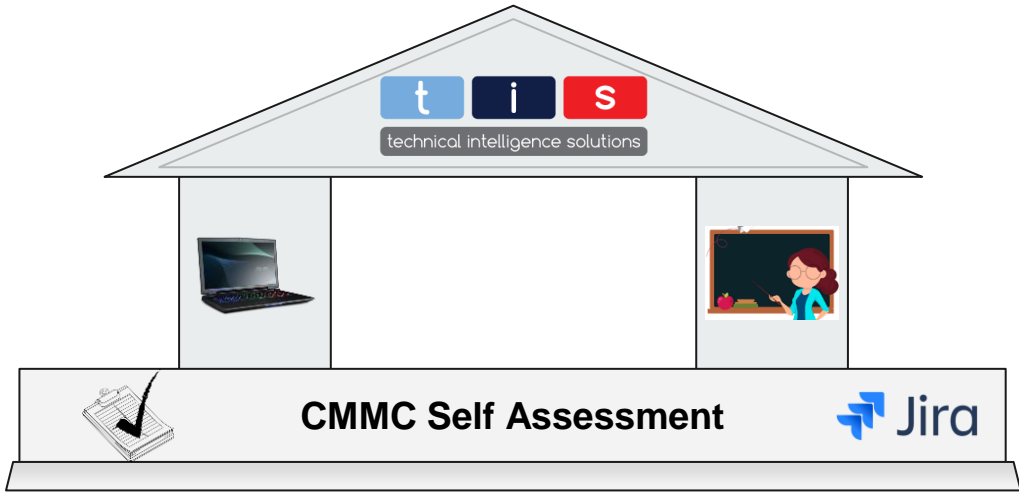
What can be improved

Proposed Solutions

IT493 Planning

IT493 Planning

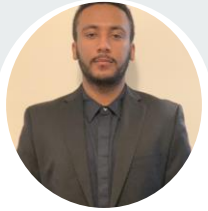# Implementation Challenges

1 The path to CMMC compliance is new for all companies — Be vigilant for updates during the life of the project

2 Tailoring Jira to meet their business needs — The team will need to learn and build a skill tailoring Jira for TIS' use

3 Functions beyond the baseline tool may require purchased plugins — Build it in a way that doesn't require purchased plugins

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493 Preliminary Schedule Modules 1-2

493 Preliminary Schedule Modules 3-4

Ou Nu			Task Mode	Task Name	Duration	Start	Finish
1	1			Module 1	14.25 days	Tue 8/23/22	Mon 9/5/22
5	2			Module 2	36 days	Tue 9/6/22	Mon 10/10/22
18	3			Module 3	29 days?	Tue 10/11/22	Mon 11/7/22
19	3.1			Week 8	7 days	Tue 10/11/22	Mon 10/17/22
20	3.2			Week 9	7 days	Tue 10/18/22	Mon 10/24/22
21	3.3			Week 10	7.25 days	Tue 10/25/22	Mon 10/31/22
22	3.3.1			10-T Test Results / Final Test Scripts	7.25 days	Tue 10/25/22	Mon 10/31/22
23	3.3.2			11-T Quantification Results	7.25 days	Tue 10/25/22	Mon 10/31/22
24	3.3.3			12-T Training Documentation / Results	7.25 days	Tue 10/25/22	Mon 10/31/22
25	3.4			Week 11	7 days	Tue 11/1/22	Mon 11/7/22
26	3.4.1			9-T Live Demonstration	7 days	Tue 11/1/22	Mon 11/7/22
27	3.4.2			13-T Transition Documentation	7 days	Tue 11/1/22	Mon 11/7/22
28	3.4.3			Assignment 10: Go-Live Demonstration	7 days	Tue 11/1/22	Mon 11/7/22
29	4			Module 4	36.25 days?	Tue 11/8/22	Mon 12/12/22
30	4.1			Week 12	7 days	Tue 11/8/22	Mon 11/14/22
31	4.1.1			16-T Peer Evaluation	7 days	Tue 11/8/22	Mon 11/14/22
32	4.2			Week 13	7 days	Tue 11/15/22	Mon 11/21/22
33	4.2.1			14-T Team Notebook	7 days	Tue 11/15/22	Mon 11/21/22
34	4.2.2			15-T Final Presentation	7 days	Tue 11/15/22	Mon 11/21/22
35	4.3			Week 14	6 days	Sat 11/19/22	Fri 11/25/22
36	4.4			Week 15	6 days	Sat 11/26/22	Fri 12/2/22

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493 Preliminary Schedule
Software Development Lifecycle

Ou Nu	i	Task Mode	Task Name	Duration	Start	Finish
1	1		▷ Module 1	14.25 days	Tue 8/23/22	Mon 9/5/22
5	2		▷ Module 2	36 days	Tue 9/6/22	Mon 10/10/22
18	3		▷ Module 3	29 days?	Tue 10/11/22	Mon 11/7/22
29	4		▷ Module 4	36.25 days?	Tue 11/8/22	Mon 12/12/22
37	5		Fall Break	1 day?	Mon 8/22/22	Mon 8/22/22
38	6		◢ Software Development Lifecycle	61 days	Tue 9/6/22	Thu 11/3/22
39	6.1		Planning and Analysis	14.5 days	Tue 9/6/22	Mon 9/19/22
40	6.2		Design	7.25 days	Tue 9/20/22	Mon 9/26/22
41	6.3		Development	14.5 days	Tue 9/27/22	Mon 10/10/22
42	6.4		Testing	14.5 days	Tue 10/11/22	Mon 10/24/22
43	6.5		Deploy	1 day	Tue 10/25/22	Tue 10/25/22
44	6.6		Maintenance	9.25 days	Wed 10/26/22	Thu 11/3/22

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493 Team Assignments

Monitoring and Controlling Plan (Team Lead) (3-I)
John

Risk Management Plan and Quality Management Plan (5-I)
Anam

Quantification Plan (7-I)
Erica

09/12

09/26

10/10

09/12

09/26

10/10

Software Development Plan (4-I)
Daniel

Test Plan/ Test Scripts (6-I)
Jasmine

Training Plan and Training Materials (8-I)
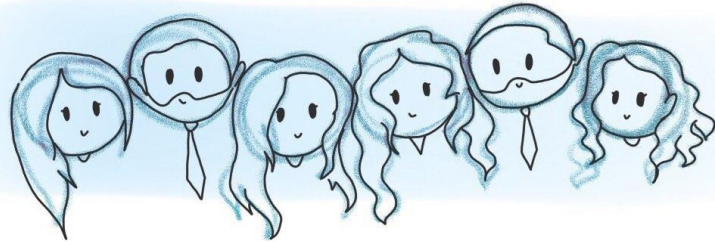Melat

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Speaker: John

Conclusion

technical intelligence solutions

Team 2

- Clear opportunities for process **improvement**

- **Direct** impact on business operations

- Aligned with TIS **growth** strategy

- Low barrier to **entry** and **sustainment**

- Long term **benefit** to additional processes

Thank you.

References

- https://www.techintsolutions.com/
- https://business.defense.gov/Acquisition/Subcontracting/Subcontracting-For-Small-Business/
- https://www.atlassian.com/software/jira/guides/use-cases/who-uses-jira#how-devops-teams-use-jira
- https://www.sba.gov/federal-contracting/contracting-assistance-programs/8a-business-development-program
- https://softrams.com/about/
- https://useitc.com/solutions/#services
- https://i3llc.us/
- https://www.8amagazine.com/top-25-8a-contracts-awarded
- https://ocd-tech.com/cmmc/
- https://www.rimstorm.com/about-cmmc/