![Virginia Information Technologies Agency (VITA) logo]

Welcome and Opening Remarks

Nelson Moe

July 10, 2019

ISOAG July 10, 2019 Agenda

I. Welcome and Opening Remarks -   **Nelson Moe / CIO VITA**
- Jack Redfield, ISO for Cherry Bekaert and VCSP Advisory Board Secretary

II. MACH37 Spring 2019 Cohort -   **Bud Roth / VentureScope**

III. Records Management -   **Chad Owens / Records**
Management Coordinator Library of Virginia

IV. Upcoming Events

V. Adjourn

Nelson Moe

Chief Information Officer
Commonwealth of Virginia

July 10, 2019

Virginia Cyber Security Partnership

The Virginia Cyber Security Partnership (VCSP) was established as a collaboration between the private and public sectors to create a trusted place to collectively discuss Cyber threats.

The mission of the VCSP is to address the cyber security risks facing Virginia and our nation by establishing and maintaining a trusted community of cyber security professionals.

vacsp.com

We now live in an on-demand society #shiftneeded

Catalina is an employee

She is a millennial and always used to getting quick responses

She needs help from HR, How long should she wait?

How to serve thousands of Catalinas at once?

Immediate Answers

Convenient Time and Place

Personalized Experience

"How much can I contribute to my 401K plan?"
"How much vacation do I have left?"
"How do I enroll newborn to benefits?"
"How much maternity leave do I get?"

Employees Make or Break Company Success
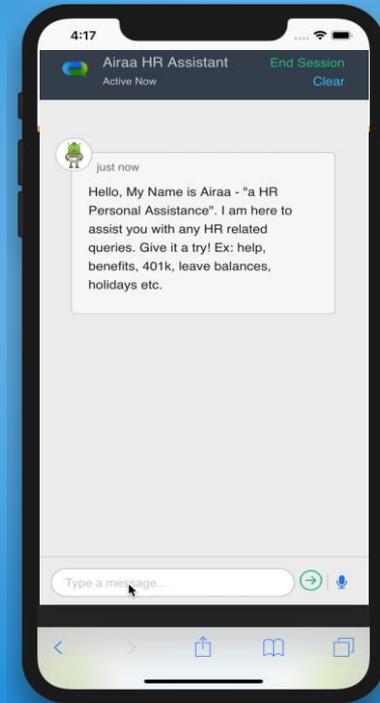
High Volume of
inbound enquires

Repetitive
activities

Too many HR
systems to interact

Lack of Integration

Increase employee
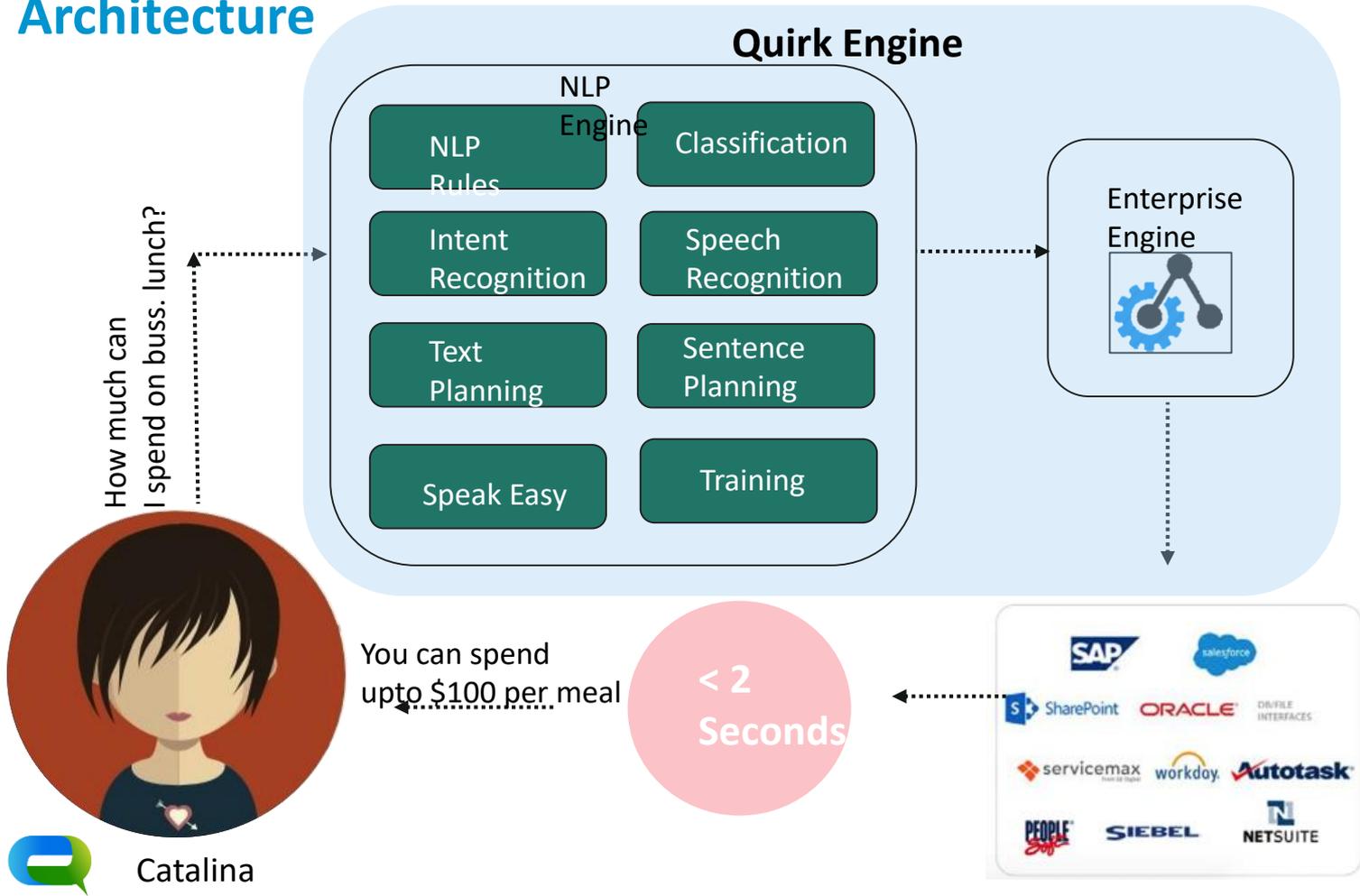knowledge

Enhance HR Digital
Transformation

Better Employee
Experience

Improve Efficiency

4:17

Airaa HR Assistant   End Session
Active Now   Clear

just now

Hello, My Name is Airaa - "a HR
Personal Assistance". I am here to
assist you with any HR related
queries. Give it a try! Ex: help,
benefits, 401k, leave balances,
holidays etc.

Type a message...

Architecture

Quirk Engine

NLP Engine

- NLP Rules
- Classification
- Intent Recognition
- Speech Recognition
- Text Planning
- Sentence Planning
- Speak Easy
- Training

Enterprise Engine

How much can I spend on buss. lunch?

You can spend upto $100 per meal

< 2 Seconds

Catalina

SAP
salesforce
SharePoint   ORACLE   DB/FILE INTERFACES
servicemax   workday.   Autotask
PEOPLE Soft   SIEBEL   NETSUITE

Meet The Squad

Raj Kondapalli
CEO / Growth Hacker
Serial Entrepreneur

Anil Kumar
CTO/ Tech Geek
Serial Entrepreneur

Thomas Van Swearingen
COO / Strategist
Serial Entrepreneur

Chandra Kishore
Full Stack Developer

ibaseit Technology Development Partner

Market Validation

80%

User Groups

80% HR Managers
10% Recruiters
5% IT Directors
5% Developers

65%

On-Boarding Pain Points

65% agreed that on-boarding is big issue and employees will have lot of uncertainty on where to find information.

42%

Interested in Product

42% of users shown interest on digitalizing the handbook and potential pilot opportunities

Competitor Analysis

Feature	Quirk.ai	ubisend	smartAI	kore.ai	Bash.ai	Leena AI
Ready to Install HR Assistant	✓	✗	✗	✗	✓	✓
Low Development Costs	✓	✗	✓	✗	✓	✓
Accuracy (NLP & Speech Recog.)	✓	✓	✓	✓	✓	✗
Document Scanning	✓	✗	✗	✗	✗	✗
Enterprise Integration Middleware	✓	✓	✗	✓	✗	✗
Scalability	✓	✗	✗	✗	✗	✗
REST & SOAP Support	✓	✓	✗	✗	✗	✗
SSO & AD Sync	✓	✗	✗	✗	✗	✗
SDK for External Integration	✓	✓	✓	✓	✗	✗

Market

Total addressable market

Total Money Spent Per Year – $1.6 Billion
Total Money Spent Per Month - $136 Million
Total Money Spent Per Week - $34 Million
Cost to Company per hour - $250/hr
HR Employee cost per hour -$50/hr
Hours spent on Employees Support/week - 5hr
Total HR Employees - 136,100

Traction

Pilot Partners
Autotask®   Genentech   COGNIX AUTOMATION
Square   SAP   PRECURSOR DRIVING YOUR ADVANCEMENT

Testimonials

"Quirk NLP/NLU capabilities are very sophisticated and ready to interface with all the major messaging platforms. Definitely a very mature and well-designed solution." – Prasad Dasari, Cognix

"Quirk's innovative architecture puts all of your data at your fingertips, and their intuitive interface makes training and improving your bots a breeze." – Kay Faris, SmartCursors

The Ask

Raising $1,500,000 in Seed Round

to sustain and grow the company over the next 15 months

USE OF FUNDS

New Hires (build Integrations)

Marketing Campaigns

Expand Office Space

Develop Partnerships

Profitability

Thank You

The First Blockchain-Powered
Smart Speaker System

ARYIA

The Problem

01 Trust

02 Privacy

03 Passive Listening
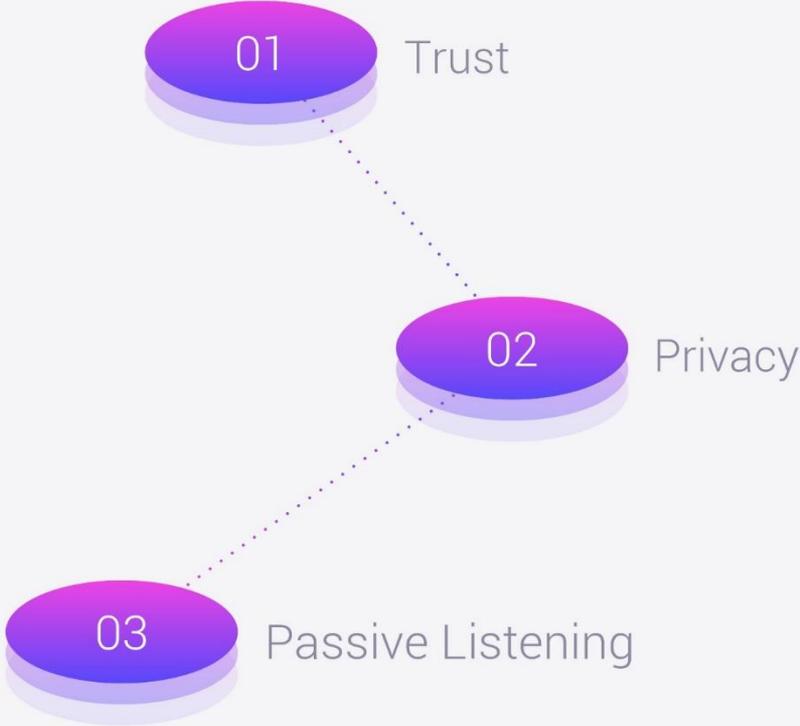
Customer Research

	Aryia
User Sample	200
Concerned with privacy	40%
Would trade for reward	70%

ARYIA

Meet Aryia

The Solution
Stage 1

Control

Aryia gives users full control over their data ownership. Additionally, all of the user voice data is completely offline.

Choice

Consumers will be able to choose what information will shared, if any and will be rewarded for their data exchange.

Reward

The world's first smart speaker designed to reward its users for their activity. Users can toggle Aryia into the following device modes:

ARYIA

ARYIA

The Solution
Stage 2

Decentralize

AI gets decentralized and ready for licensing on third party devices. External developers can contribute to the AI system with new modules.

Marketplace

The newly created modules and commands will be listed on the AI marketplace in exchange for a usage fee (AIA coins) decided by their dev.

Customize

Users can decide which modules and commands they want to use with their smart speaker and purchase them with AIA coins from the AI marketplace.

AYA Credits

The speaker comes out of the box with a set number of AYA loaded on the device to be spent in the AI marketplace.

Get More AYA

If needed, users can earn additional AYA coins by participating in the rewards system or purchase them from an exchange.

03

Feedback

03

Decentralized Data Flow

ARYIA

KEY STORAGE

START

ENCRYPTION ENGINE

DATUM STORAGE

DEPERSONALIZED USER

DATUM ADS DISTRIBUTION QUEUE

ASSIGN REQUESTED ADS TO CORRESPONDING USERS PROFILES

ARYIA

Market Size

$ **2.68** Billion

Value of Smart Speaker
Market in 2018*

$ **11.79** Billion

Expected Value of Smart
Speaker Market By 2023*

440 %

Expected Market Growth
Within the Next 5 years*
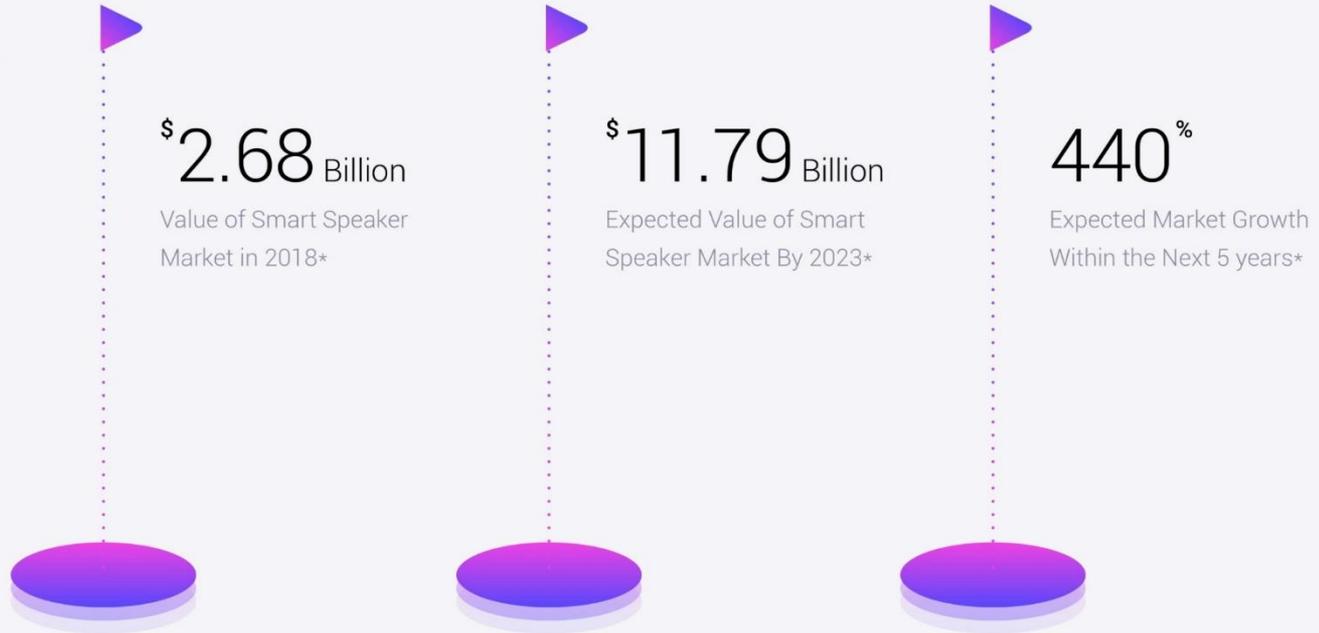
*Marketsandmarkets.com (2018). Smart Speaker Market by IVA, Component, Application, and Geography - Global Forecast to 2023. Retrieved from URL https://www.marketsandmarkets.com

05

Data Invasive
Competition

Centralized Smart Speakers

- Amazon Echo
- Google Home
- Apple Homepod
- Sonos One
- JBL Link 20

Private by design, Blockchain-Powered Smart Speakers

- Aryia Alpha

Meet Aryia Alpha - the first ever blockchain-powered smart speaker of its kind

ARYIA

ARYIA

Revenue Streams

Data Monetization

Product Sales

Affiliate Program

Mine & Learn Platform

Market Research Surveys

Decentralized Marketplace

Team

Alex Delibas
Founder, CEO

Cristian Diaconu
Founder, COO

Anton Yushin
Founder, Product Vision

Alexis Yushin
IT Strategist

Saulo Maciel Mariano
Industrial Design & Manufacturing

Artem Kormylets
Video & Graphics

Advisors

Ben Way
World-renowned startup technologist, inventor and serial entrepreneur based in Silicon Valley
Business Development

Francois Poupard
Business Development Manager at Ethfinex, blockchain and cryptocurrency expert
Business Strategy

Gerald Friedland
Professor at UC Berkeley, Specialist in Artificial Intelligence and Speech Recognition
Artificial Intelligence

Andrei Popescu
Co-Founder of COSS.IO & SCX Holdings, Seasoned Blockchain Tech Start-Ups investor
Blockchain Tech

Daniel Stone
Founder of Blackstone Consulting, with focus on treasury and risk management
Financial Markets Expert

Sebastian Broways
Product design strategy specialist, User research, UX/UI Designer
UI/UX

Jevin Maltais
Software Engineer turner Product Manager, Founder of Boomlabs.ai, Co-Founder of Aerial.ai
Artificial Intelligence

Philipp Sauerborn
Legal Advisor, International Tax and International Structuring Expert
Corporate & Tax Structure

ARYIA

What We're Looking For

01

$600,000
Private Round

02

Use of funds:

- team and advisory board growth;
- blockchain development ;
- product development and production;
- security;
- logistics;
- marketing.

ARYIA

Thanks for your attention!
Learn more about Aryia at https://aryia.ai

FortMesa

Delivering team security culture.

Security is hard:

- **Train cyber warriors.**
- **Silo them in a Security Operations Center.**

Security Silos

Security is hard:

- **Train cyber warriors.**
- **Silo them in a Security Operations Center.**

Not working?
- **More complex tools**
- **Better/more warriors.**

Security Silos

FortMesa

30% of cyber jobs are currently unfilled.

- *NIST, US Dept. Of Commerce*

Security Silos

FortMesa

30% of cyber jobs are currently unfilled.
- *NIST, US Dept. Of Commerce*

<u>Meanwhile,</u>
   Tech Users:
      "Not My Problem"

Security Silos
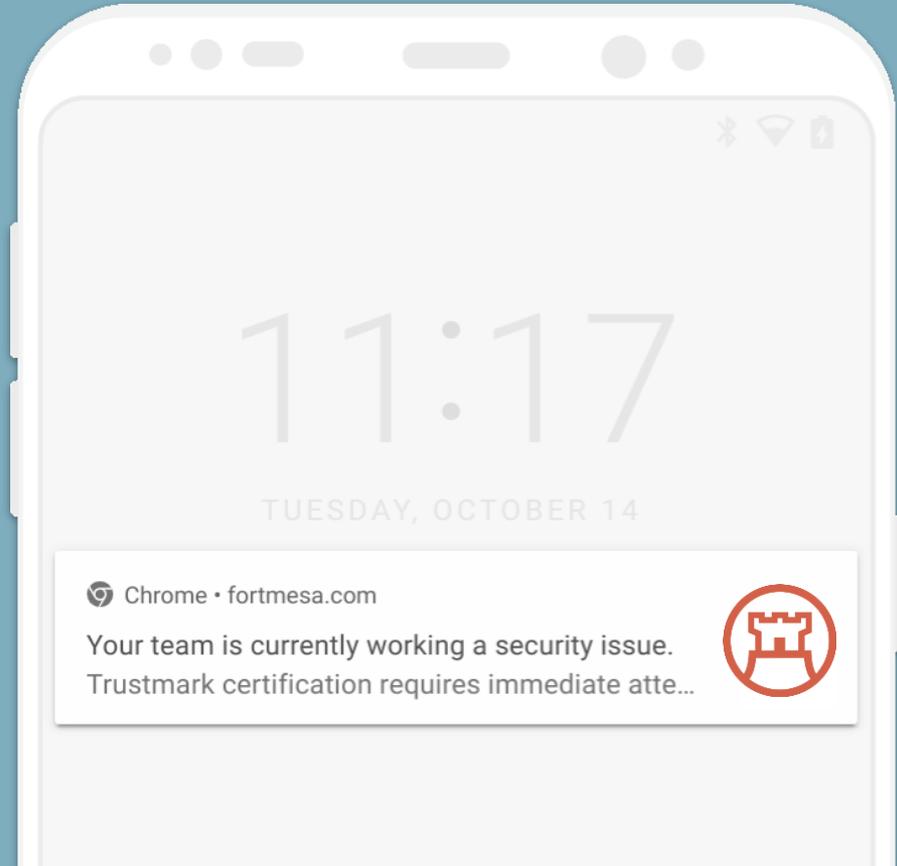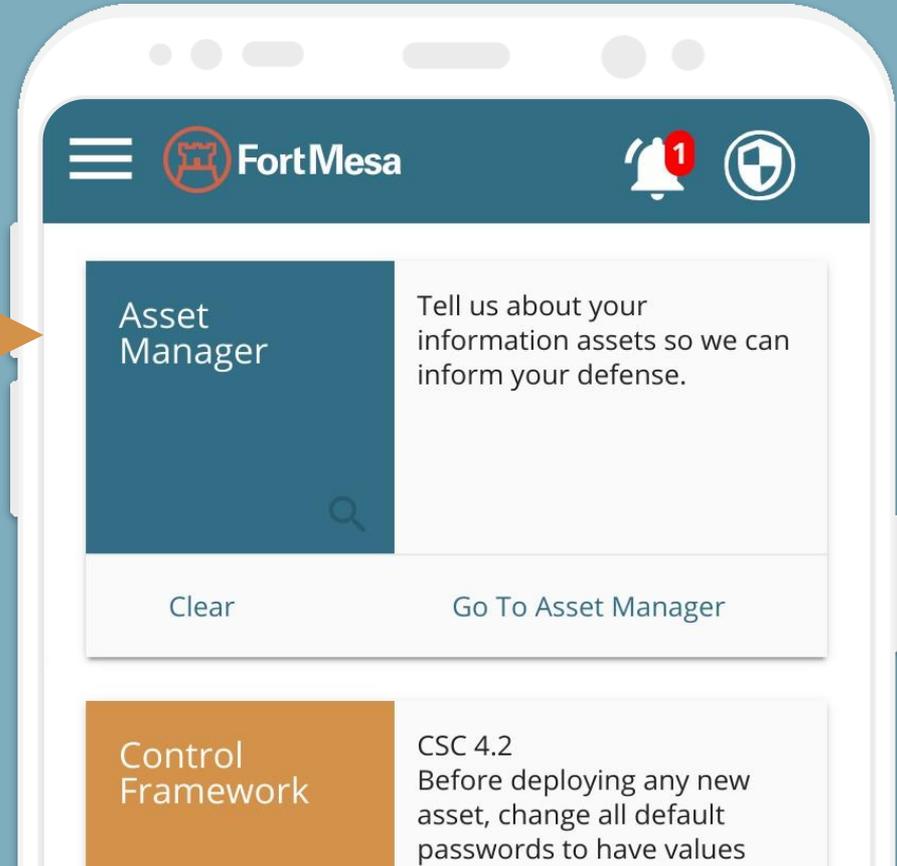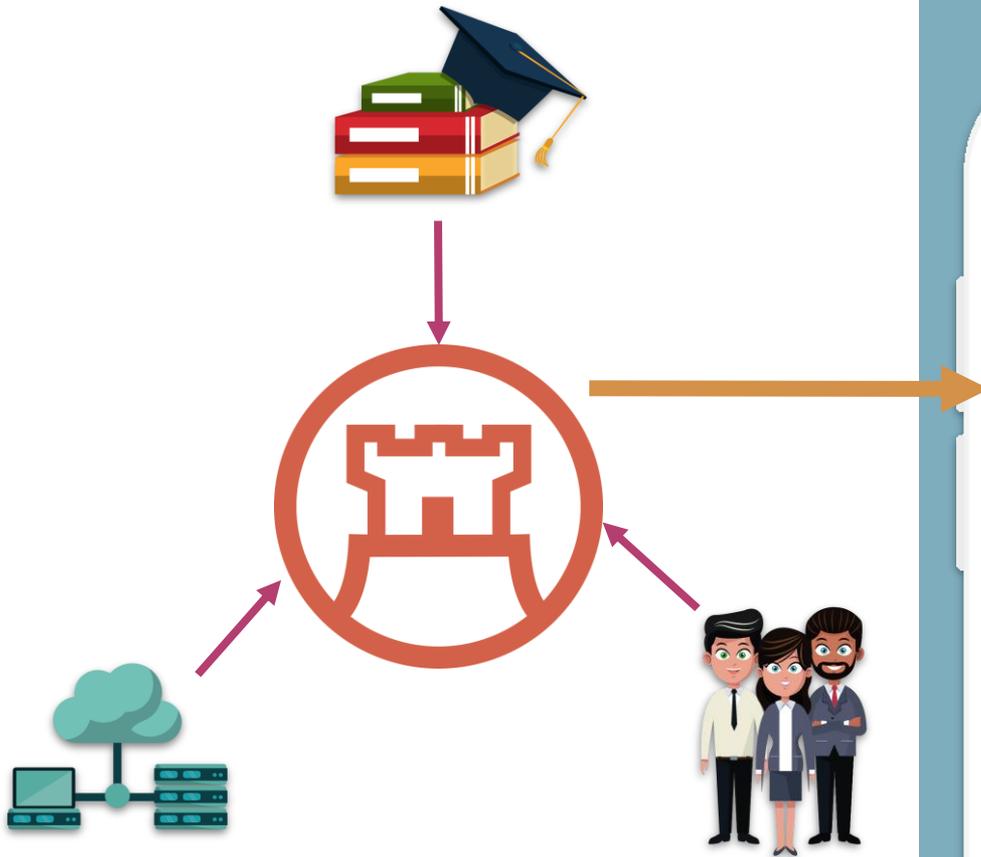
FortMesa

Team Security Culture

FortMesa
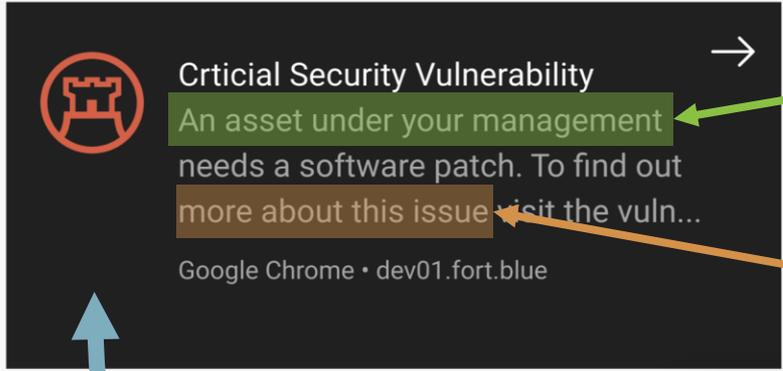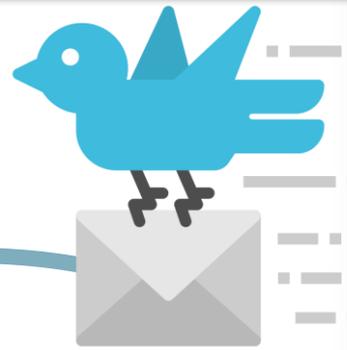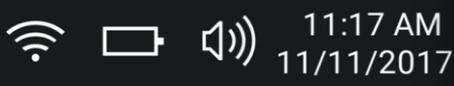
Team Security Culture

Key Talent

Matthew Fisch
Founder & CEO

Karan Sharma
Lead Developer

Sumit Jaryal
UX Designer

Danny Swett
Lead Engineer

Sushma Rani
Developer

Lori Fisch
Operations

Strategic Advisors

Finance & Accounting
A. Michael Bucci
Managing Shareholder
Pattison, Koskey, Howe & Bucci

Legal & Governance
John Katovich
Founding Partner
Cutting Edge Counsel

Intellectual Property
Paul C. Rapp, Esq.
Independent Counsel

Offshore Talent
Inderjit Singh
Managing Partner
Geek Informatic Limited

FortMesa Team

FortMesa
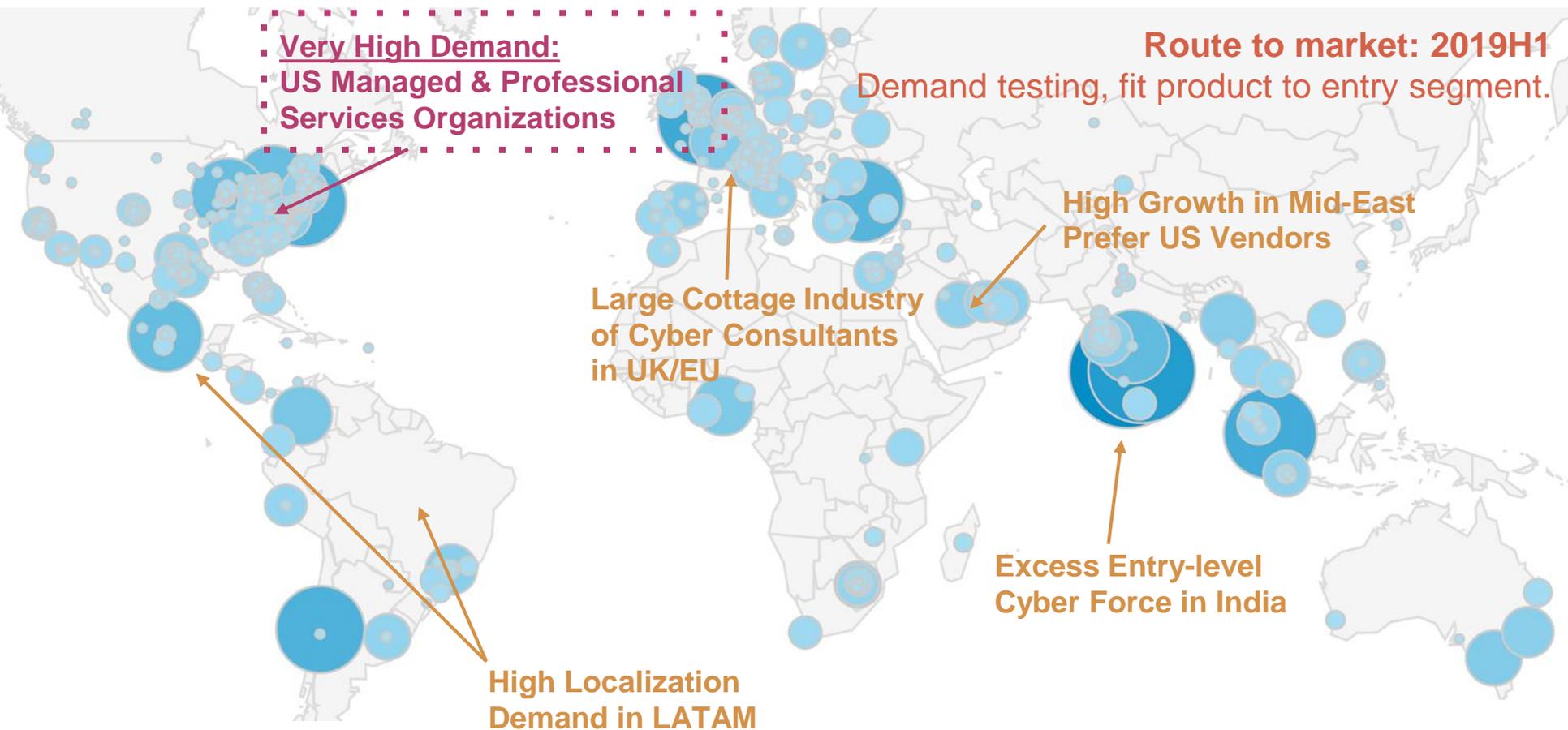
Very High Demand:
US Managed & Professional Services Organizations

Route to market: 2019H1
Demand testing, fit product to entry segment.

High Growth in Mid-East Prefer US Vendors

Large Cottage Industry of Cyber Consultants in UK/EU

Excess Entry-level Cyber Force in India

High Localization Demand in LATAM

Inbound Demand

FortMesa
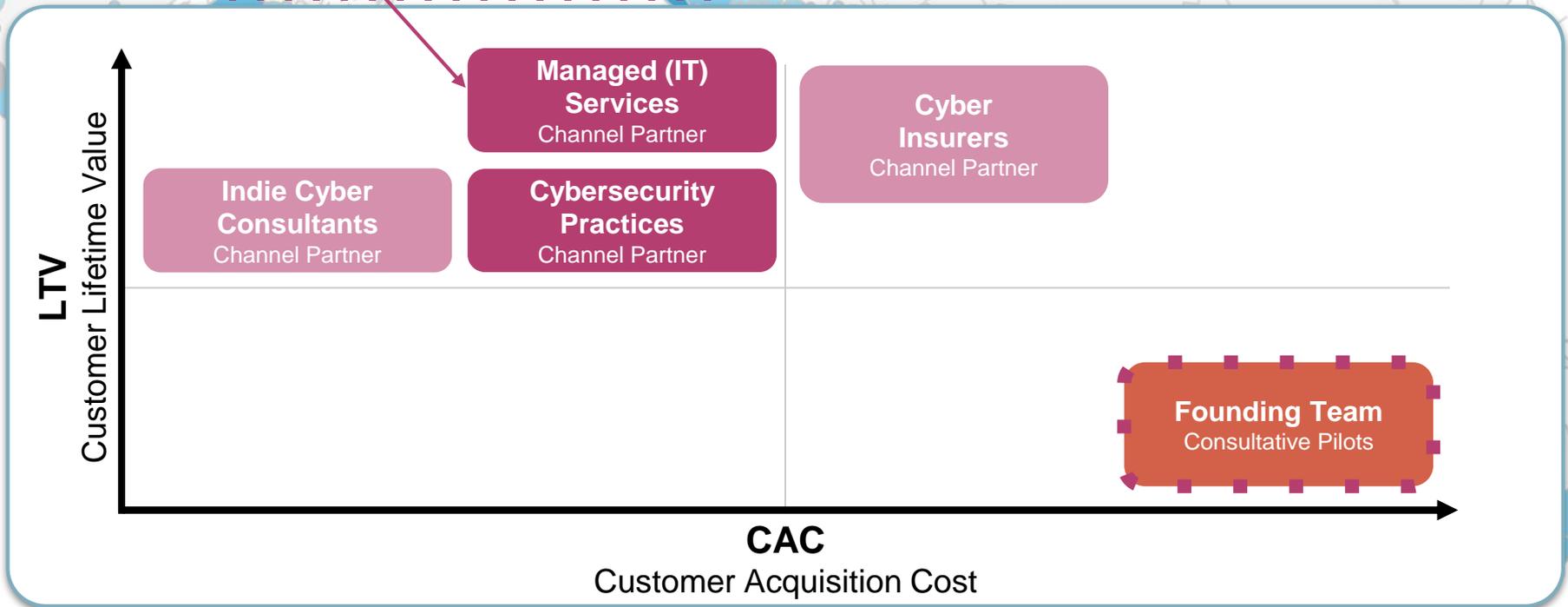
Sales Channels

Route to market: 2020 and Beyond
Full market multi-channel strategy.
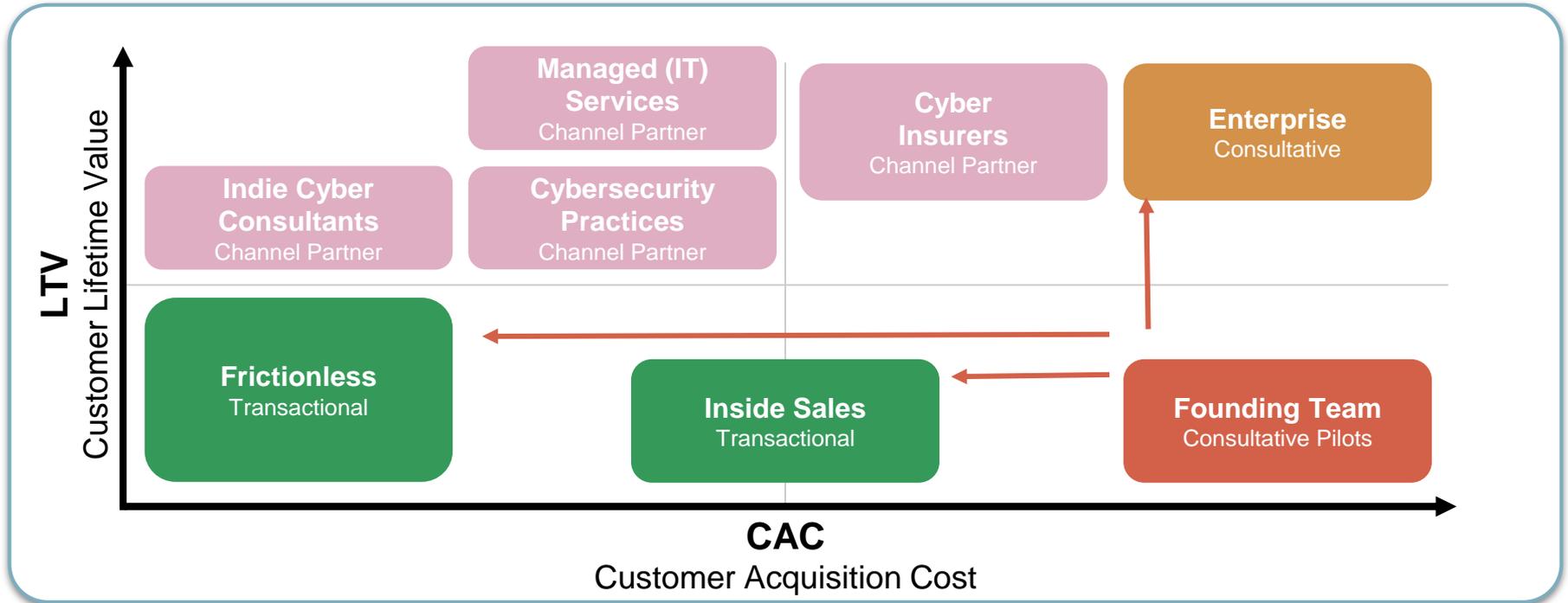
Sales Channels

US Market Opportunity 2023 (Forecast)
Domestic figures represent 40% of global opportunity.

Security Services Vendors
Consulting, Managed, Outsourced
$33.9B
$10B growth

Too small for a SOC?
$22.4B
Less than 500 employees

Use Current Workforce to
Fill Empty Cyber Jobs
$4.3B

**We estimate $13,731 in
annual savings per head.**

Integrated Risk Management Software
$3.6B
$897M growth

Sources (2019): Gartner & IDC Spending Forecasts, US NIST and US BLS Statistics

Addressable Market

FortMesa

We're asking you to support our mission.

$1.5m for our next 2 years of growth.

Key Use of Funds

- Build a competitive moat of integrations.

- Scale an internal sales & success competency.

- Power outreach to channel partners and enterprise.

The Ask

FortMesa

We're asking you to support our mission.

$1.5m for our next 2 years of growth.

Key Use of Funds

- Build a moat of integrations.
- Scale sales & success.
- Power outreach campaigns.

One more ask:

Help us recruit early adopters!

- **IT MSP or Security MSSP**
- **Cyber Consultancy**
- **Anyone.**

The Ask

FortMesa

Team Security Culture

MΛLWORk

ACCELERATING
THE CYBERSECURITY WORKFORCE

Presented By Bobby Sheppard and Jay
Anderson
July 2019

The Problem

There are **3.5 million cybersecurity job vacancies Worldwide**.

" **60%** of surveyed companies say their companies are at **moderate** or **extreme risk** of cybersecurity **attacks due** to this **shortage**. "

Cyberattacks will **cost**
6 TRILLION dollars **globally** by 2021.

Malwork platform provides a **cost-effective** subscription-based **Cybersecurity Marketplace**.

Our Platform enables customers to have virtual **access to a virtual cybersecurity workforce that is ready-to-work** on day-one.

Our goal is to **ENABLE** cybersecurity professionals to **operate micro-businesses** through the **Malwork Platform to serve their customers virtually.**

Malwork Platform

Customers

Malwork Vendors

Cyberattacks
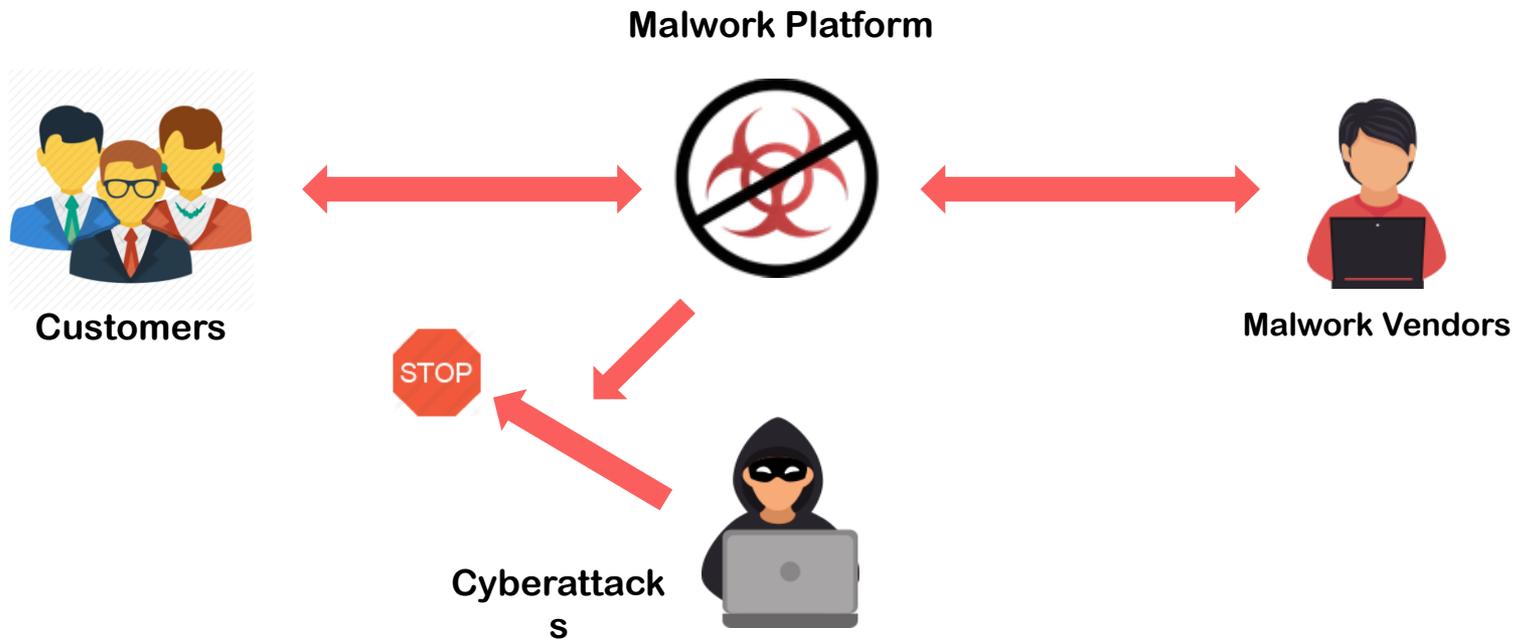
Optimizing Workflow on All Sides.

Client Experience

- ✓ **Simple** Dashboard

- ✓ **Tiered** Subscription Model

- ✓ **Vendors** filtered **by skills and requirements**

- ✓ Transparent **daily logs and** payments

- ✓ **Vendor** ratings

- ✓ Powerful communication **and** alerts

Daily log   24th November 2016

Every day you have to write down everything you did, so client knows what he is paying you for.

CONTRACT:	Looking for a 5 Bodyguards for our Hotel Event	
DAY STATUS:	COMPLETED	
PAYMENT:	PAID	

CHECK-IN:	00:10	**CHECKIN NOW**	**TAKE DAY OFF**
CHECK-OUT:	08:30		
HOURS:	8	CHECKOUT NOW	

Time table

━━ Submitted log
── Unsaved log

00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12
12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-00

Optimizing Workflow on All Sides.

Vendor Experience

- ✓ **Powerful** Dashboard

- ✓ **Employee** management

- ✓ **Customer** rating

- ✓ **Role based** access control

- ✓ Simple **tools**

- ✓ Cybersecurity **certification** system

Employee: John Doe

John Doe
email@companygmail.com

★★★⯪☆ 3.5 | 32 contracts
License: Alabama - 55616503RS-21

✏ Edit

● Active account
❗ Unverified credentials   [verify]
💬 No requests from employee
📄 2 active contracts
🕐 Last login: 2min ago

Contracts (subtitle)

| Active contracts | Archived contracts | Someother tab |

The Malwork Team
A web platform for Cybersecurity

MΔLWⓇRk

Bobby Sheppard

Founder and CEO
U.S. Army Veteran with 25
years National Security
expertise.
7 years start-up experience
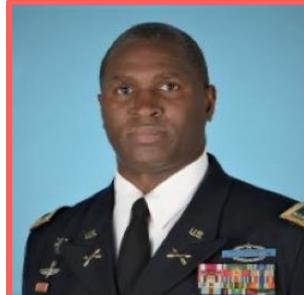
Jay D. Anderson

Co-founder and CMO
Retired Chief Warrant Ofc. U.S. Army Spec
Ops. 20 years Law enforcement and Cyber
Security experience.
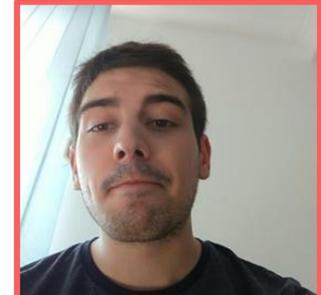
Dušan Stojadinović

Co-founder and CTO
Full Stack Developer 8+ years,
former CTO @ appCarGo.com

Dipto Chakravarty
Strategic Advisor

Rick Doten
CISO Advisor

PaaS model = Gig-Economy

HIGH-END MARKETPLACE

Unique Subscription-based Model

Business Model
How We Earn Revenue

Digital Security Advisory - Precursor to Marketplace
Cybersecurity Marketplace

*Malwork receives 10-20% of revenue per vendor

Phase 1
Platform Enabled Vendors

Tier 1	Tier 2
Start-up	**Company**
$7/mo	**$15/mo**
(per employee)	(per employee)

Phase 2
Malwork Cybersecurity Marketplace

Tier 1	Tier 2	Tier 3
Small Business	**Growth**	**Enterprise**
$500-$800/mo	**$2500-4000/mo**	**$5000-8000/mo**

Phase 1 - 6-12 months
Building database of Cybersecurity Professionals (and their customers).
Testing the platform.

Phase 2 - 12-24 months
Full Beta Launch of the Cybersecurity Marketplace.

M Δ L W ⊛ R k

Primary Target Market

Cybersecurity Professionals seeking Part-time revenue.

Cybersecurity Professionals seeking to have a less expensive way to build their business.

Secondary Target Market

Companies who want to Post unfilled Cybersecurity Jobs.

Customer Acquisition

MALW🜨Rk
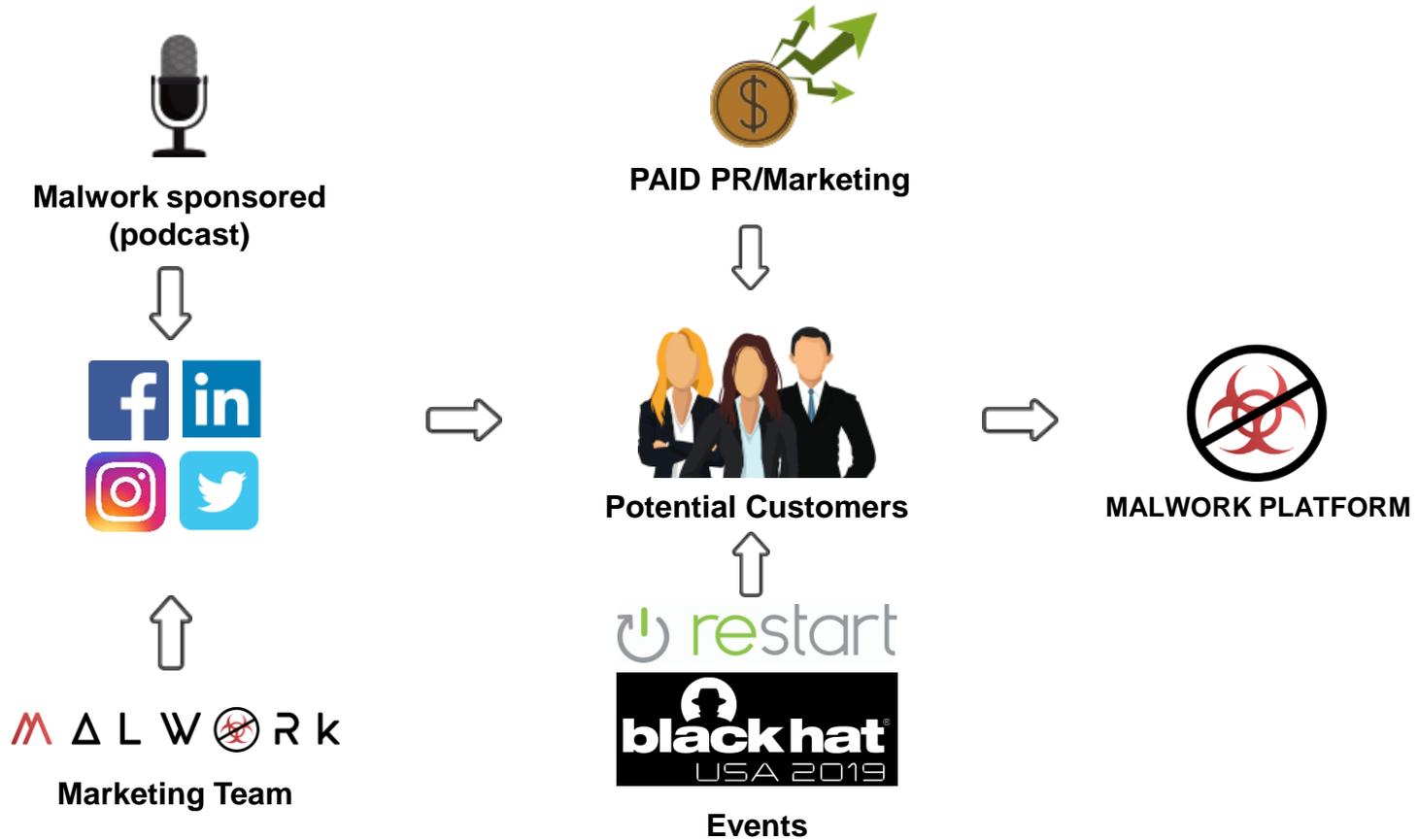
Over the past 2 months we've spoken to **over 60 potential customers.**

Our prospective **customers** are **seeking**:
- **Optimization of Resources**
- **Cost-Effectiveness**
- **And a skilled Workforce**

All of which are **more plausible** with a **Malwork** powered **cybersecurity marketplace rather** than a **new internal hire**.

- **Gartner** **stated** that by the end of 2019 companies **would have spent** **124 Billion on Cyber security**.

- **With 1 Trillion dollars spent by 2021**

- These market indicators provide **an open field of** **opportunity** for a **cybersecurity marketplace**.

Competitors

	Main Focus	Why we are better
hackerone	Pentesters	**Multiple Cybersecurity Disciplines Represented**
toptal	Developers and Designers	**Our subscription-model lends to long-term engagements**
CyberSN Your Staffing and Job Searching Partner	Cybersecurity Staffing Company	**Enables Micro-businesses**
		MALWORK

Raising 1.5M

ALLOCATION OF INITIAL FUNDS

- Virtual Office Space

- Consulting CISO for platform information Sr. DEV contractors

- Full-time Front-end Developer

- Full-time LinkedIn and Instagram Branding outreach team

- Full-time Vendor Management Executive to attract and keep Malwork Vendors

- Full-time UX/UI team to include graphic designer.

- Sales Distribution reps for cybersecurity

- Cybersecurity R&D tools integration development

- Part-time Mobile and Desktop development team

Thank You!

team@malwork.com

Bobby Sheppard @ 240-440-3133

Records Management and Compliance in the Digital Commonwealth

ISOAG Meeting
July 10, 2019

Chad Owen

Records Management Coordinator

LIBRARY
of VIRGINIA
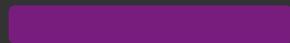
A quick survey for starters:

How many of you have ever tried to open a file that you found was corrupted?
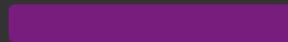
A quick survey for starters:

How many of you have ever found a copy of a file in an odd or unexpected place?
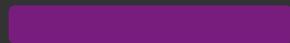
The fundamental dichotomy

Records in electronic form are both inherently fragile and easily duplicable: therefore, both difficult to preserve and equally difficult to confidently eradicate.
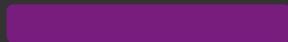
More questions than answers
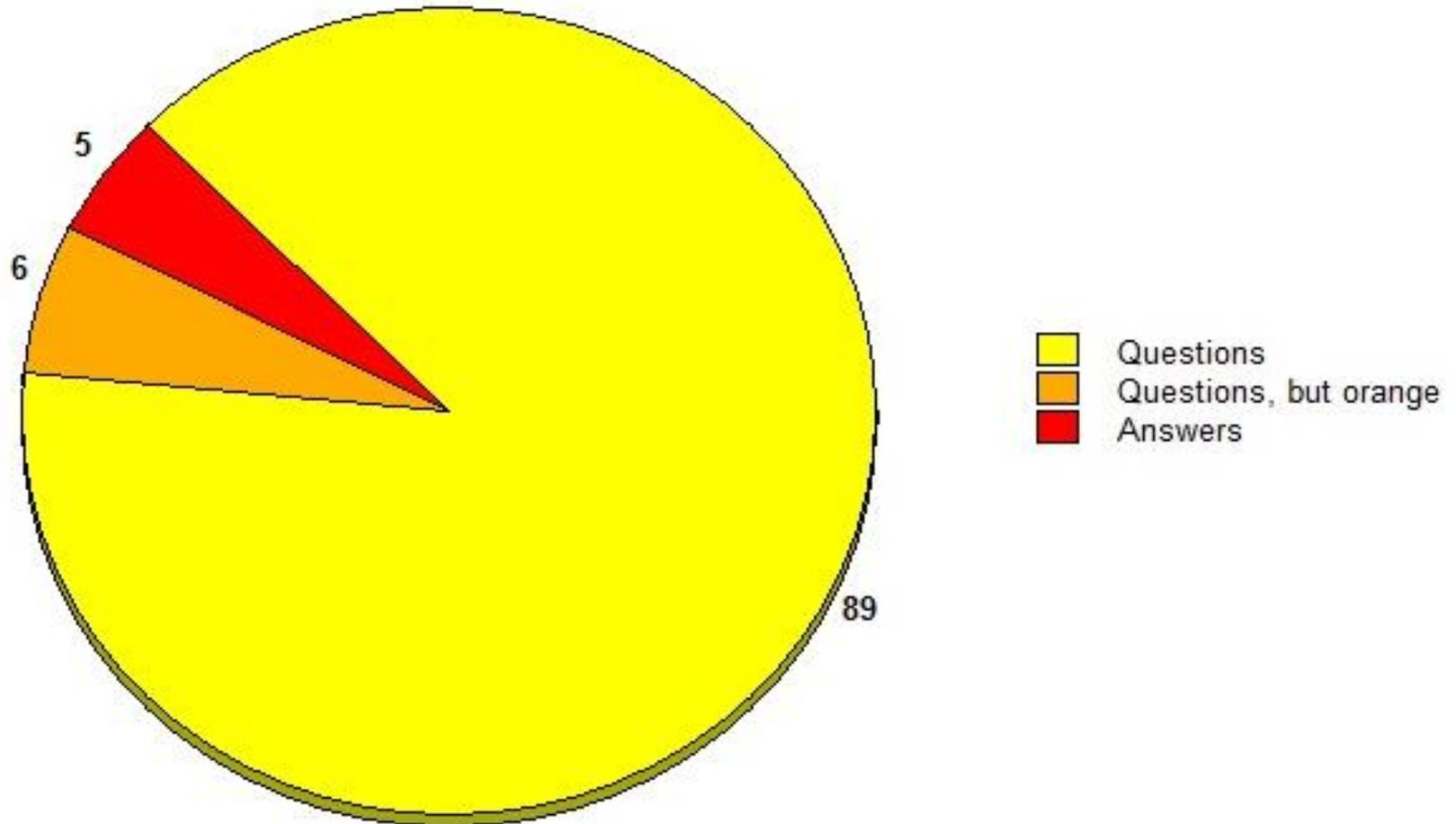
Why records management matters

- Protect rights of citizens

- Improve efficiency

- Reduce risk of litigation

- Ensure compliance
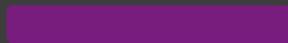
Why records management matters
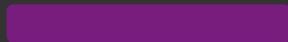
2006 was a good year…
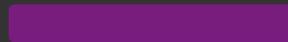
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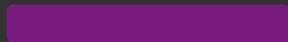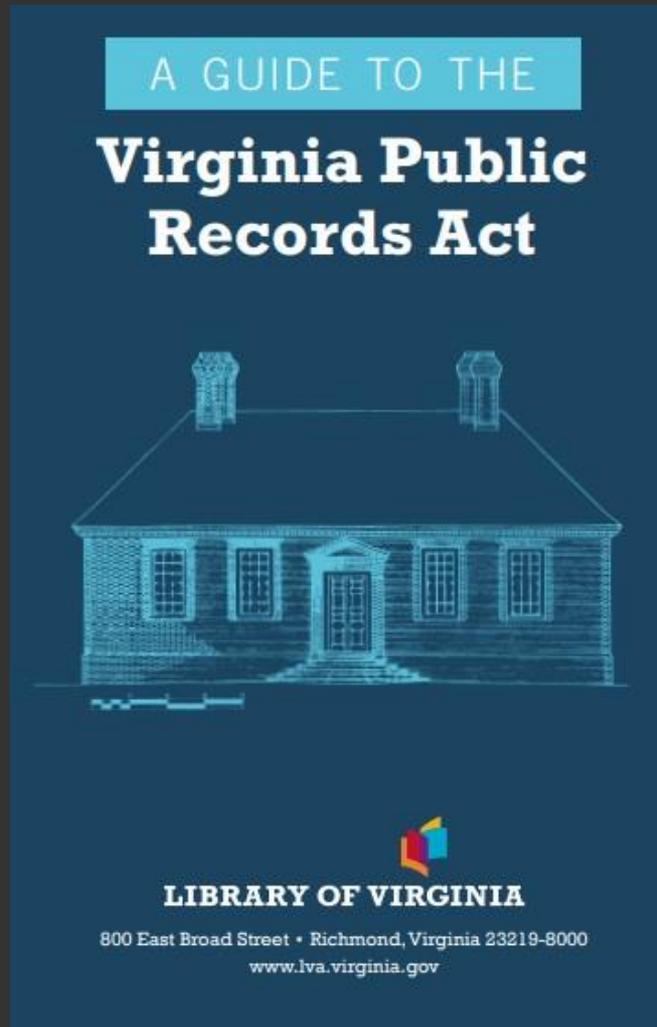
What is a public record?

. . . documents a transaction or activity . . .

Regardless of physical form or characteristic . . .

. . . is produced, collected, received or retained in pursuance of law or in connection with the transaction of public business.

Virginia Public Records Act, COV § 42.1-77
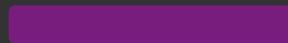
What makes a record?

- Content

  What's it about?

- Context

  Who what when where why?
  Metadata

- Structure

  Appearance and arrangement

  Relationship between records/fields

What makes a record?

Content:

"This should be illegal."

Context:

Who said it?

Structure: When and how was it said, and what connects it to other records?

The content is the same…

Is it secure and accessible?

- Protected from unauthorized access

- Available for subpoena, FOIA, or audit for the entire length of its retention period
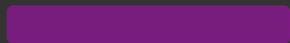
Is it *really* accessible?
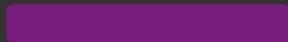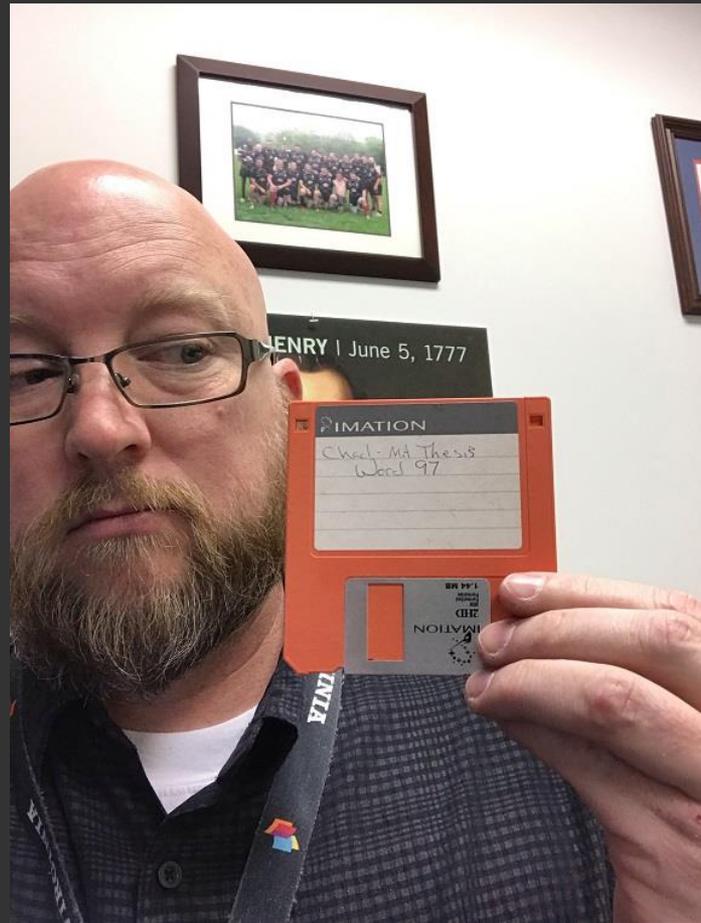
Conversion/Migration/Refreshing

- File formats
- Storage media
- Checking for degradation

What does success look like?

99.99% success
~1.3 million public school students in VA
~500k real estate transactions annually

Records loss should never happen!

LIBRARY OF VIRGINIA

RESEARCH NOTES NUMBER 30

Lost Records Localities:
Counties and Cities with Missing Records

Numerous Virginia localities, most of them in the eastern part of the state, have suffered tremendous losses of their early records because of intense military activity (predominantly during the Civil War), courthouse fires, and/or natural disasters. At some point, almost everyone conducting genealogical or historical research will face the problem of finding information from a county or city described as a "lost records locality."
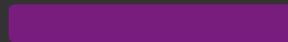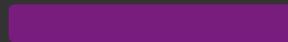
Is it trustworthy?
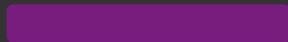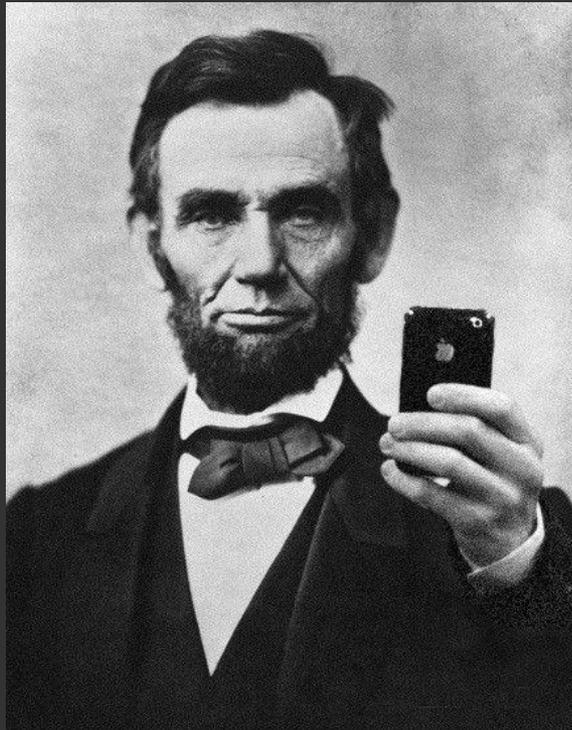
Treat them the same

Electronic records may occasionally be susceptible to alteration. However, if they are properly secured, the danger is not greater than the equivalent danger to hard copy records.

Destruction of electronic records

COV § 42.1-86.1(C): Each agency shall ensure that records […] are destroyed or discarded in a timely manner […] provided, however, such records that contain identifying information […] shall be destroyed within six months of the expiration of the records retention period.

COV § 42.1-86(B): Recovery copies shall have the same force and effect for all purposes as the original record and shall be as admissible in evidence as the original record whether the original record is in existence or not.
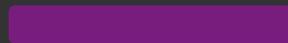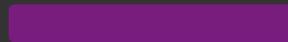
What's in your Vault?
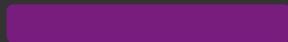

Is Vault enabled?
Do you use default settings?
What is happening to messages in Vault?
Do the users know what is happening?

Destruction of electronic records

The best defense is a good offense.

Destruction of electronic records

- Encourage the use of shared drives/documents rather than emailing drafts back and forth

- Use file naming structures that help distinguish between versions of documents, especially the finished, final, official version

- Encourage regular cleanups of shared drives and email accounts
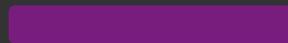
Don't panic!

Help is available!
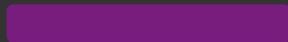
Records Management

Under the authority of the Virginia Public Records Act, the Records Management section at the Library assists state and local government in ensuring that public records are maintained and available throughout their life cycle. Records Management supports the efficient and economical management of public records by publishing records retention and disposition schedules, presenting workshops, monitoring the disposal of non-permanent records, and assisting with the transfer of permanent records to the Archives.

Use the **contacts** page to identify your agency/locality records officer and LVA records analyst.

- Services - Education/training, State Records Center, Imaging Services
- Retention Schedules
- Records Oversight Committee
- Forms
- Infolinx
- Publications
  - Virginia Public Records Management Manual
  - Tip Sheets
  - Creating Policy and Procedures
  - Electronic Records Guidelines
  - Guide to the Virginia Public Records Act
- Guidance
  - Box Specifications
  - Destruction of Records Containing Social Security Numbers
  - Disaster Planning - Emergency Pocket Response Plan (Council of State Archivists)
  - Statement on the use of text messaging and private e-mail
  - Timely Destruction of Records
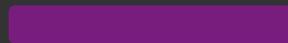- Organizations and Regulations

Contact

All forms and schedules, as well as additional resources, available at:
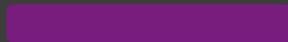
www.lva.virginia.gov/agencies/records

For specific questions, contact your designated Records Officer, and then your assigned LVA

Records Management Analyst

Thanks for all you do!

Chad Owen

Records Management Coordinator

Library of Virginia

chad.owen@lva.virginia.gov

Upcoming events

Upcoming Events

(ISC) 2 Richmond Chapter Meeting

Date: July 25, 2019
Time: 6 - 8 p.m.
Venue: ECPI Innsbrook
4305 Cox Rd, Glen Allen, VA 23060

https://www.isc2rva.com/events

ISOAG meets the first Wed. of each month in 2019

Upcoming events

(ISC) 2 Richmond Chapter Meeting

Date: Aug. 29, 2019
Time: 6 - 8 p.m.
Venue: Tech for Troops
4840 Waller Rd, Richmond, VA 23230

https://www.isc2rva.com/events

ISOAG meets the first Wed. of each month in 2019

Future ISOAG

Aug. 7, 2019 @ CESC 1 - 4 p.m.

Speakers: Tanya Nacey, SAIC

Barry Davis, DSS

Debi Smith, VITA

TBA, VITA

ISOAG meets the first Wed. of each month in 2019

ADJOURN

THANK YOU FOR ATTENDING