

CLOUD SERVICES WHY THE CONTROL ROOM OF THE FUTURE ISN'T A ROOM

YANN MARSTON
SOFTWARE SALES LEADER

MISSION-CRITICAL
COMMUNICATIONS

CUSTOMERS

CITIZENS

VIDEO
SECURITY &
ANALYTICS

COMMAND
CENTER
SOFTWARE

MANAGED &
SUPPORT SERVICES

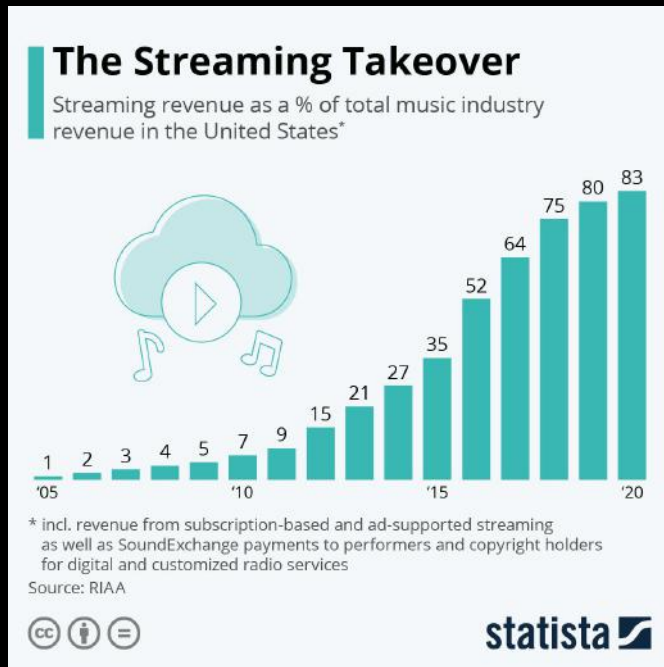
BETTER TECHNOLOGY v BETTER OUTCOMES



**1000 Songs
In your pocket**

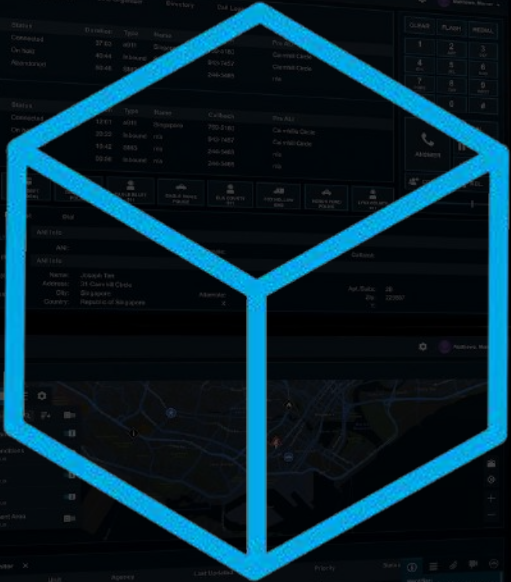


**All your Songs
Anywhere**



**Outcomes not
technology**

BETTER TECHNOLOGY **VERSUS** BETTER OUTCOMES



**THE CONTROL ROOM
OF THE FUTURE**

VERSUS



**WORKPLACE OF
THE FUTURE**

CHALLENGE ONE: THE WORK ENVIRONMENT

OPERATIONAL DEMANDS



TECHNOLOGY OBSOLESCENCE



PERSONAL STRESS



RETENTION & RECRUITMENT

A BETTER OUTCOME : THE VIRTUAL WORKPLACE

At the height of COVID-19 pandemic, control centre staffing was reduced to a minimum, home-work opportunities expanded, and duty rosters created around assigned teams to ensure only one team would have to be replaced in case of infection.

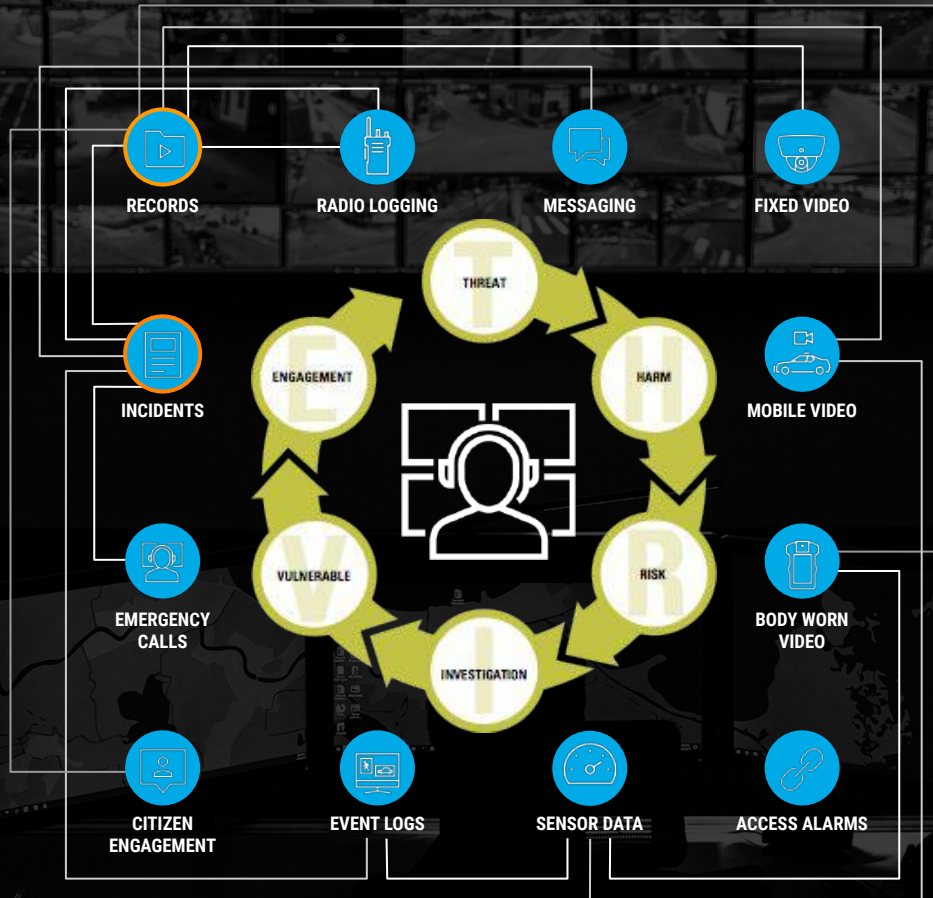


Service levels improved and as shift coverage could be switched on for shorter periods immediately.
Distributed control center roles increased the catchment areas for recruitment
Remote working became an “incentive” for great performance
Lower stress working environment with more flexibility increased staff morale, lowering churn

CHALLENGE TWO : THE HUMAN SYSTEMS INTEGRATOR



Time Critical Decisions



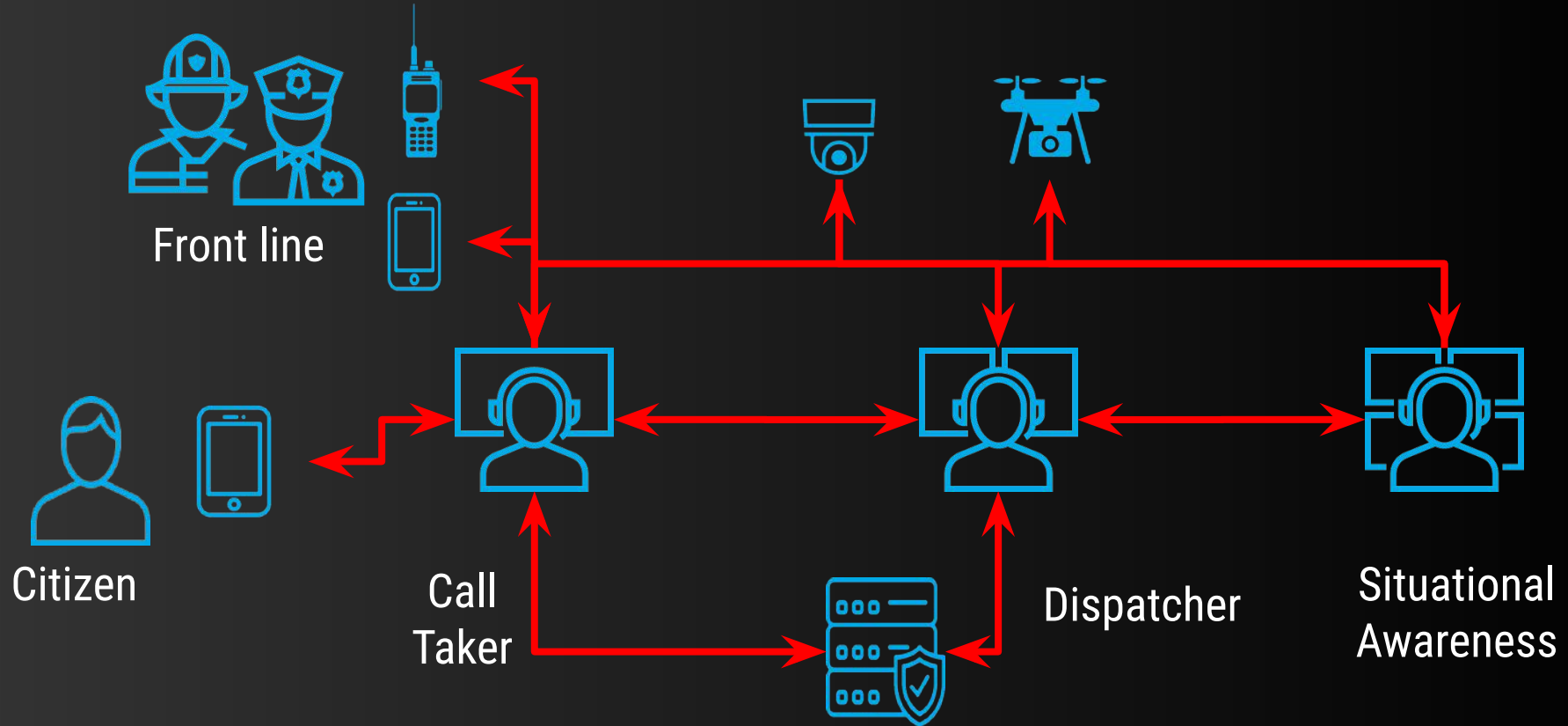
SIMPLE
PROCESS

SILOED
SYSTEMS

COMPLEX
WORKFLOW

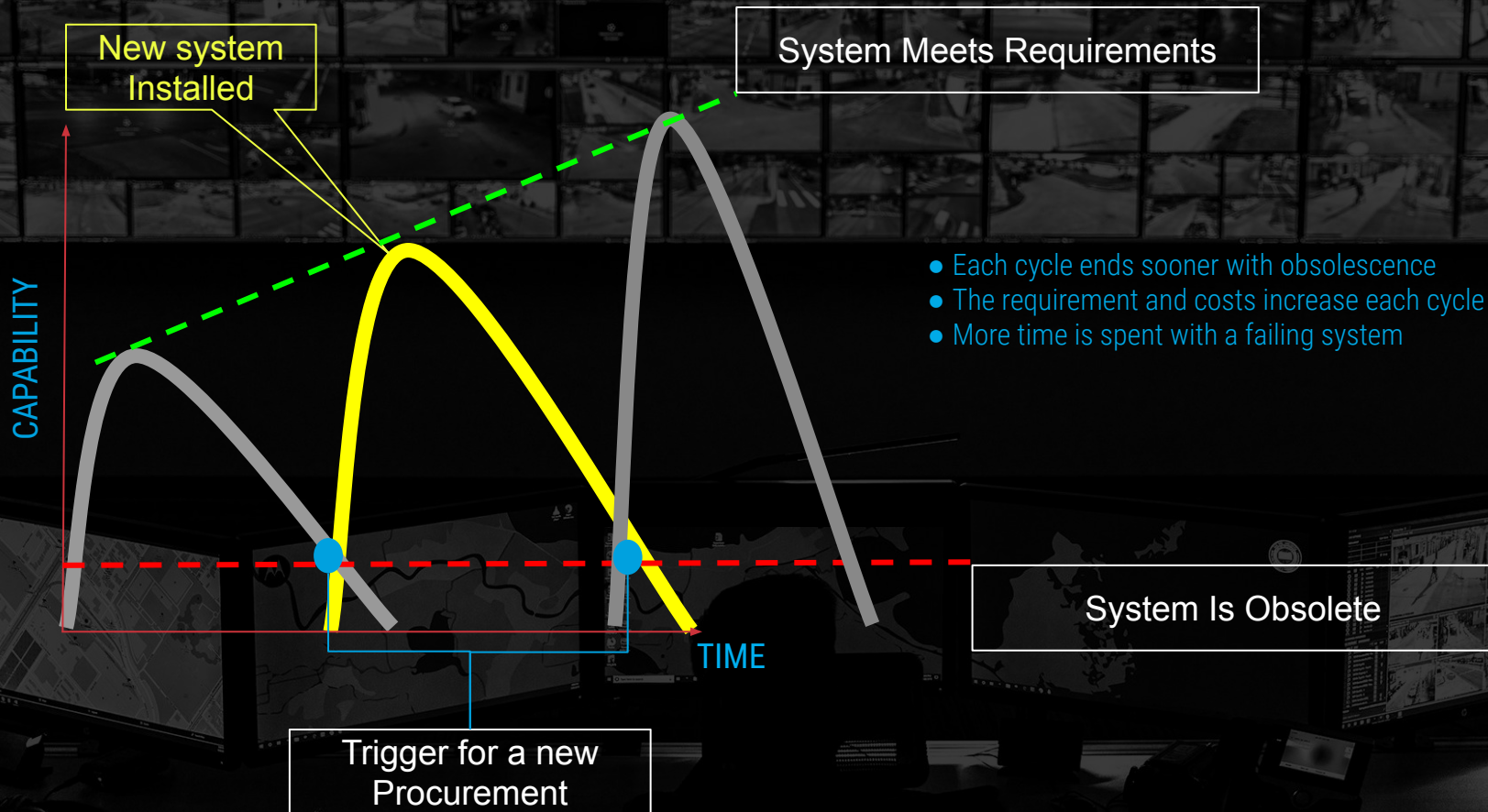


A BETTER OUTCOME: OPTIMISING WORKFLOWS



INTELLIGENCE MANAGEMENT

CHALLENGE THREE: THE INFINITE RFP LOOP



- Each cycle ends sooner with obsolescence
- The requirement and costs increase each cycle
- More time is spent with a failing system

Trigger for a new Procurement

A BETTER OUTCOME: EVERGREEN IT

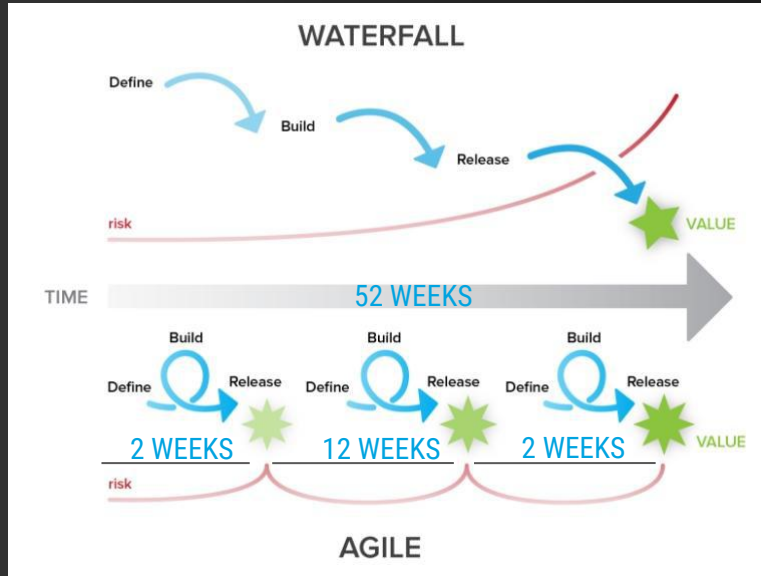
“A technology ecosystem that is continuously changing and evolving, never becoming out-of-date or obsolete’.”

To realise the benefits of Evergreen IT you should view your services as a set of components that deliver particular functionality, rather than as specific systems or technologies

Source: Digital Directorate, scottish government 2020



A BETTER OUTCOME: EVERGREEN IT



ADVANTAGES OF AGILE OVER WATERFALL

- CUSTOMER FOCUSED DEVELOPMENT
- REGULAR FEATURE ENHANCEMENTS DELIGHT CUSTOMERS
- REACT QUICKLY TO NEW HIGH PRIORITY REQUIREMENTS
- KEEPS PACE WITH MARKET REQUIREMENT - NO LEGACY

DEVELOPMENT
ENVIRONMENT



DEVELOPERS
DEFINE
BACKLOG
WITH USERS

BUILD

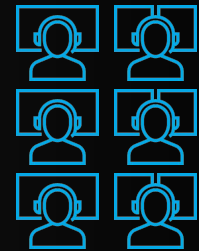
TRAINING
ENVIRONMENT



DEVELOPERS
BUILD
SOLUTIONS
WITH USERS

TEST

PRODUCTION
ENVIRONMENT



DEVELOPERS
RELEASE
FEATURES ON
LIVE PLATFORM

RELEASE

CHALLENGE FOUR: UPWARD ECONOMIC PRESSURE

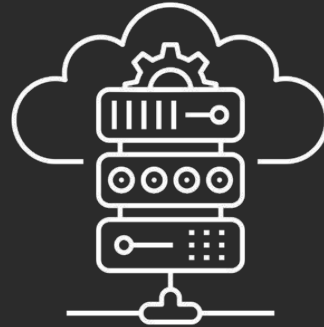
PRICE
PER
USER



UTILITIES



INTEREST RATES
& INFLATION



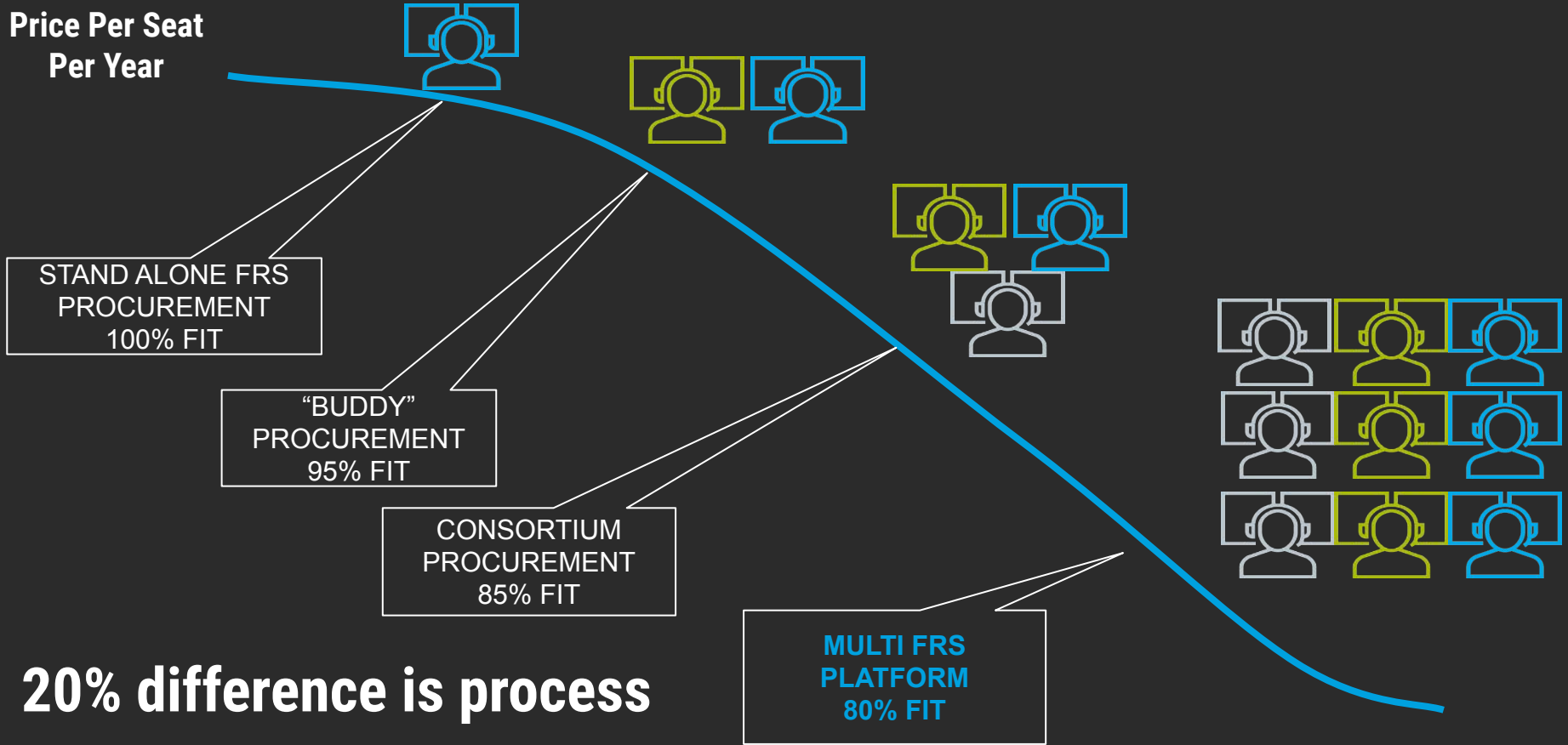
INFRASTRUCTURE
& SOFTWARE



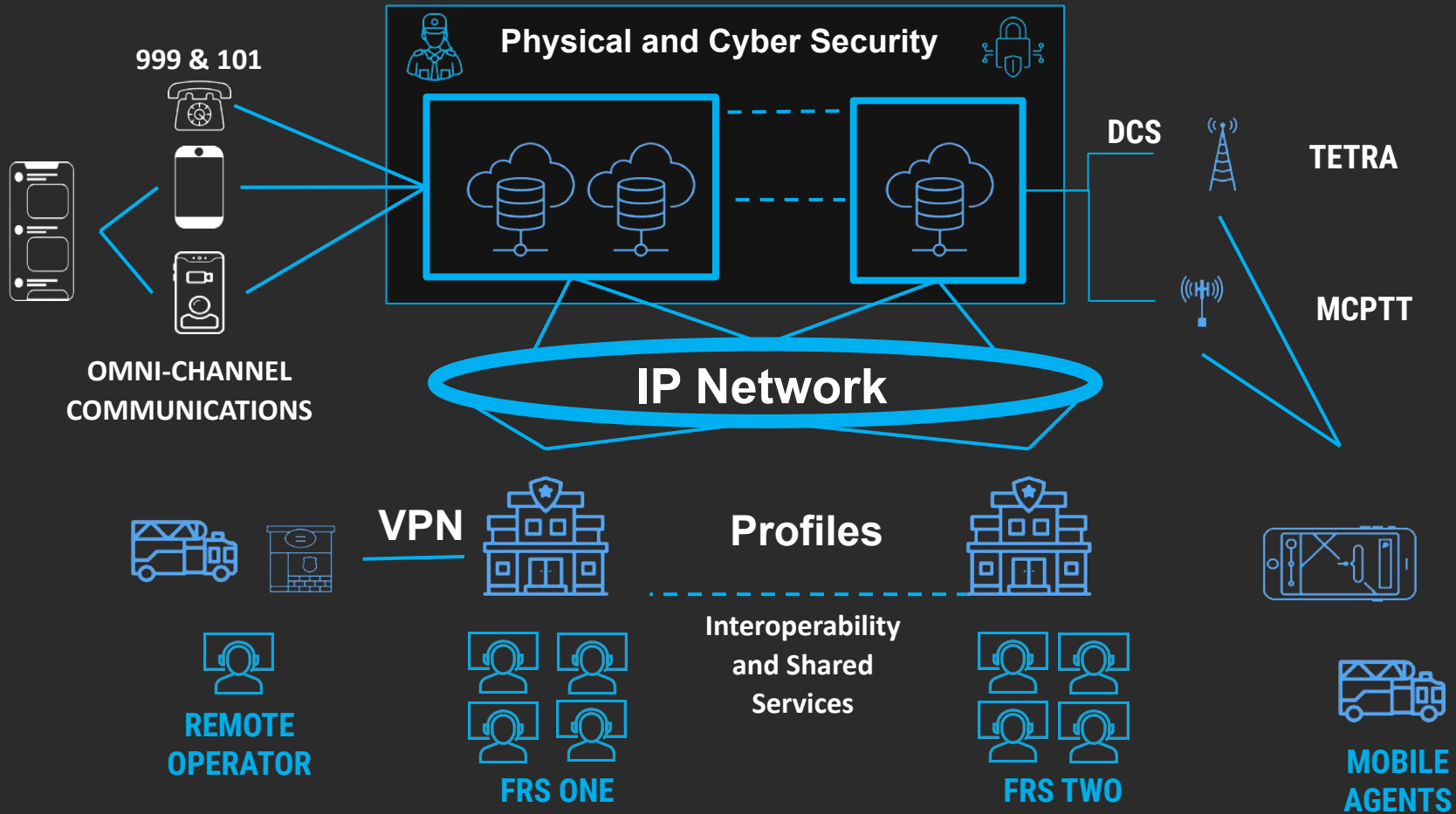
DEVELOPMENT
AND OPERATIONS

A BETTER OUTCOME: LEVERAGE ECONOMIES OF SCALE

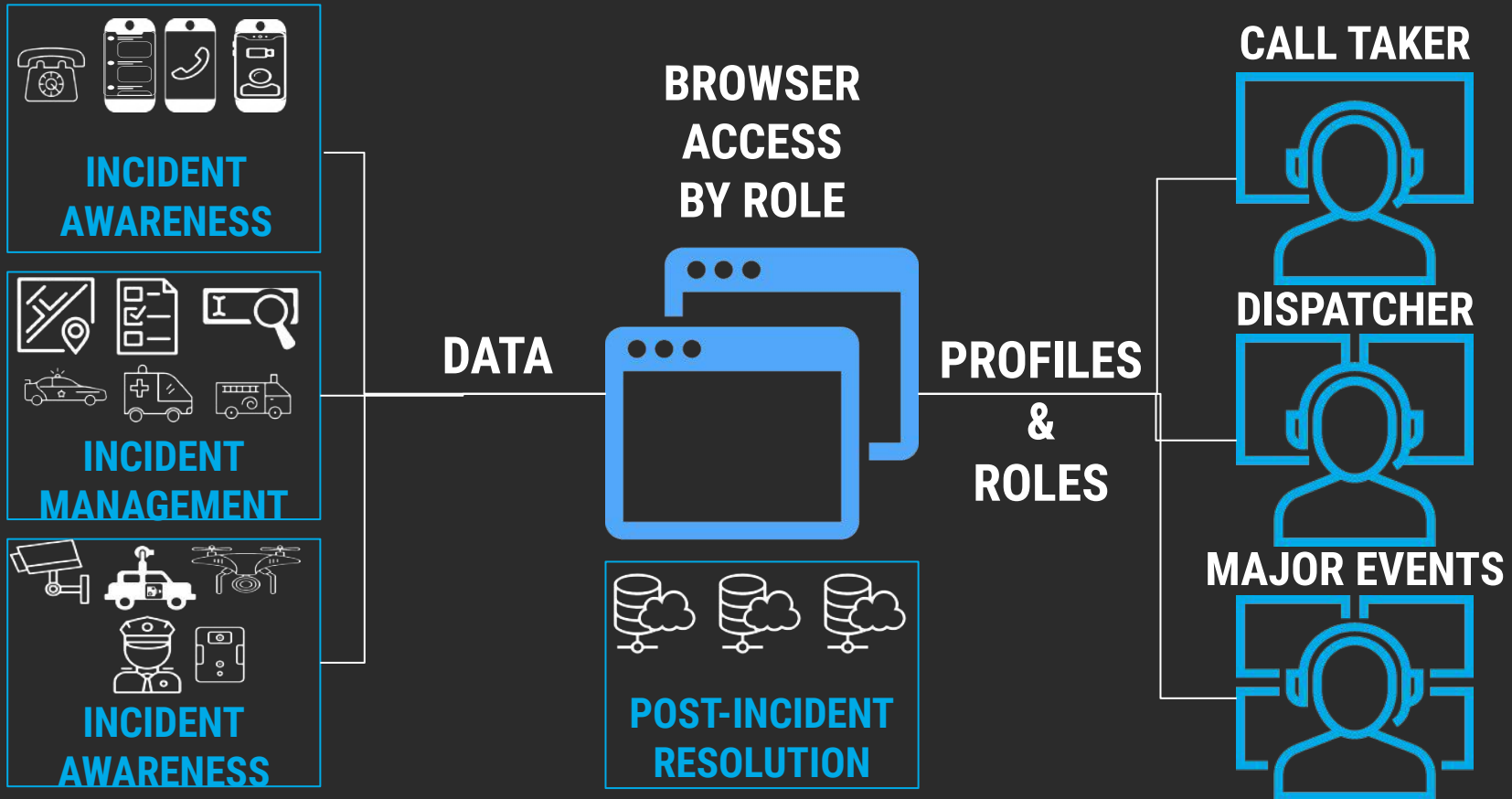
Price Per Seat
Per Year



A BETTER OUTCOME: CLOUD HOSTED PLATFORMS



A BETTER OUTCOME: BROWSER BASED ACCESS



CHALLENGES FOR THE VIRTUAL CONTROL ROOM



PROFILE

What functionality is needed for role?
Will the role be expanded with demand?
Can all functions be accessed remotely?



PERSISTENCE

How is data stored ? Cloud - local encryption?
How are local applications managed and supported?
How resilient is access to the system (broadband)?



PRIVACY

Are communication links secure?
Is physical privacy possible (seperate room)?
Is system access controlled by 2 factor/biometrics?



PROCESS

Can Operators work effectively remotely, equipment?
What are the organisational requirements?
What are the supervisory processes?



PEOPLE

Retention - empowerment and work life balance
Risk - Duty of Care in times of crisis and day to day
Welfare - The operators performance and wellbeing

CLOUD SERVICES : BETTER OUTCOMES

MULTI AGENCY HOSTED PLATFORMS



Cost savings: More cost-effective than on-premises infrastructure and support, especially for small agencies who are able to share the platform

Flexibility: Accessed from anywhere with secure internet connection, making it easier to collaborate, work remotely and respond quickly to demand

Security: Industry leading physical and cyber security measures provide better security than most agencies could afford to implement on their own.

Integration: Open API's simplify the integration of other cloud-based and on-premises systems making optimised workflows possible

Disaster recovery: Cloud services provide robust disaster recovery capabilities, allowing agencies to recover outages quickly.

Scalability: Cloud services can easily be scaled up or down to meet changing business needs without needing additional on-prem-hardware.

Reliability: Cloud providers often have the highly redundant infrastructure, which can provide better uptime and reliability than on-premises systems.

Automation: Cloud Platforms can include automation tools that can help agencies streamline workflows and reduce the need for manual intervention.

Innovation: Cloud services enable rapid deployment of functionality without interrupting service, supporting agile development and Evergreen IT.

Optimise scarce resources: Outsourcing non-core IT functions to the cloud frees up time and resources to focus on strategic projects, driving innovation

Flexibility, Resilience, Innovation & Choice

THE CONTROL ROOM OF THE FUTURE ISN'T A ROOM IT IS BETTER OUTCOMES

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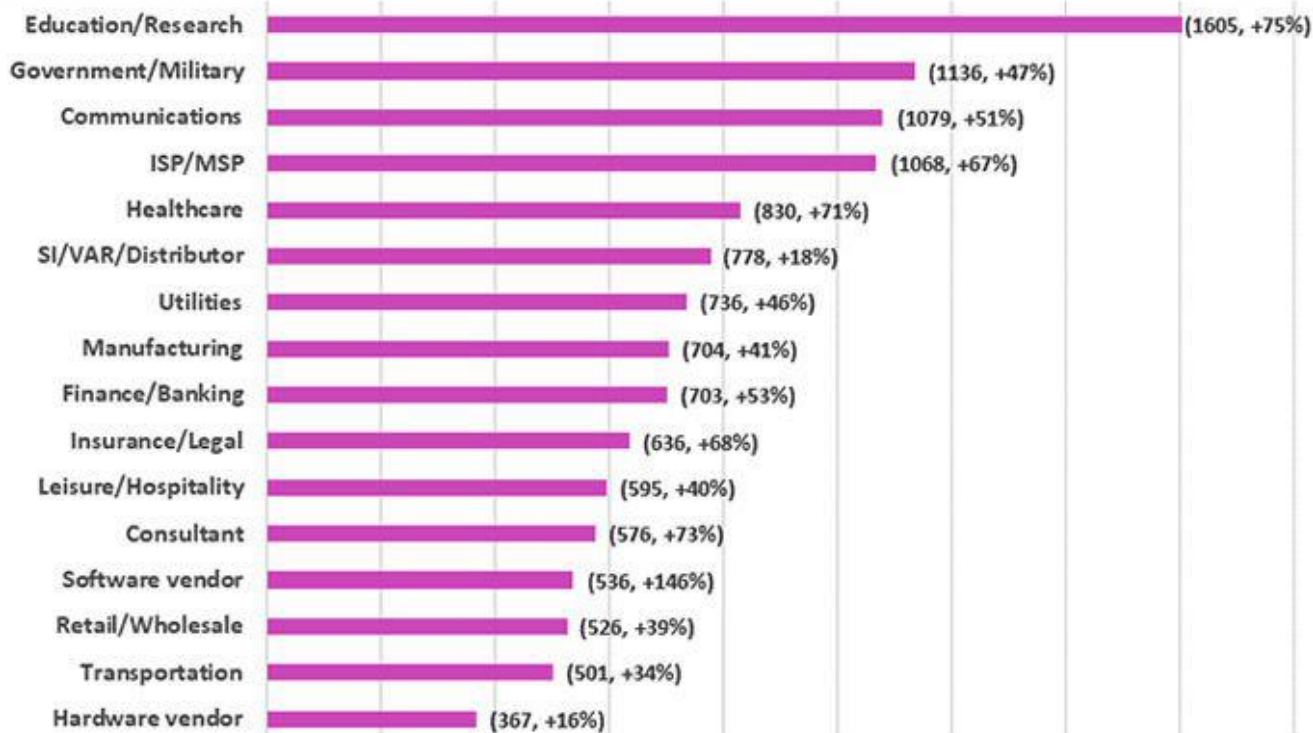
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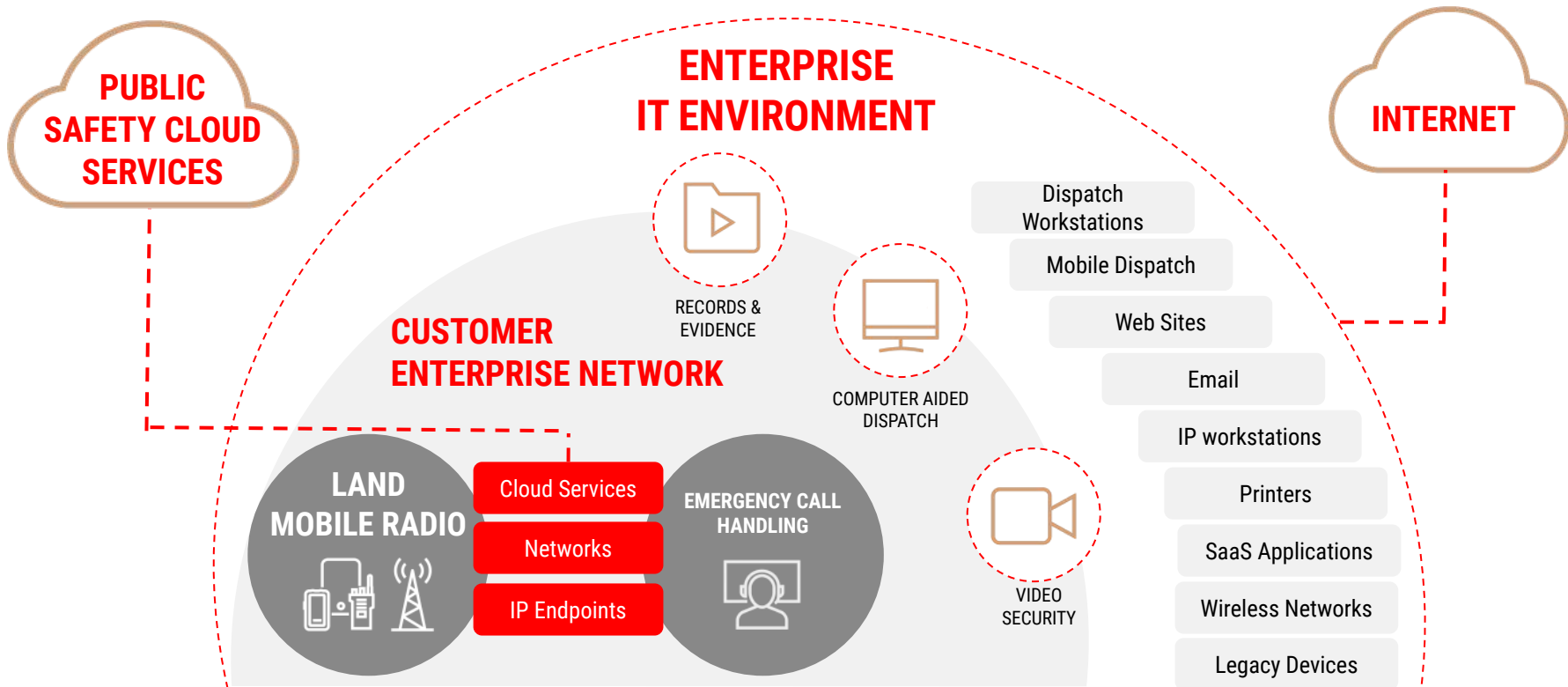
MANAGED &
SUPPORT SERVICES



Average Weekly Attacks per Organization by Industry (2021)



PUBLIC SAFETY LANDSCAPE



**MAXIMUM
IMPACT**



COMPREHENSIVE CYBER SOLUTION

EXPERTS IN TECHNICAL DELIVERY AND ADVISORY SERVICES



MATURITY ASSESSMENTS

Discover network and system vulnerabilities, and develop a strategy mapped to NIST, ISO and other frameworks.



PENETRATION TESTING

Actively attempt to exploit technology and social vulnerabilities to evaluate security risks.



TABLETOP EXERCISES

Practice and develop a framework for responding to a cyber incident and determine plans for actions and communications.



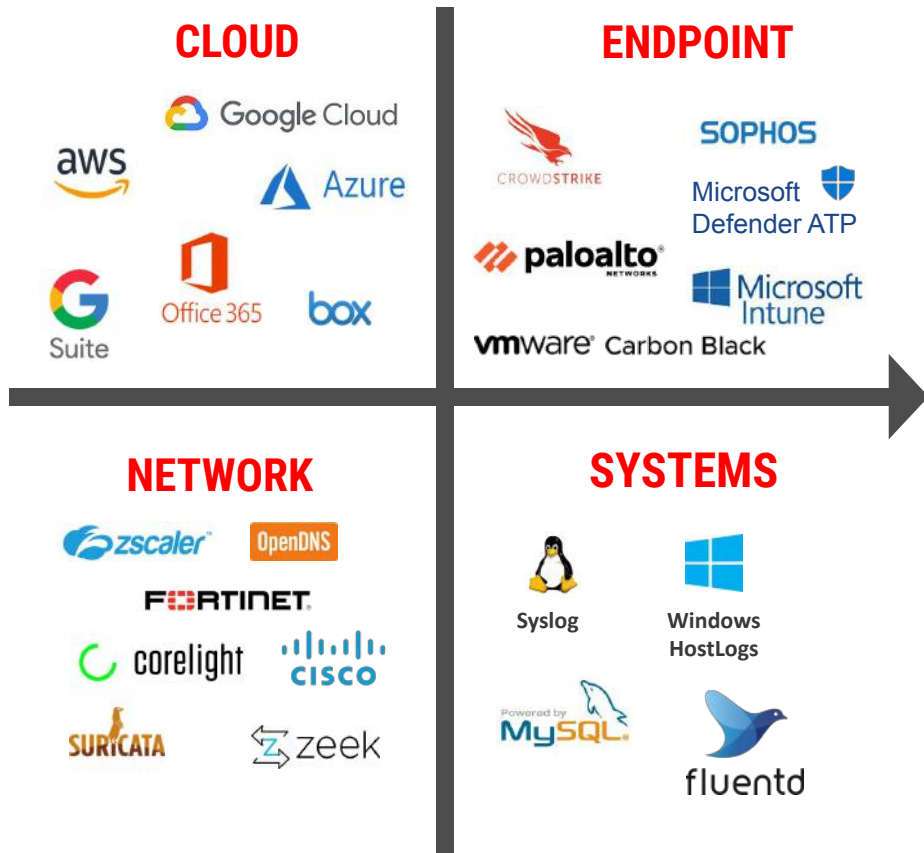
vCISO

A senior practitioner with a retainer based relationship who you can call upon to support activities and strategy

**MAXIMUM
IMPACT**

MANAGED DETECTION & RESPONSE

THE COMPLETE SECURITY COVERAGE



MSI 24x7 Security Operations Centre

EXPERIENCED ANALYSTS

PRE-SCRIPTED RESPONSE ACTIONS

**MAXIMUM
IMPACT**