



Intelligent and Connected Enterprises

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April 12, 2018

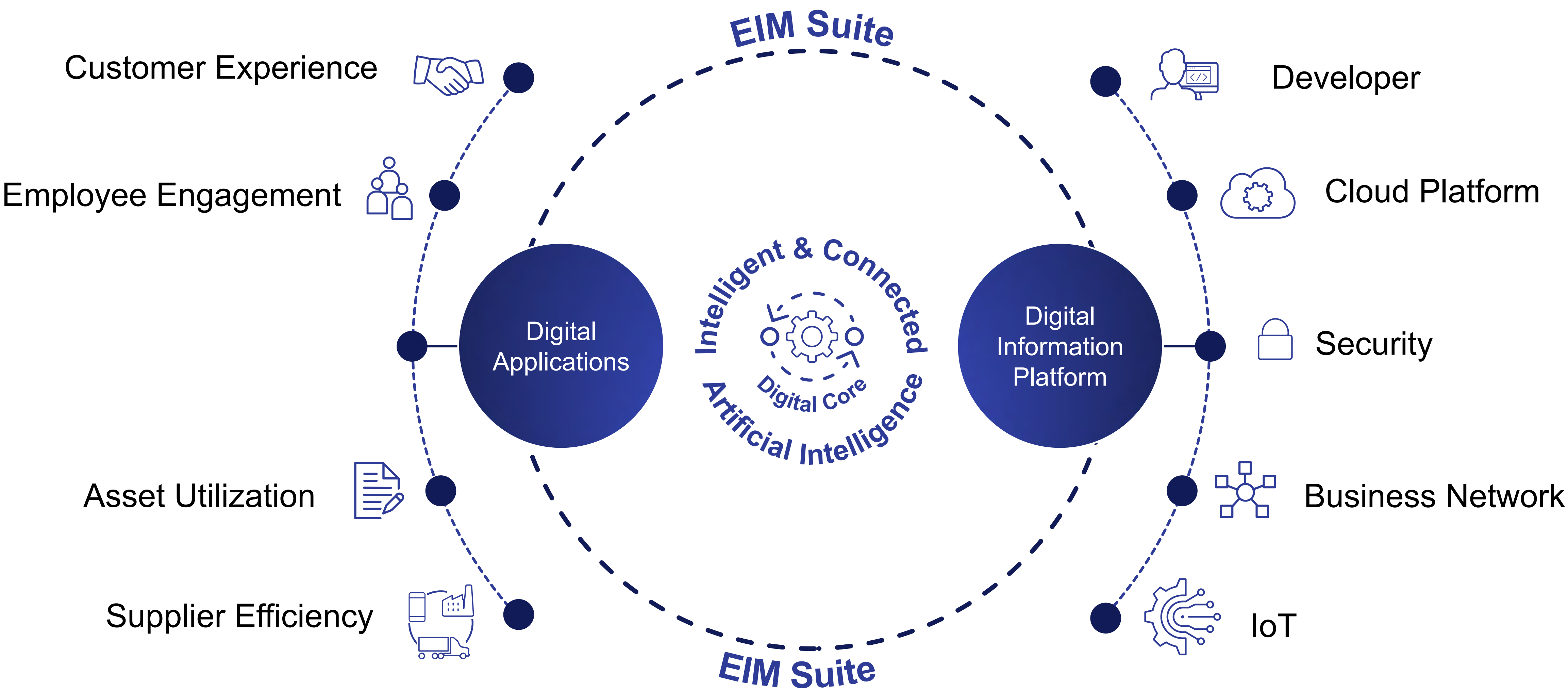
opentext™

We are **The Information Company.**

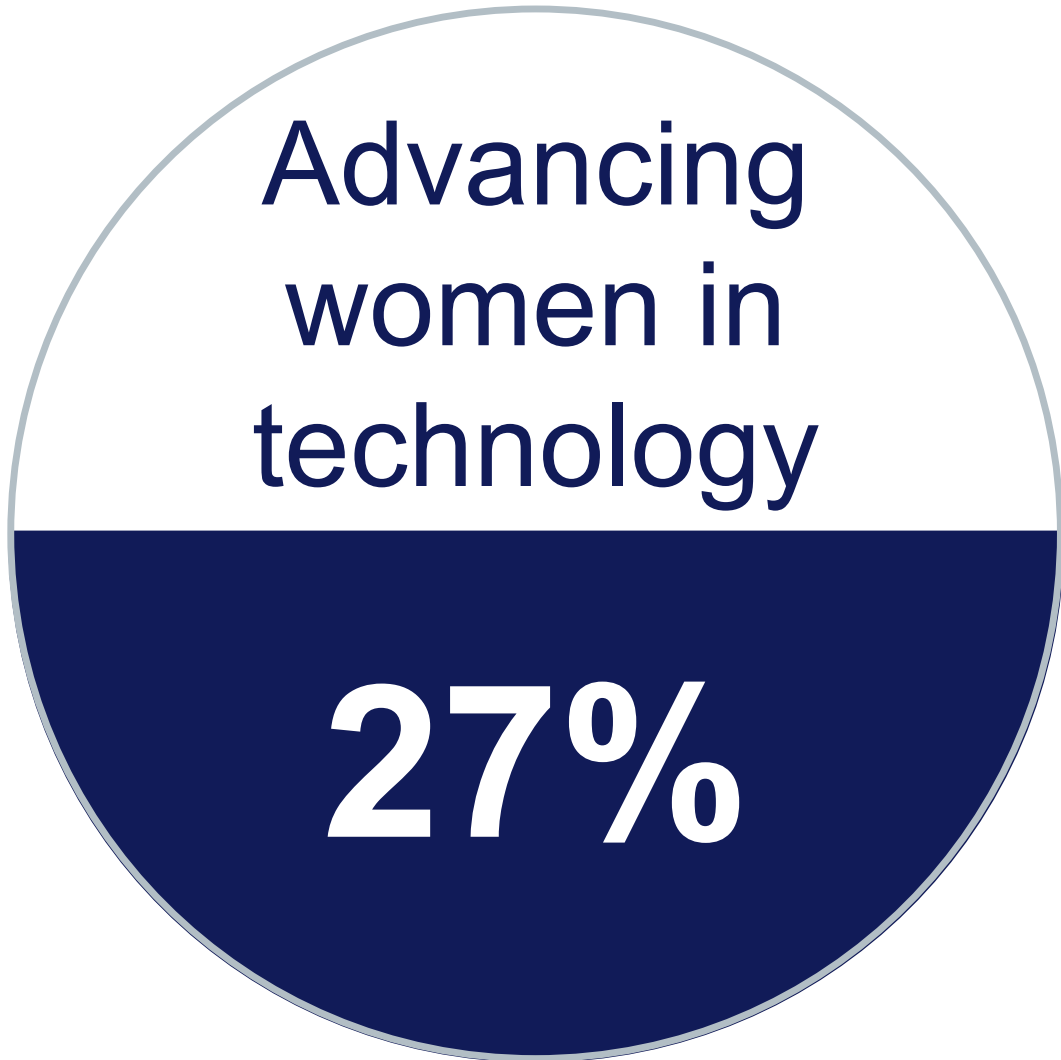
Enabling **intelligent** and **connected enterprises.**

Inspiring a **new way to work.**

Our Vision for Intelligent and Connected Enterprises

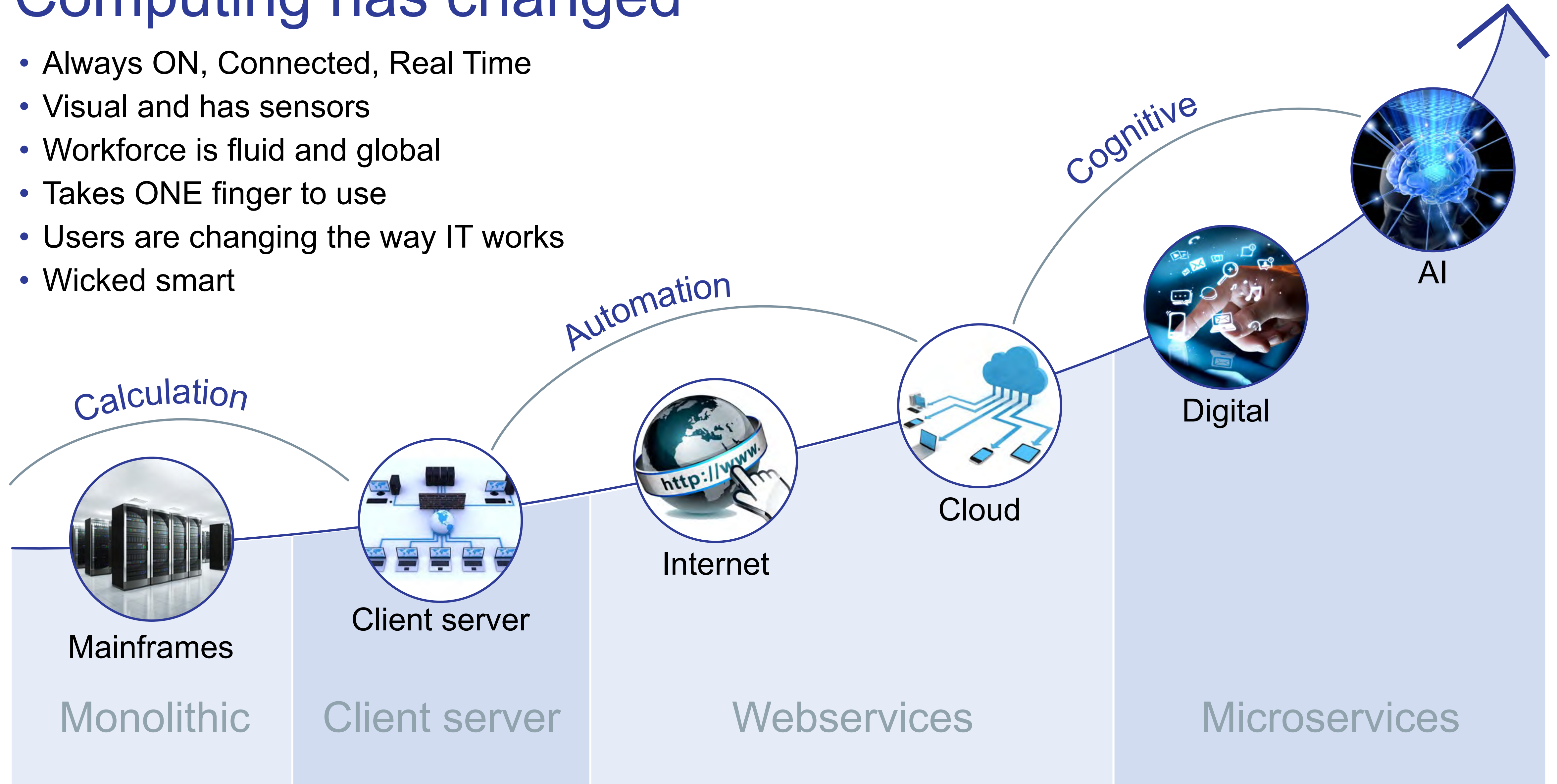


OpenText inspires a new way to work

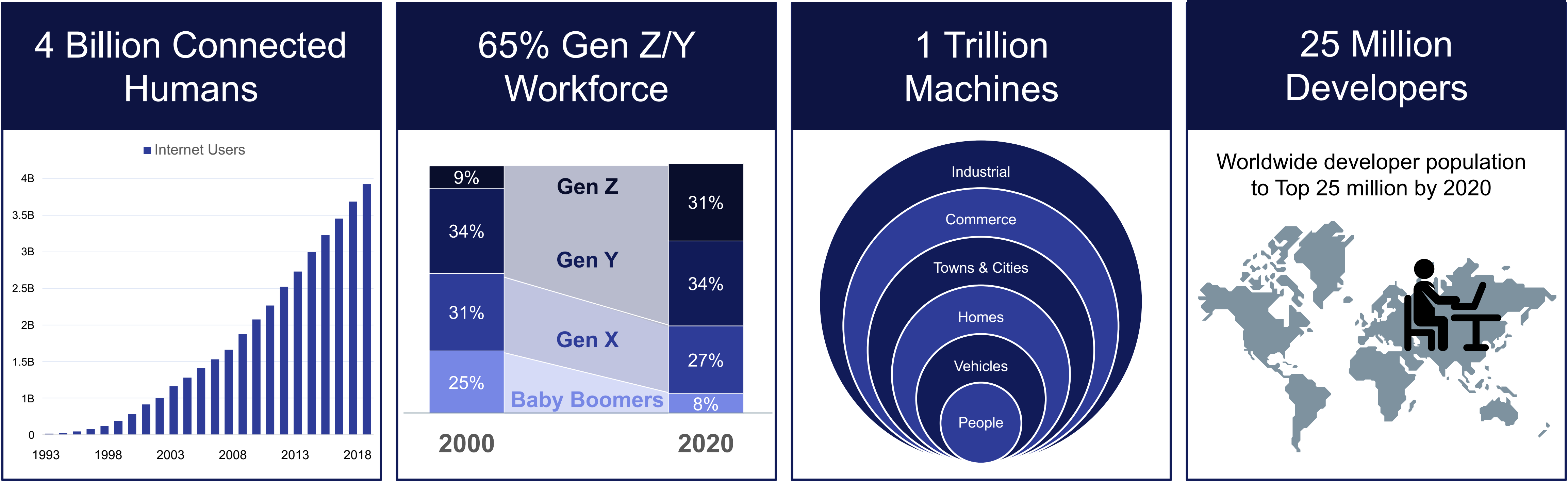


Computing has changed

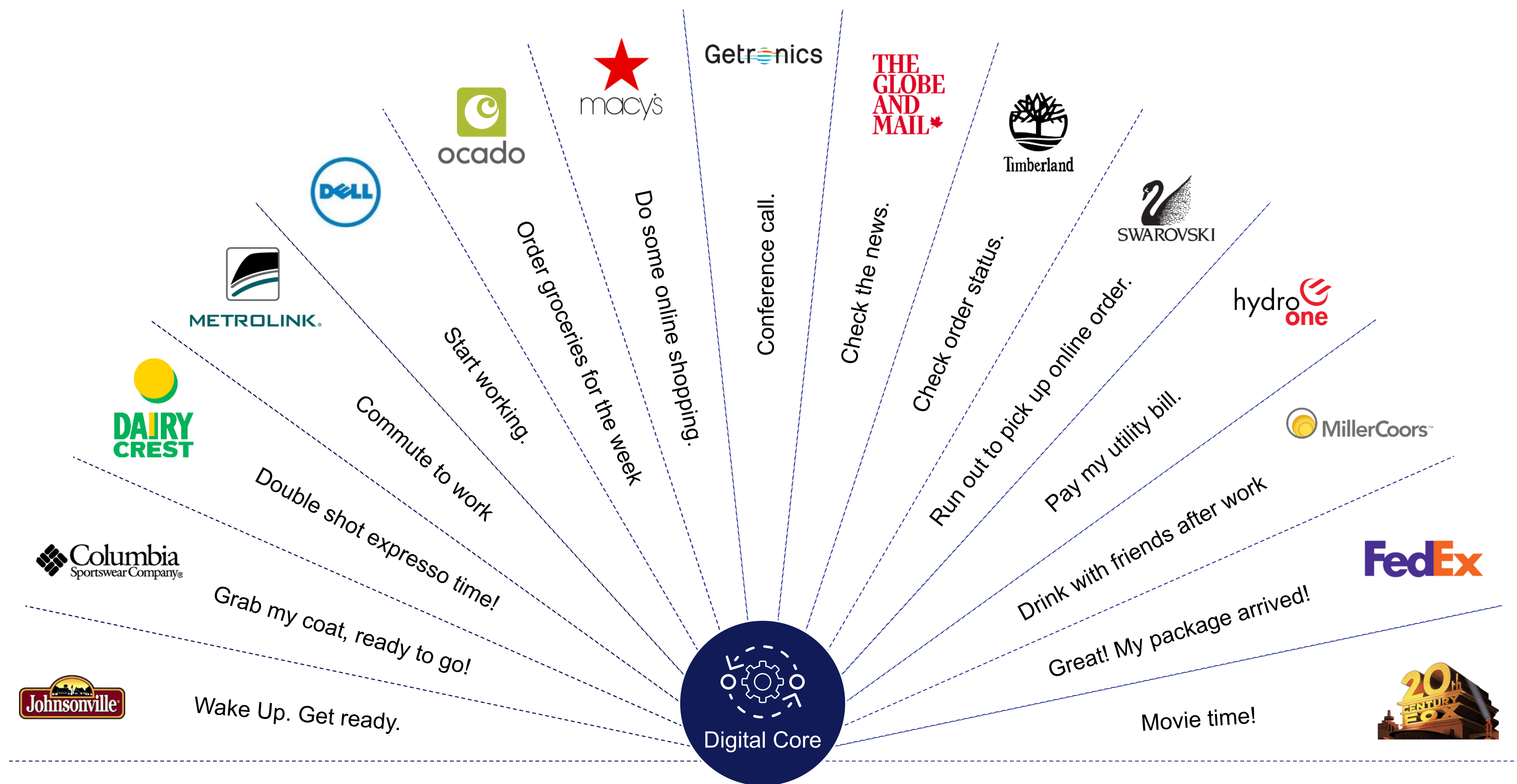
- Always ON, Connected, Real Time
- Visual and has sensors
- Workforce is fluid and global
- Takes ONE finger to use
- Users are changing the way IT works
- Wicked smart



Finding the opportunity in a disruptive time

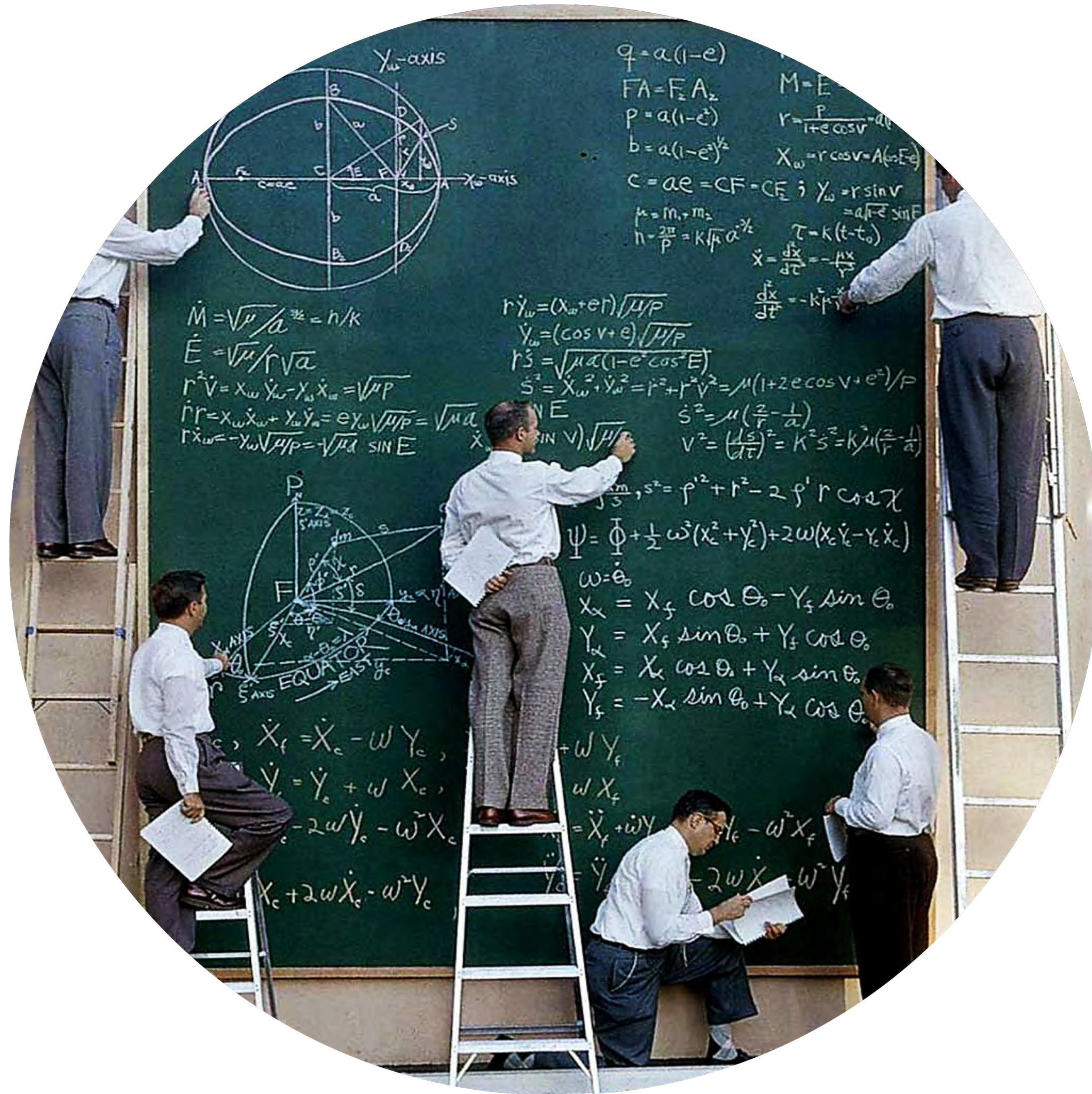


Connected Humans in the Digital Experience



Business is very complex today ...

- Changing workforce (Gen Y/Z)
- New business models (Gig-economy)
- We are all software companies
- Data scientists (the new job)
- Corporate social responsibility (CSR)
- AI
- Regulation (GDPR)
- Digital (got to go faster)
- Robots (going to lose my job)
- Machines and IoT (raining data)
- Security
- Mobile is eating the world (PC's are gone)
- Cutting costs, increasing revenue

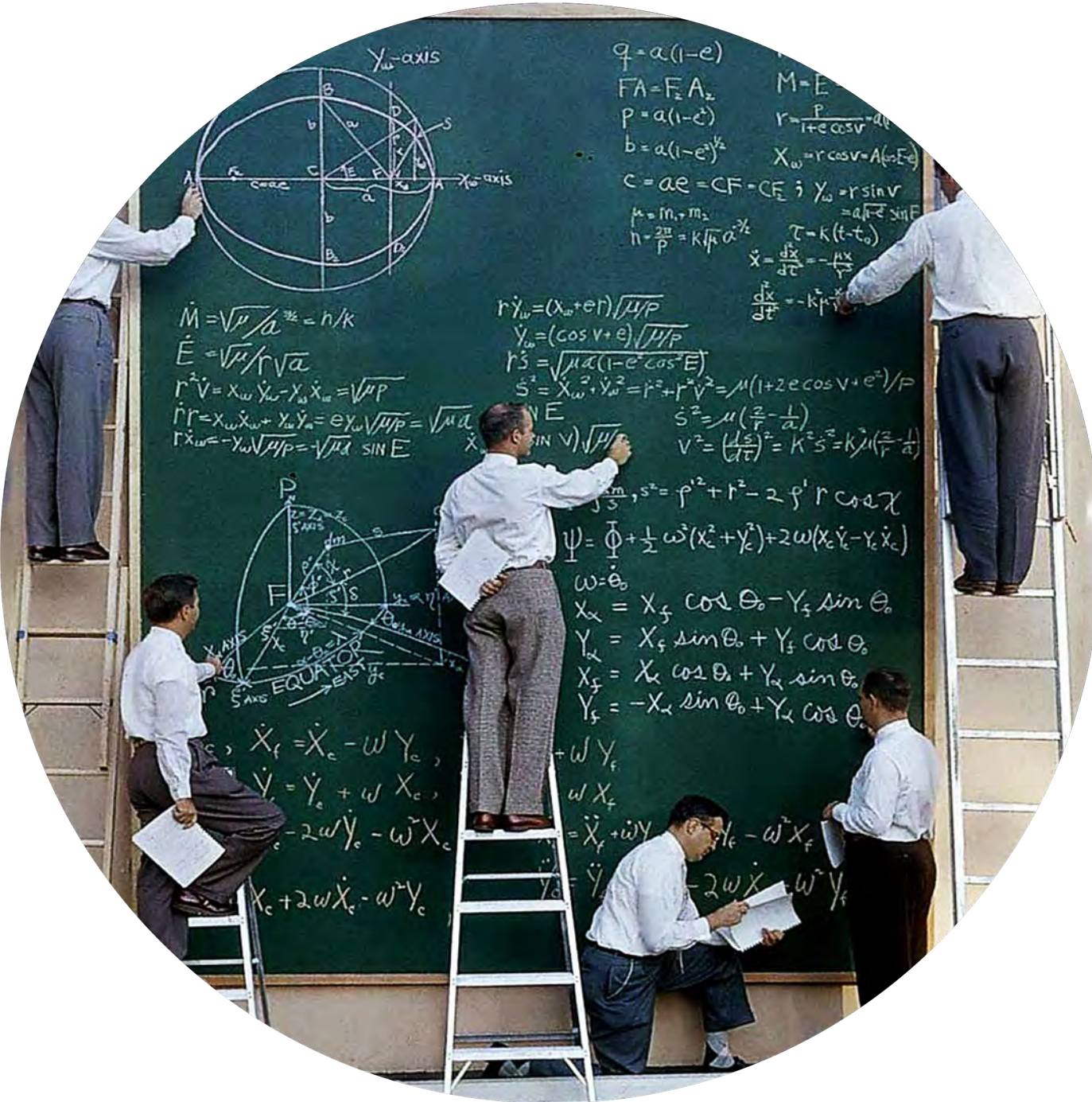


NASA engineers in 1968

Comfort + Complexity = Calamity



+



=

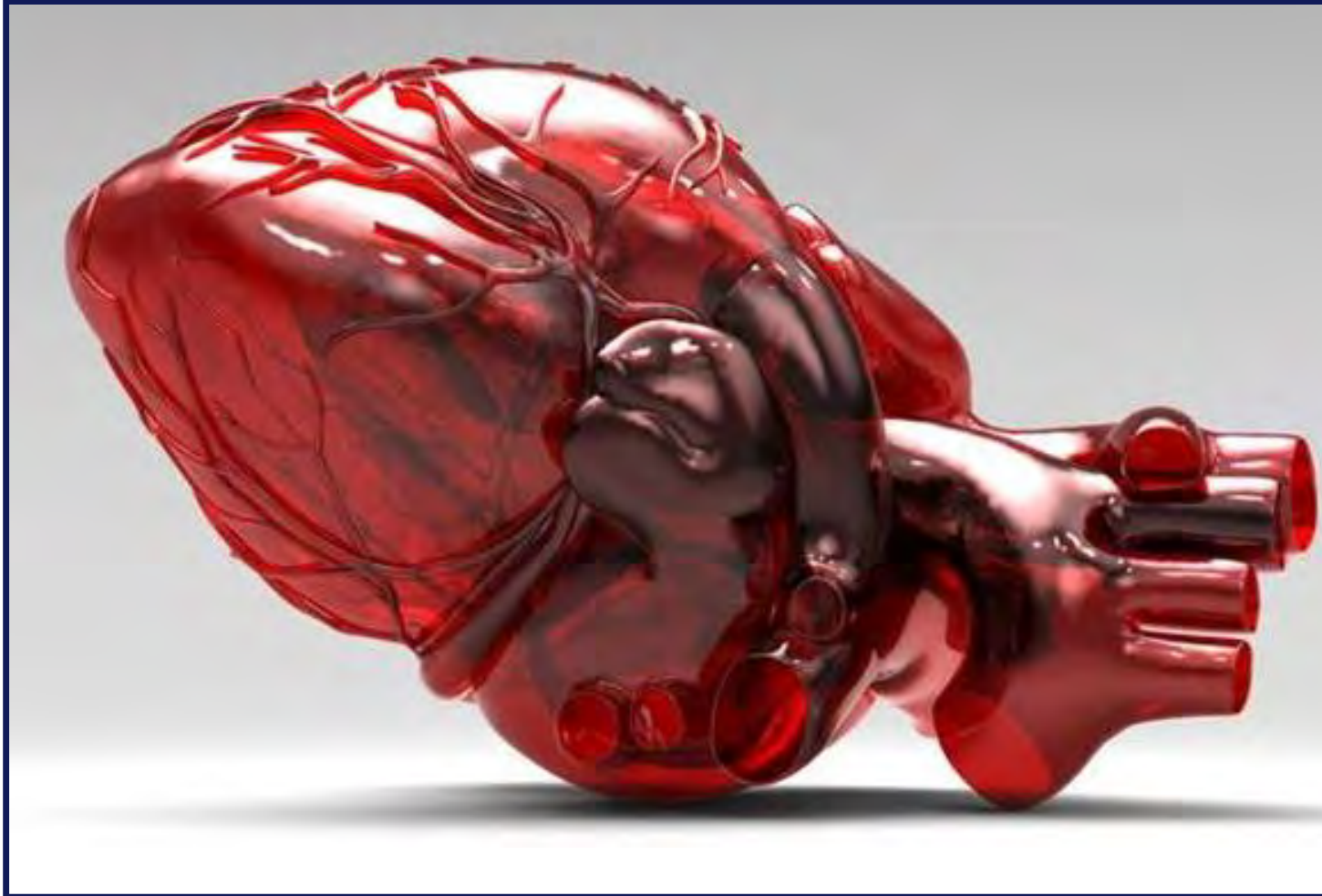


Job #1 today:

- **Security** is the digital platform
- **Insight** through AI

Amazing things are happening

3D printed organs.
No human hands.



No check out lines.
No human hands.



5 million cars a year.
No human hands.



So are bad things

Yahoo Data Breach of 3 Billion Accounts

Largest breach in the
history of the internet

YAHOO!

Nortel Network Security Breach

Bankrupt after hackers
extracted trade secrets

NORTEL

Not So Lucky

Credit Card Readers
listened to from Parking Lot

LUCKY

US Office of Personnel Management Data Breach

Target of a data breach
where 21.5 million
records were stolen

**UNITED STATES
OFFICE OF PERSONNEL
MANAGEMENT**

And so are “stranger things”...

When your social data determines your social status and when your social data can no longer be trusted at the same time.

Entitlements based on a social score



<https://www.chinainternetwatch.com/12125/alipay-sesame-credit/>

Fake Video using AI



<https://www.theverge.com/2017/7/12/15957844/ai-fake-video-audio-speech-obama>

Weaponizing Data

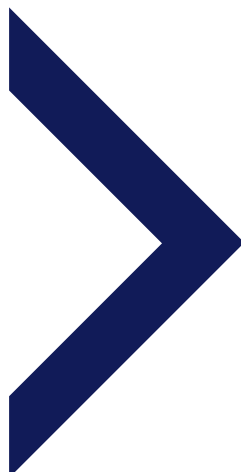


<https://9to5google.com/2018/04/09/cambridge-analytica-android-basics/>

No, Emma González did not rip up the U.S. Constitution!

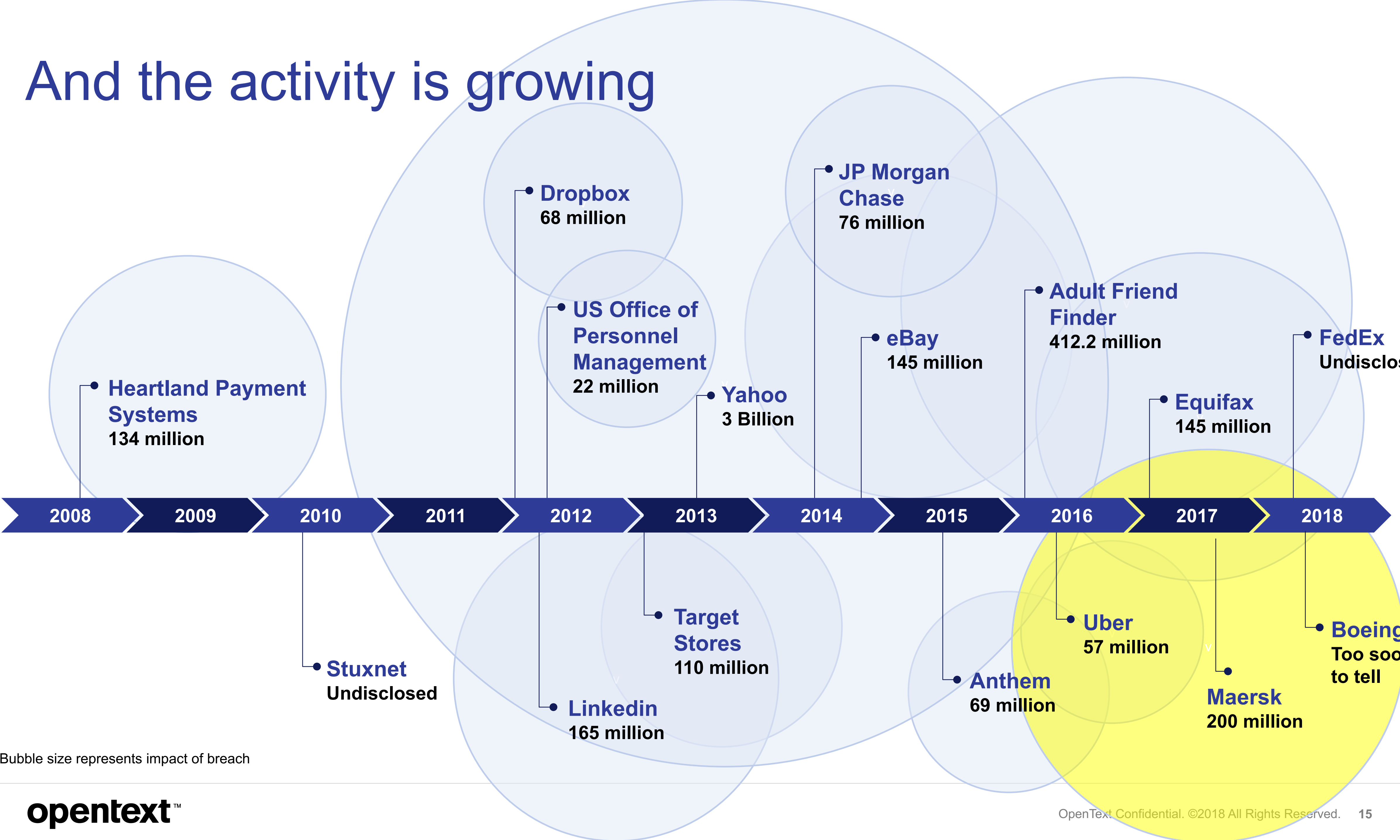


<https://www.teenvogue.com/story/emma-gonzalez-parkland-gun-control-cover>



<https://www.yahoo.com/lifestyle/theres-fake-picture-parkland-teen-ripping-constitution-people-sharing-190303807.html>

And the activity is growing



Bubble size represents impact of breach

How do hackers work?



- Test Perimeters
- Spam & Phish
- 3rd Party Data
- Penetrate and Lurk
- Find weak “information” policies, procedures and systems
- Go lateral inside your network
- **Drip or Pour information out**
- Time from “Penetration to actual Breach” can be weeks
- Reasons vary: crime, espionage, hacktivism, conflict, war

Just one event can take down your business



- Personal data of 143 million Americans
- >>> Names, Social Security numbers, birth dates, addresses, driver's license, credit card numbers, tax identification numbers and email addresses <<<
- The company took six weeks to notify the public after finding out about the breach
- 90 day breach
- Patches where available
- Data did not show up on the dark web

Or take down your business for months

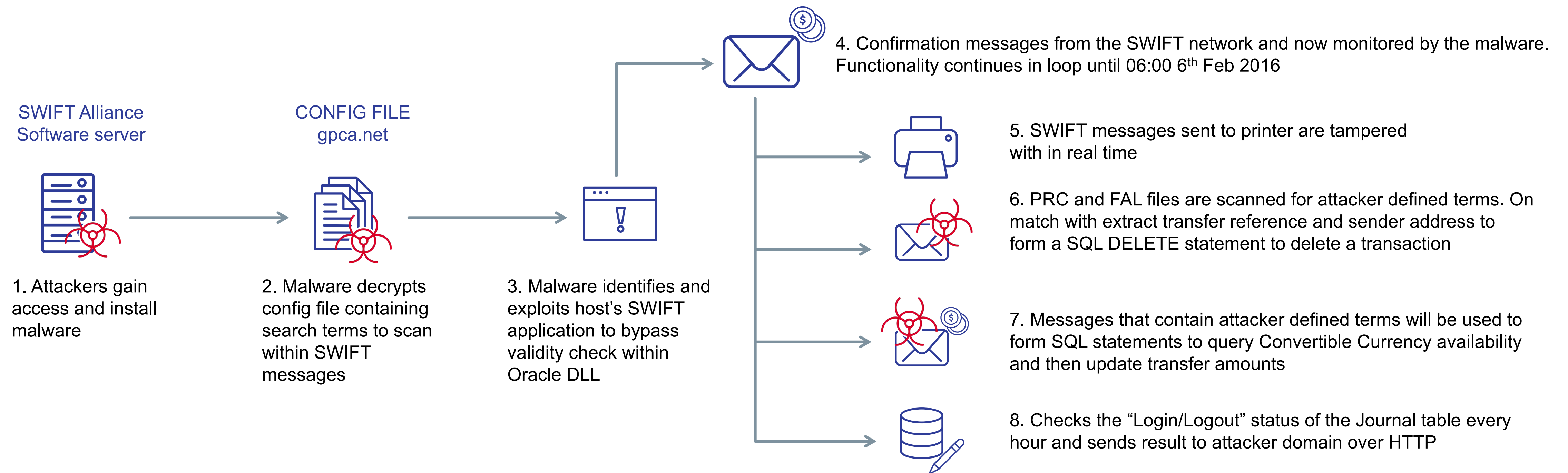
Shamoon - 2012



- Saudi Aramco is Saudi Arabia's state owned national oil company
- **August 15, 2012:** an attack is launched through an opened scam email; **infecting 30,000** workstations
- **75% of infected PC's had their data erased** [documents, spreadsheets, emails, files]
- 200 day breach

Or take down an eco-system

\$81M stolen and evidence erased through SWIFT



Or take down a nation



JSF family of aircraft

**Carrier Variant
(CV) F-35C**



**Conventional Take-Off
and Landing
(CTOL) F-35A**

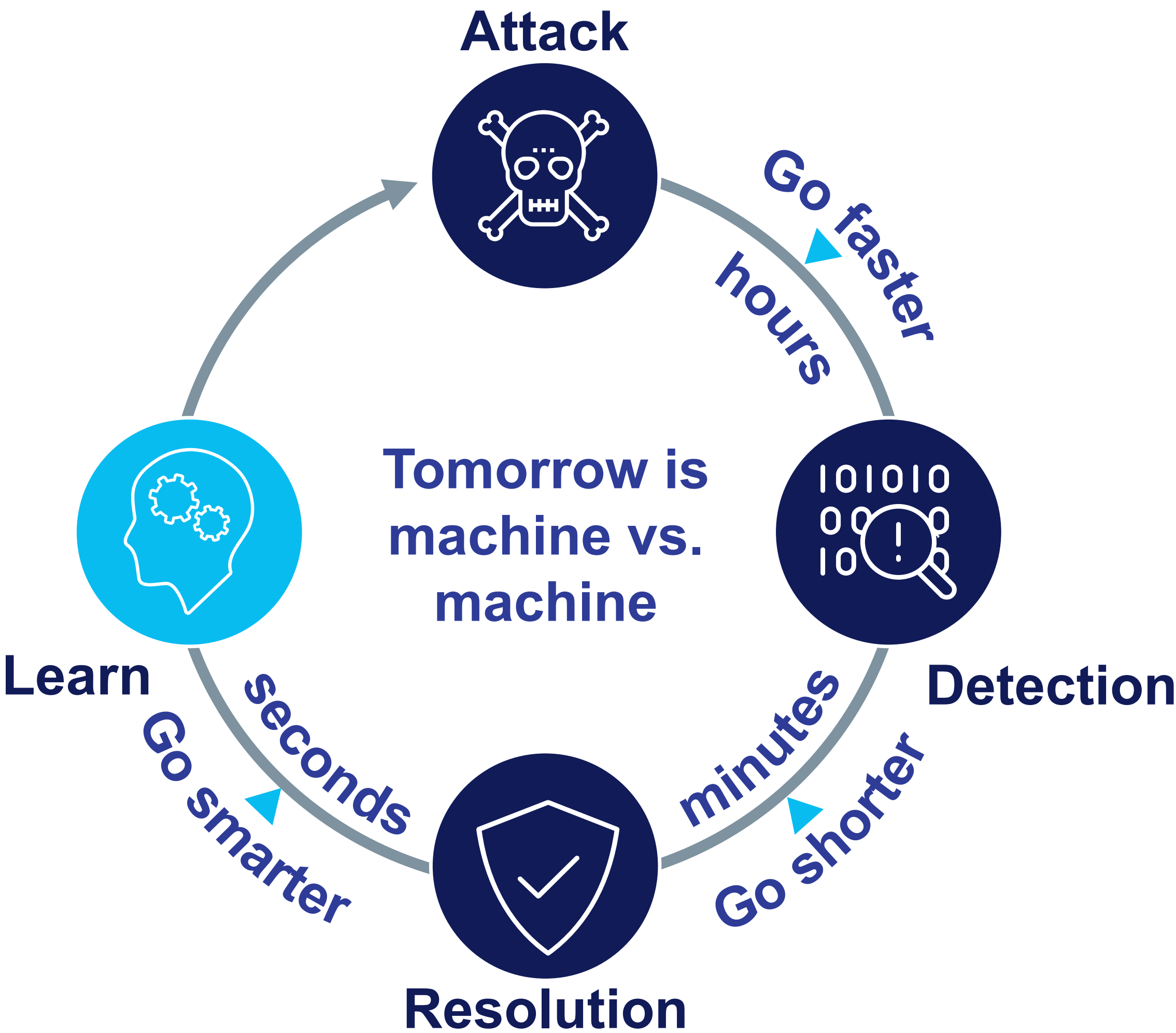
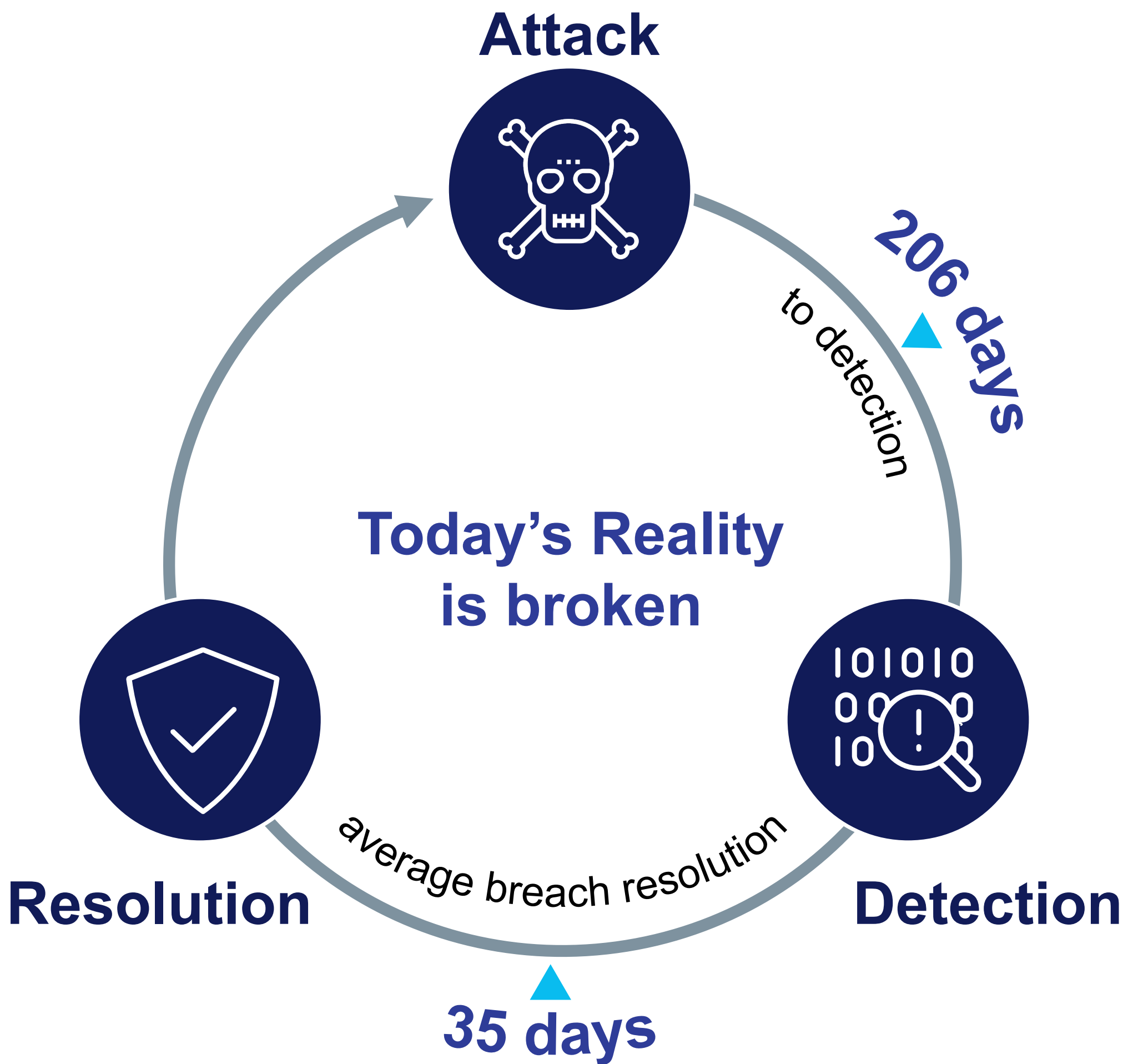


**Short Take-Off
Vertical Landing
(STOVL) F-35B**



- Air-frame designs
- Engine designs
- Take off and landing specifications
- Communication systems
- Weapon systems
- ALL stolen

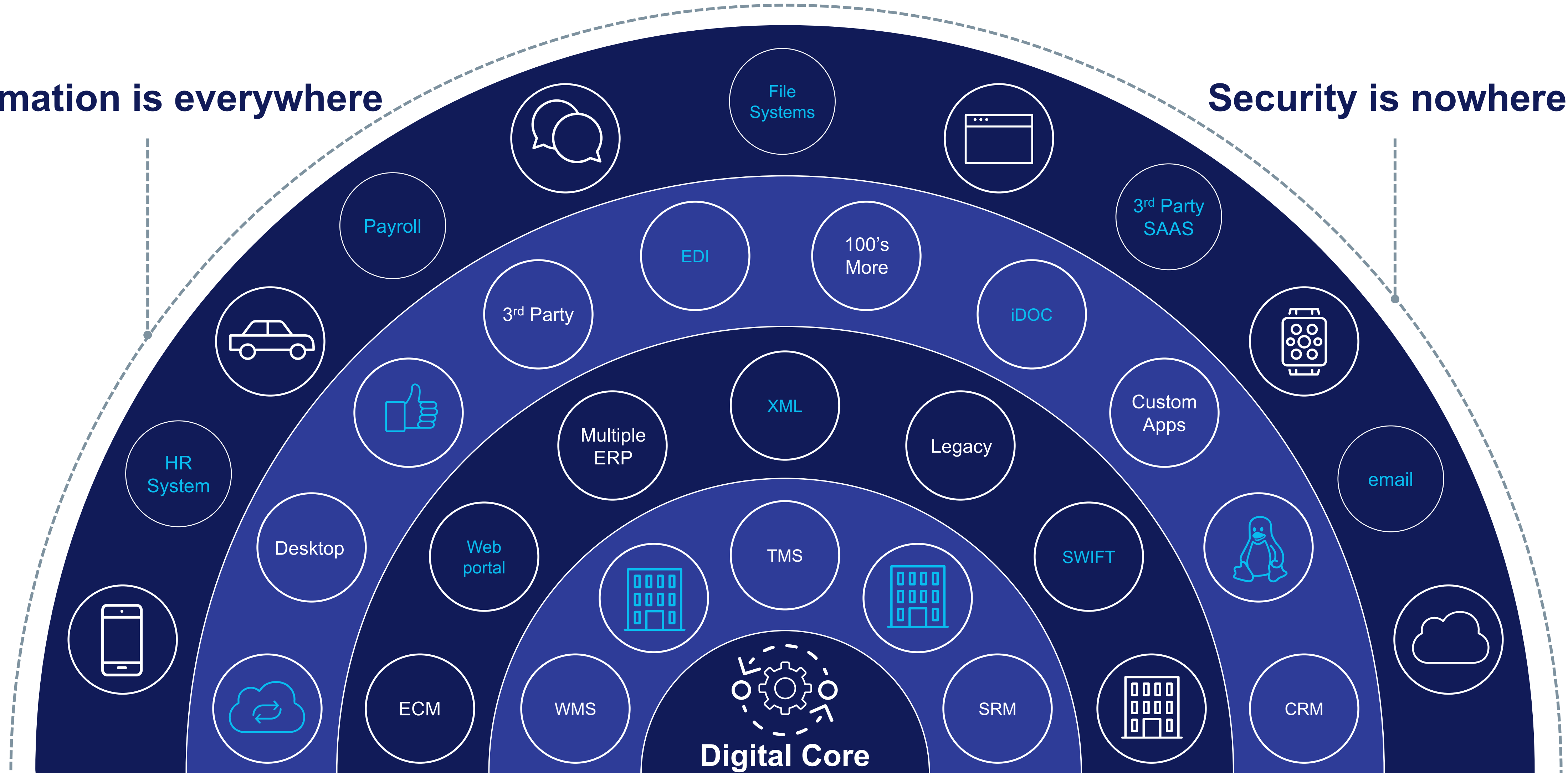
Windows of exposure need to shrink



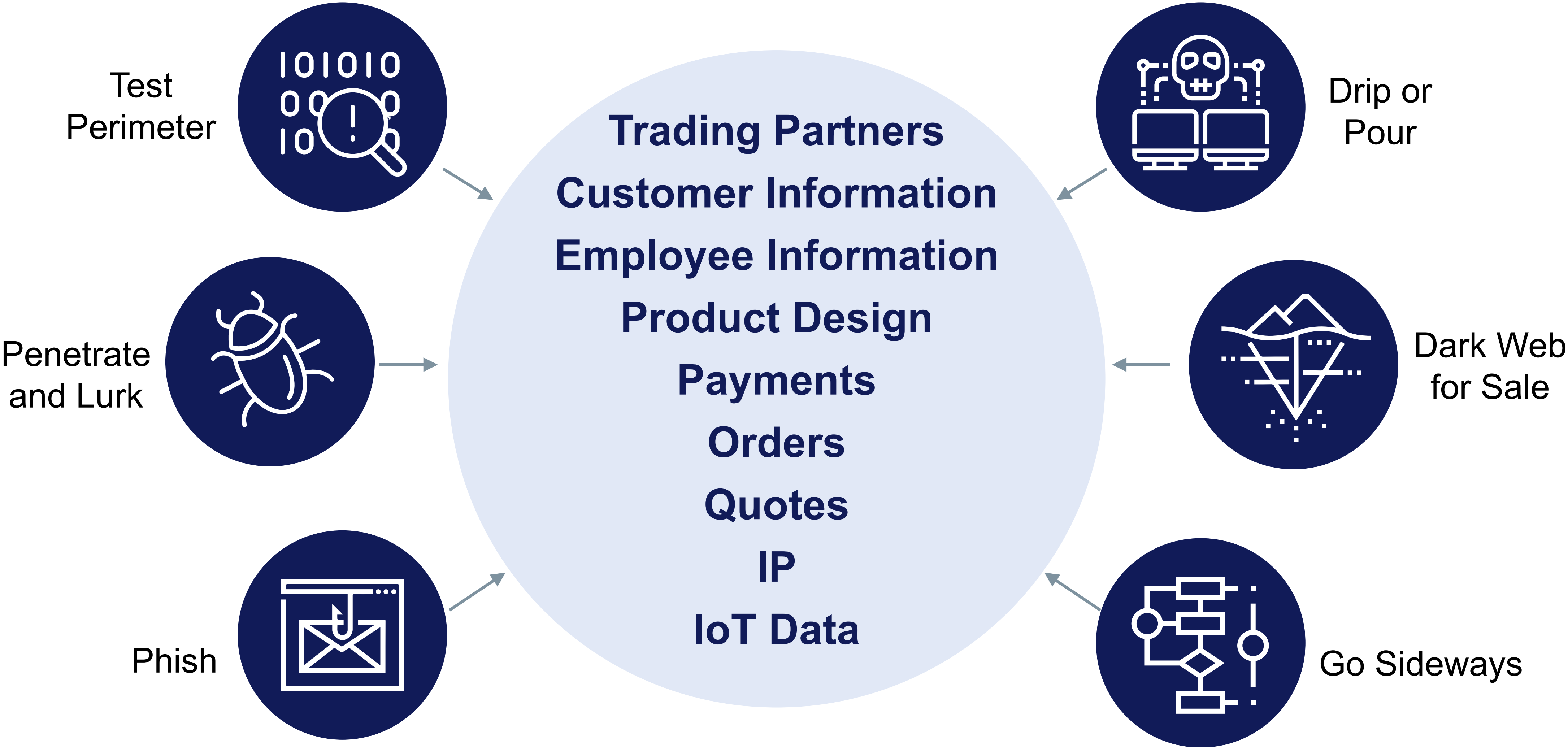
And corporate information is sprawling everywhere

Information is everywhere

Security is nowhere!



Information is at the heart of your business, and at the heart of attacks.



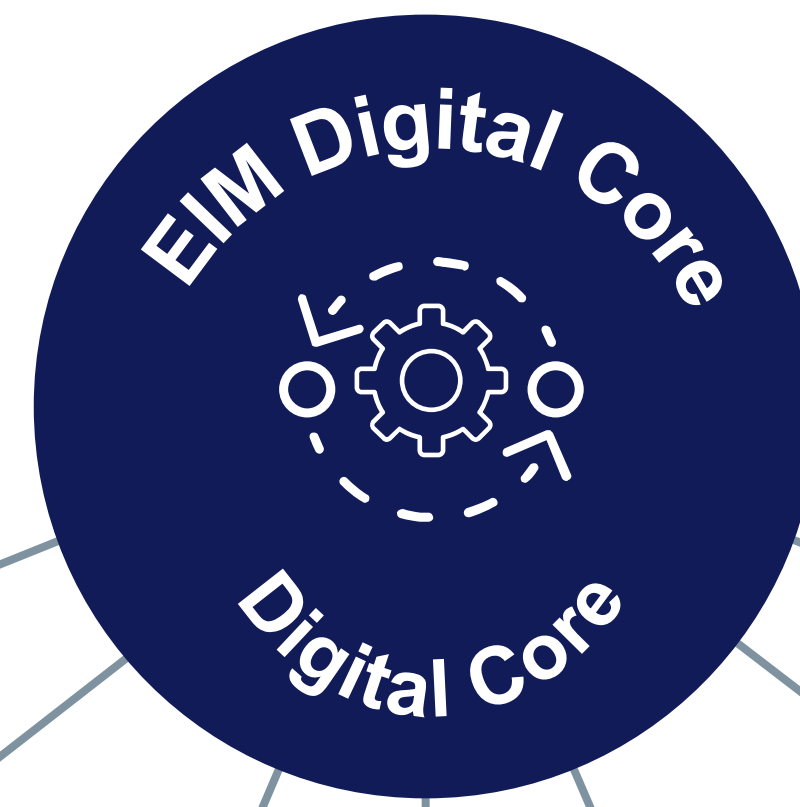
Introducing **OpenText Release 16, EP4**

The **secure digital platform** for **intelligent** and **connected enterprises**

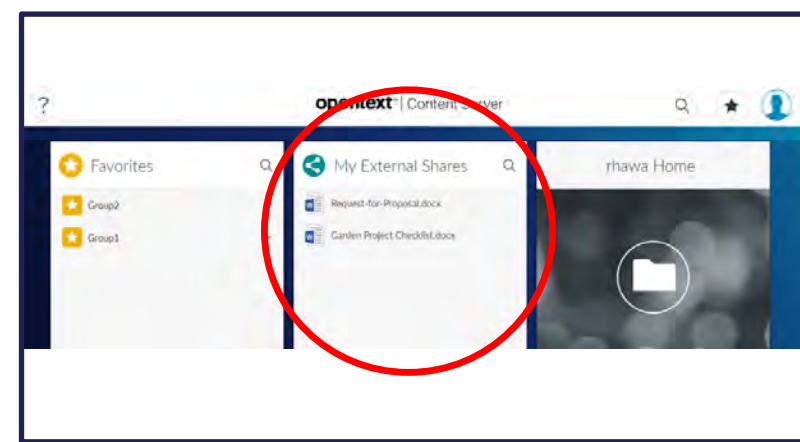
Security as the digital platform

Release 16

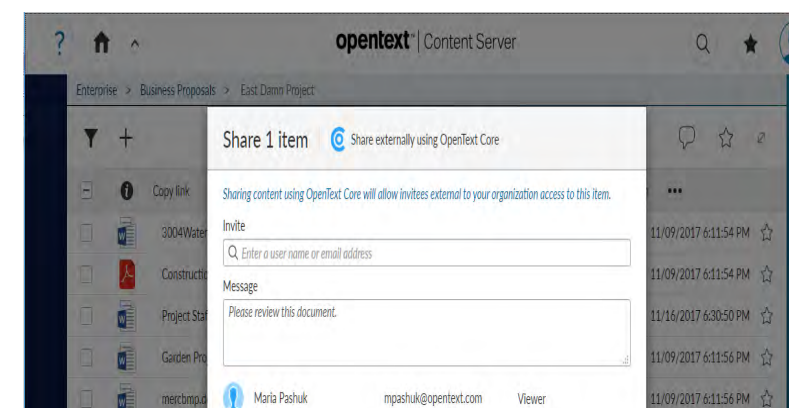
EP4



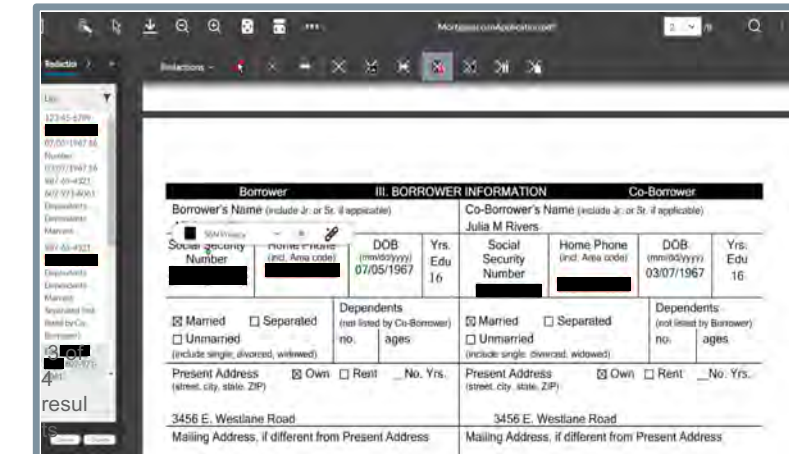
Access and Organize



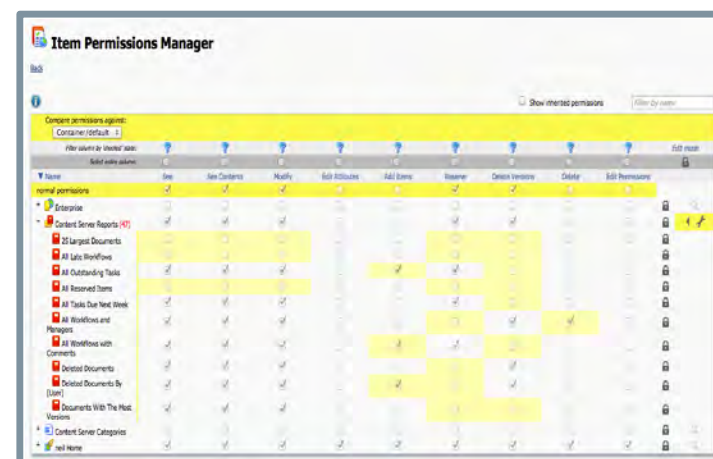
Application Security, Data Security



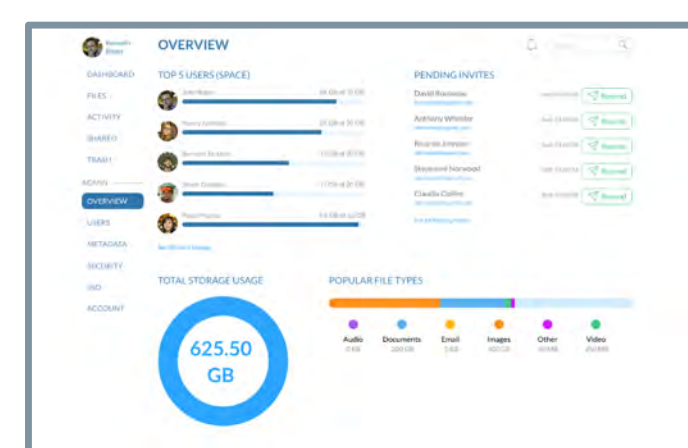
Sensitive information



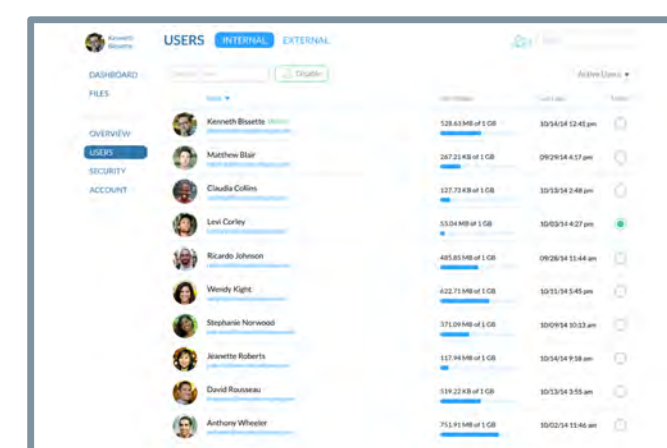
Content Intelligence



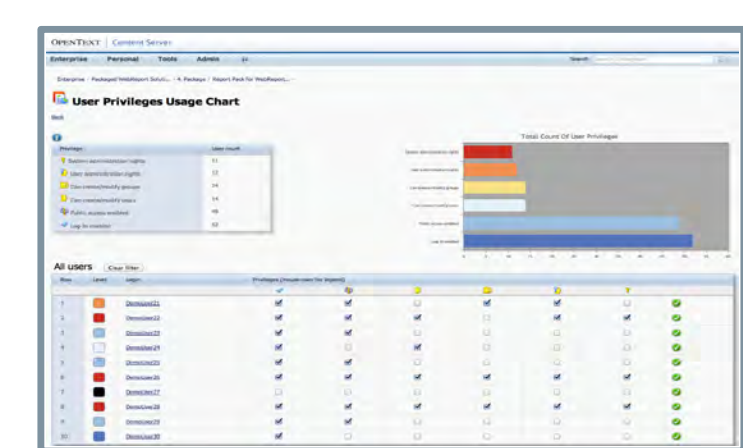
100% secure work spaces



Create, share and collaborate



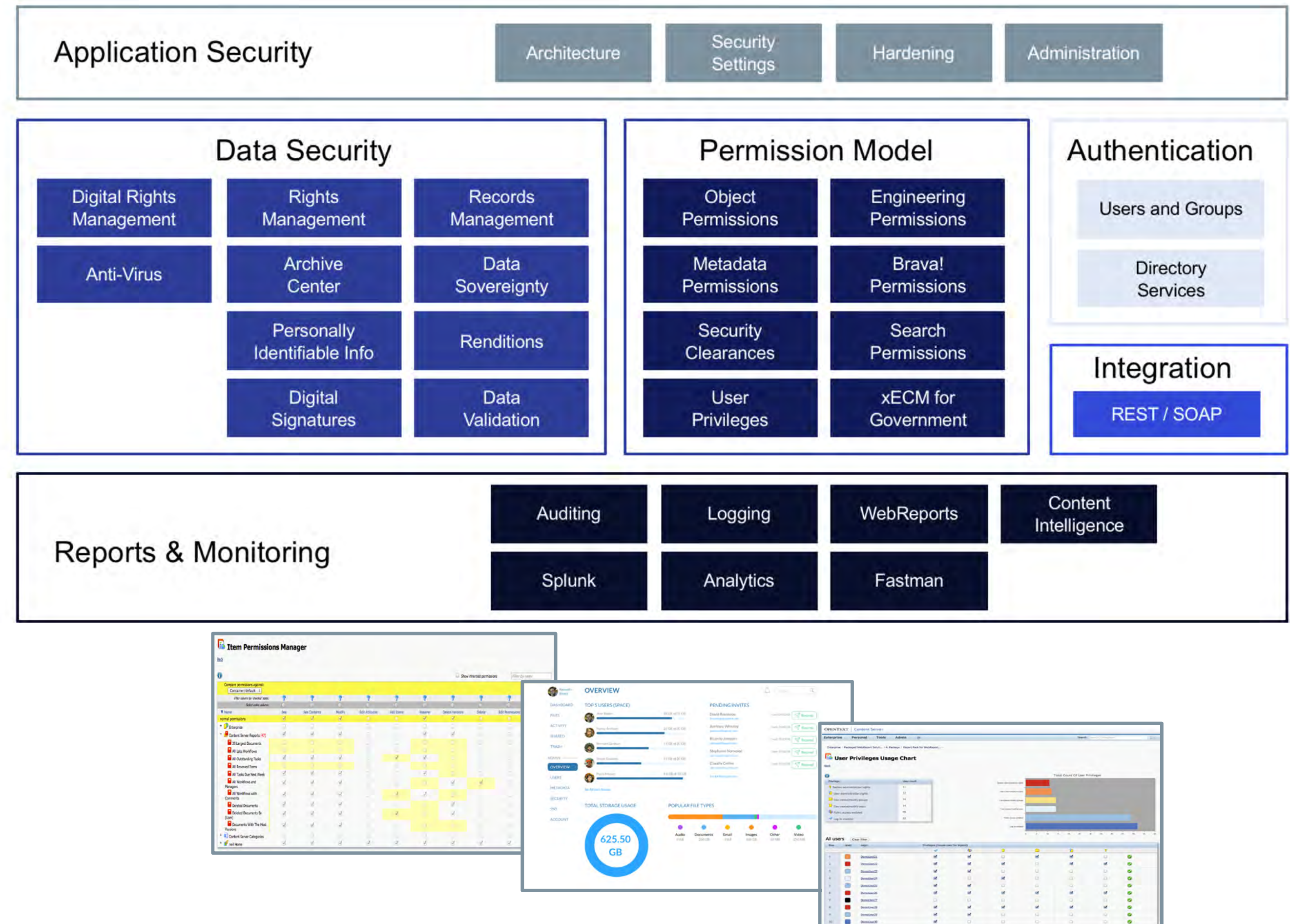
Sharing with confidence



- 1 Machines are now attacking humans
- 2 Humans cannot fight the machines
- 3 Machines are now fighting machines, with
 - Knowledge (Machine Learning)
 - Insight (AI)
 - Autonomic Action (Autonomous Clouds)

Machine vs. Machine: Over 1,000 Security Related Features in OpenText Release 16 EP4

- Application level security
- Database level security
- User and role base security
- Context, Rights and Time base
- SAML 2.0 and SSO
- AES-256 encryption at-rest & in-transit (SSL)
- Document fragmentation & Document-level security
- Standards: WORM, event-based, SEC 17a4, FIPS 140-2, DOD 5015.2, ITAR, FSTEC, and more
- Audit trails, usage patterns, monitoring and analysis – Content Intelligence
- And hundreds more



We have an endpoint responsibility !!!

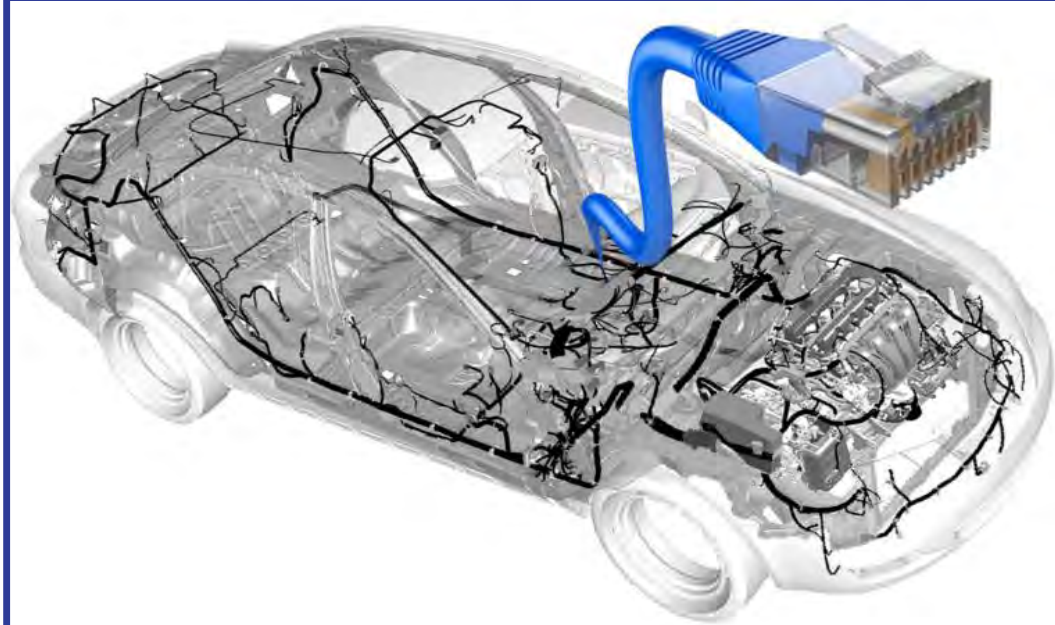


- A day in the life of the modern workforce is “connected” and complex
- Working, sharing, social, WiFi jumping, always online
- If it has a signal or an address, it can be found and exploited
- **We have an endpoint responsibility:**
 - On and off our networks
 - From employees to trading partners

Endpoints are smart and critical

Examples of Critical Data on Endpoints

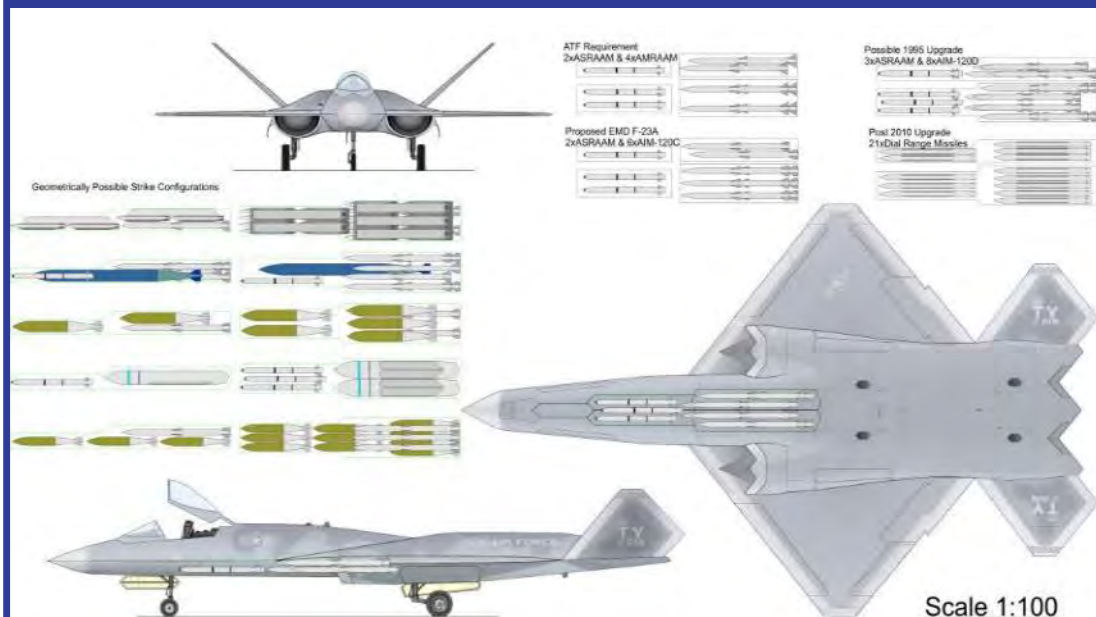
Software controlled vehicles



Tunnel plans and access points



Fighter jet capability specifications








Employee personal information



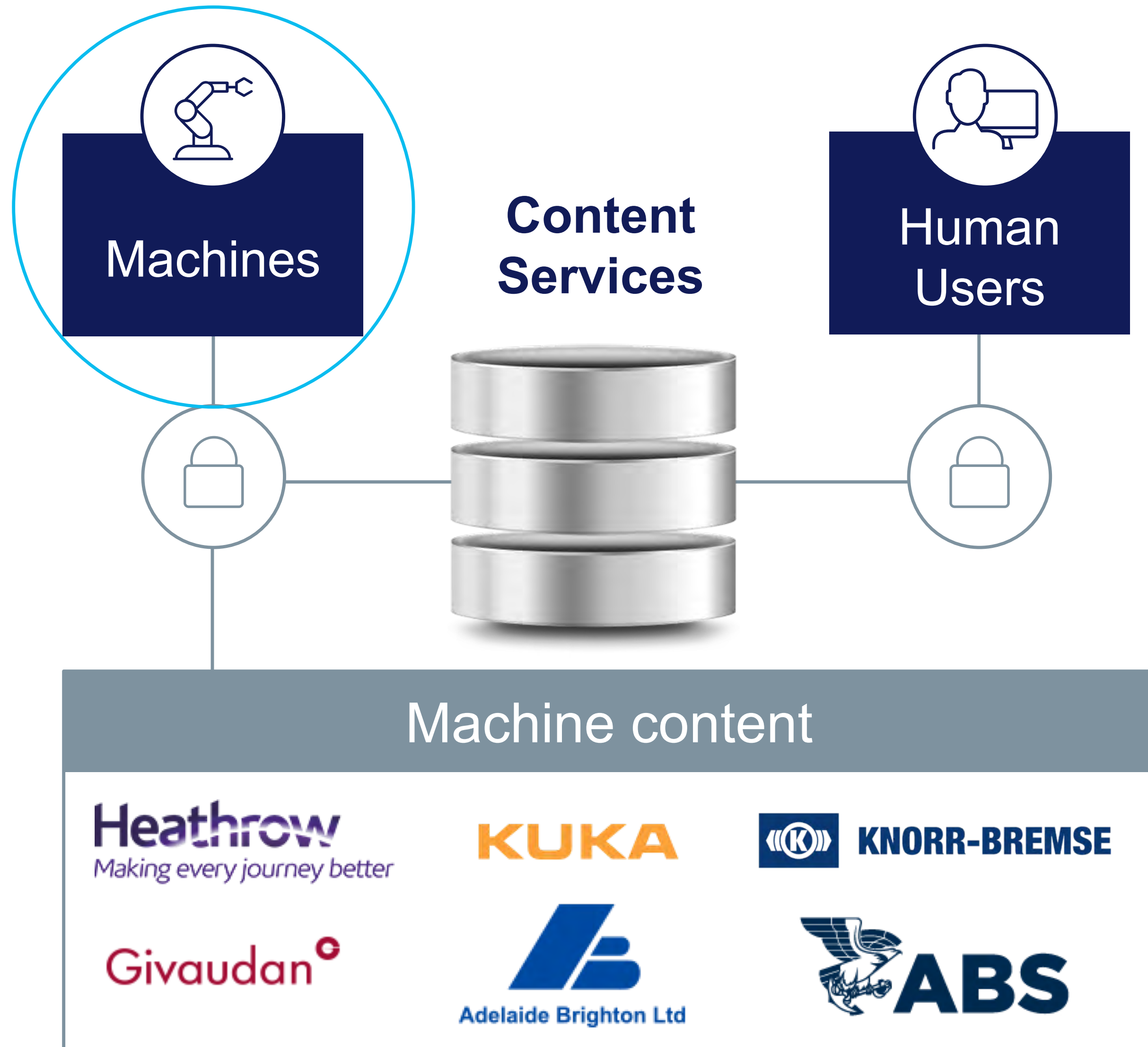
What EnCase Does

- Collects without disruption
- Monitors and alerts behaviours
- Uses advanced analytics to detect abnormal behaviours
- Find what is important through Machine Learning
- Automatically redact
- Feeds Magellan for detection, resolution and learning

OpenText protects over 50 Million end points today

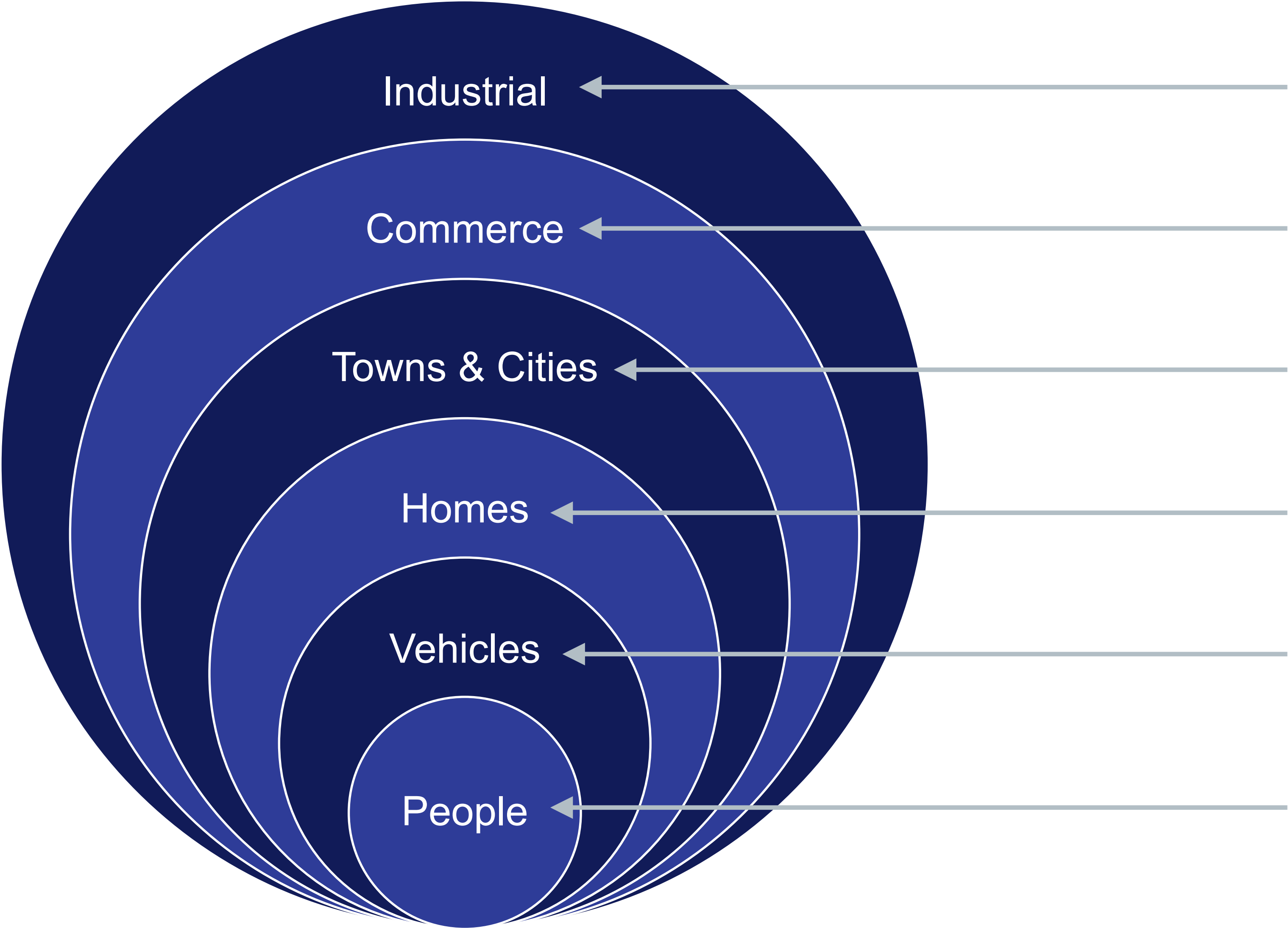
				
800,000 Endpoints	25,000 Endpoints	50,000 Endpoints	120,000 Endpoints	300,000 Endpoints
Forensic & malware analysis	Detect & respond to threats	Endpoint visibility	WannaCry ransomware	Automated alarm response

OpenText IoT: machines and trusted eco-systems



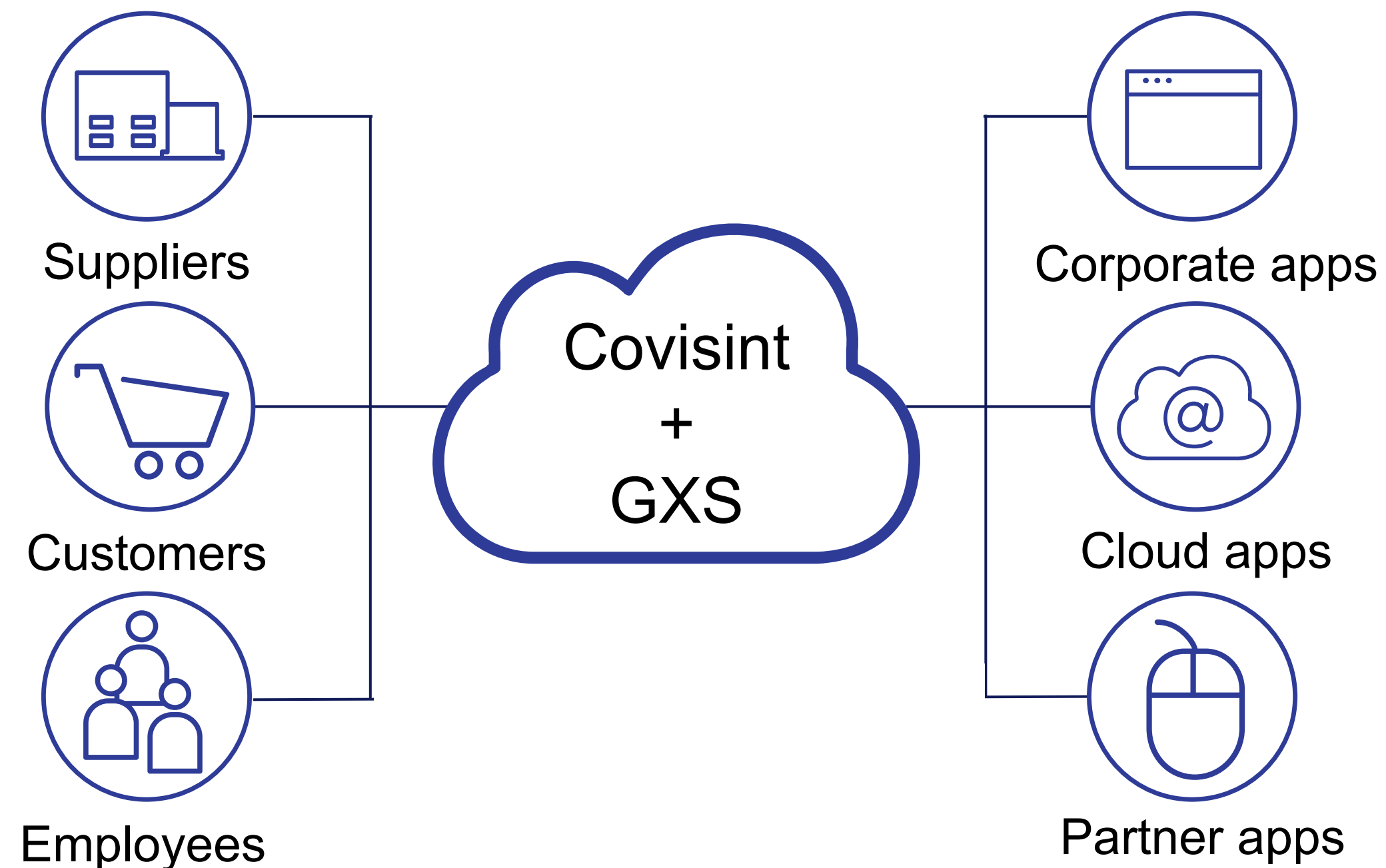
- Connected Machines and Humans
- Ready to receive information from smart machines via standards
- Messaging and orchestration
- API accessible, persist information, rules driven
- Integrated Magellan
- Build your own Application

OpenText IoT customers



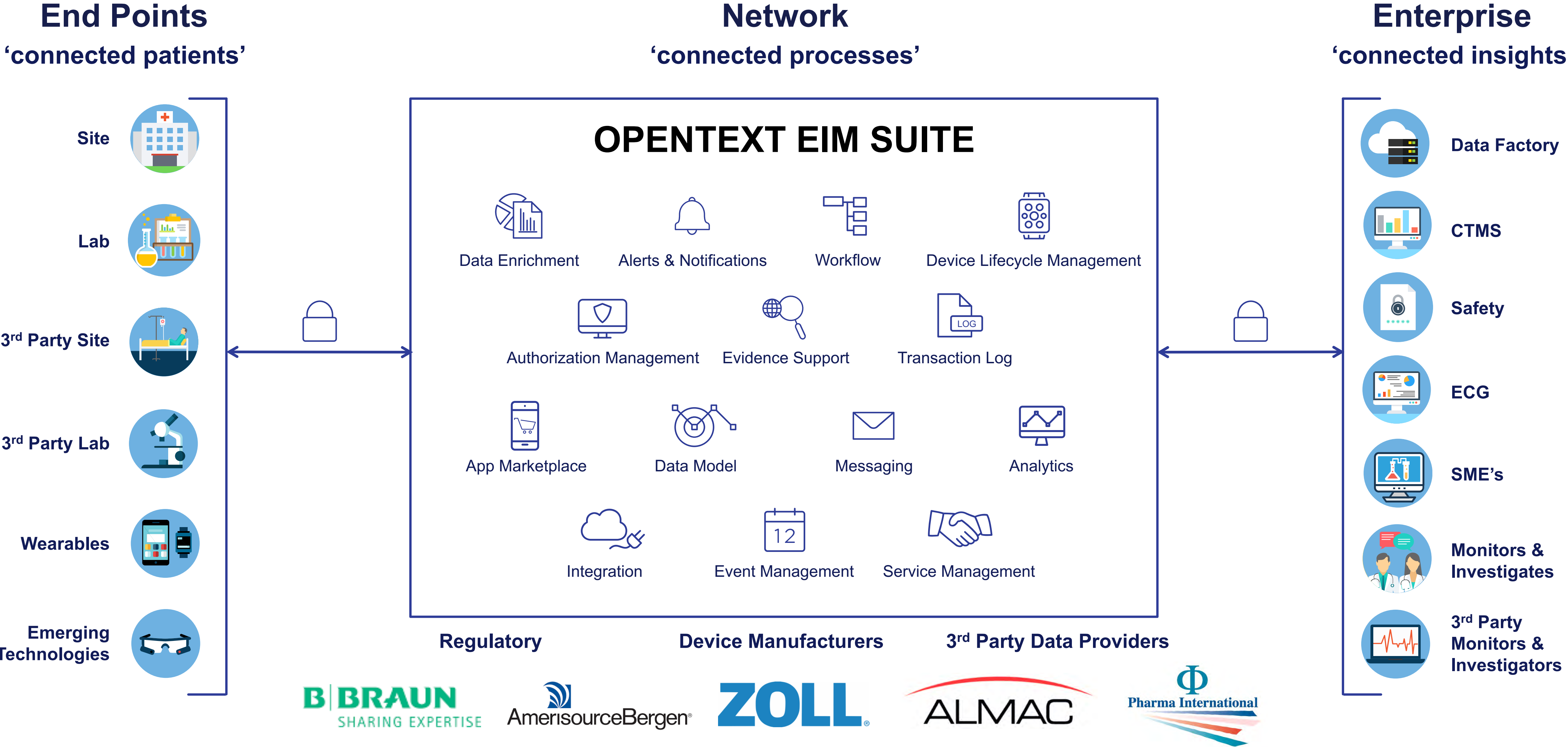
OpenText Secure Supply Chain (GXS)

Every person, device and application needs an identity



- **One Million Trading Partners**
- **Identity Manager**
Are you who you say you are
- **Authorization Manager**
What are you authorized to access
- **Identity Sync, Analysis & Intelligence**
Analyze and audit information access
- **Identity Event Streaming Engine**
Integrate all user and ID directories

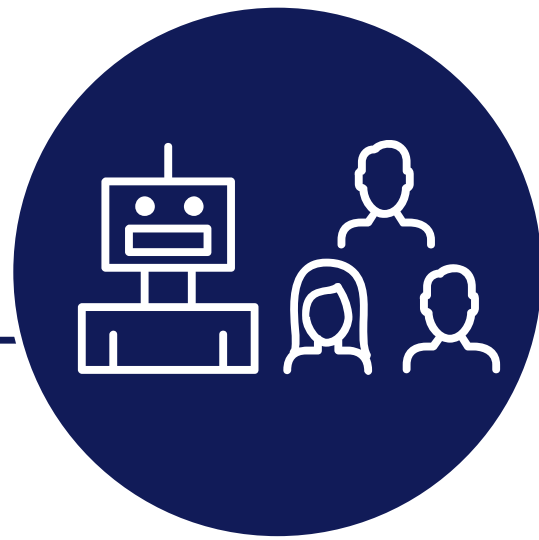
BioTech Customer in Action: Bringing it all Together



When things **go wrong** ...

You need the tools to **discover** and **recover**

Discovery is a critical component of EIM



Machine
discovery vs
Humans

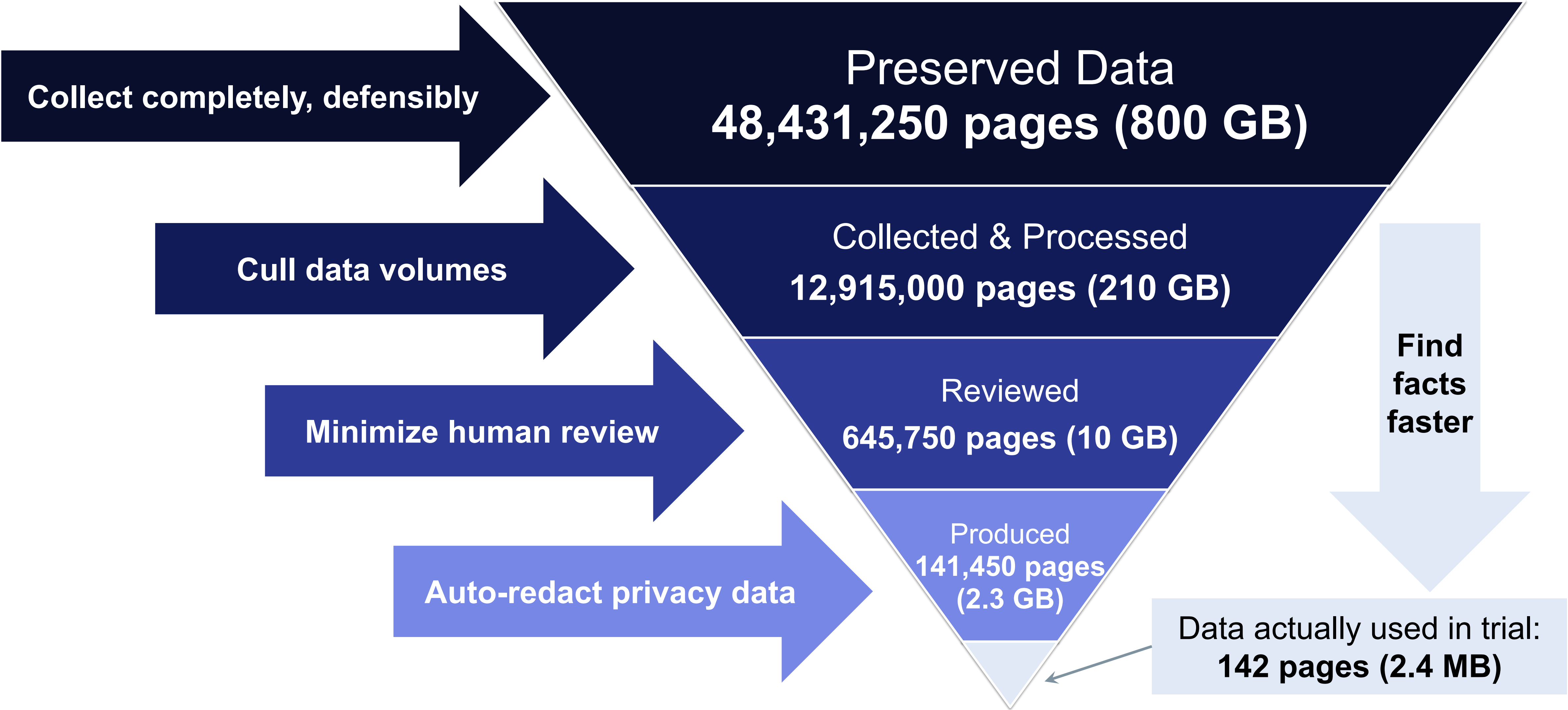


Needle in the
haystack



Speed to
resolution

OpenText Reconnind: Security breach example!



Ransomware brought Atlanta to its knees

SamSam Ransomware
March 22, 2018

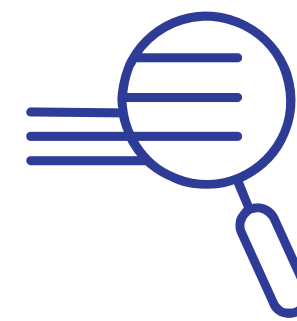


Population: 472,522

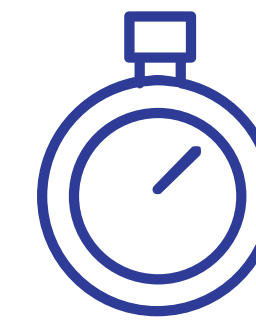
- City services have ground to a halt
- City cannot collect revenues and residents cannot pay
- Police databases and judicial systems are compromised
- Completely avoidable!

Serious Fraud Office (SFO) Selects OpenText

UK SFO is using **OpenText™ Axcelerate** as its next-generation investigations platform to:



Expedite
investigations



Save
caseworkers time



Automated
document analysis

“ AI technology will help us work smarter, faster and be more effective in prosecuting economic crime. ”



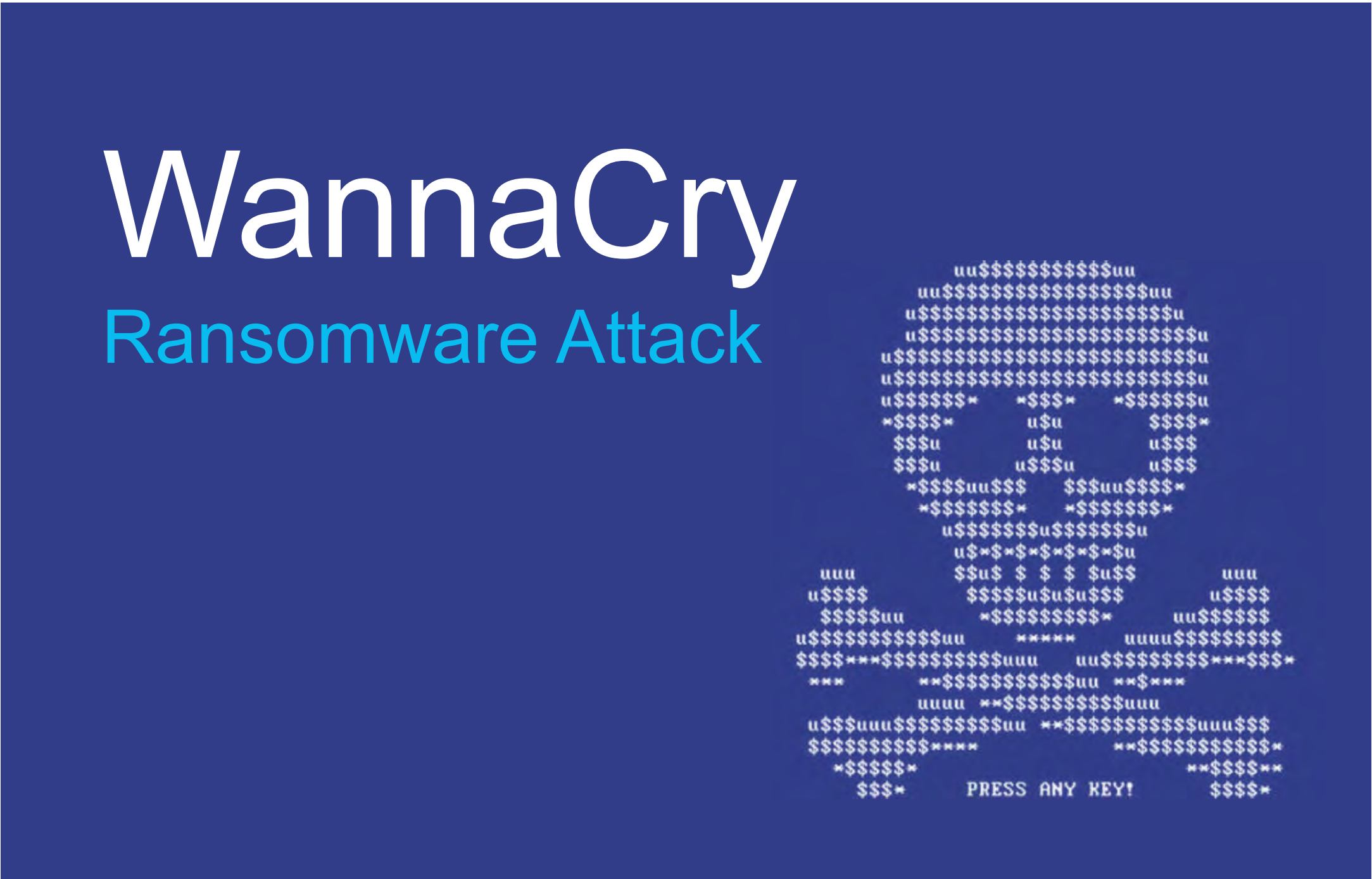
SFO

serious
fraud
office

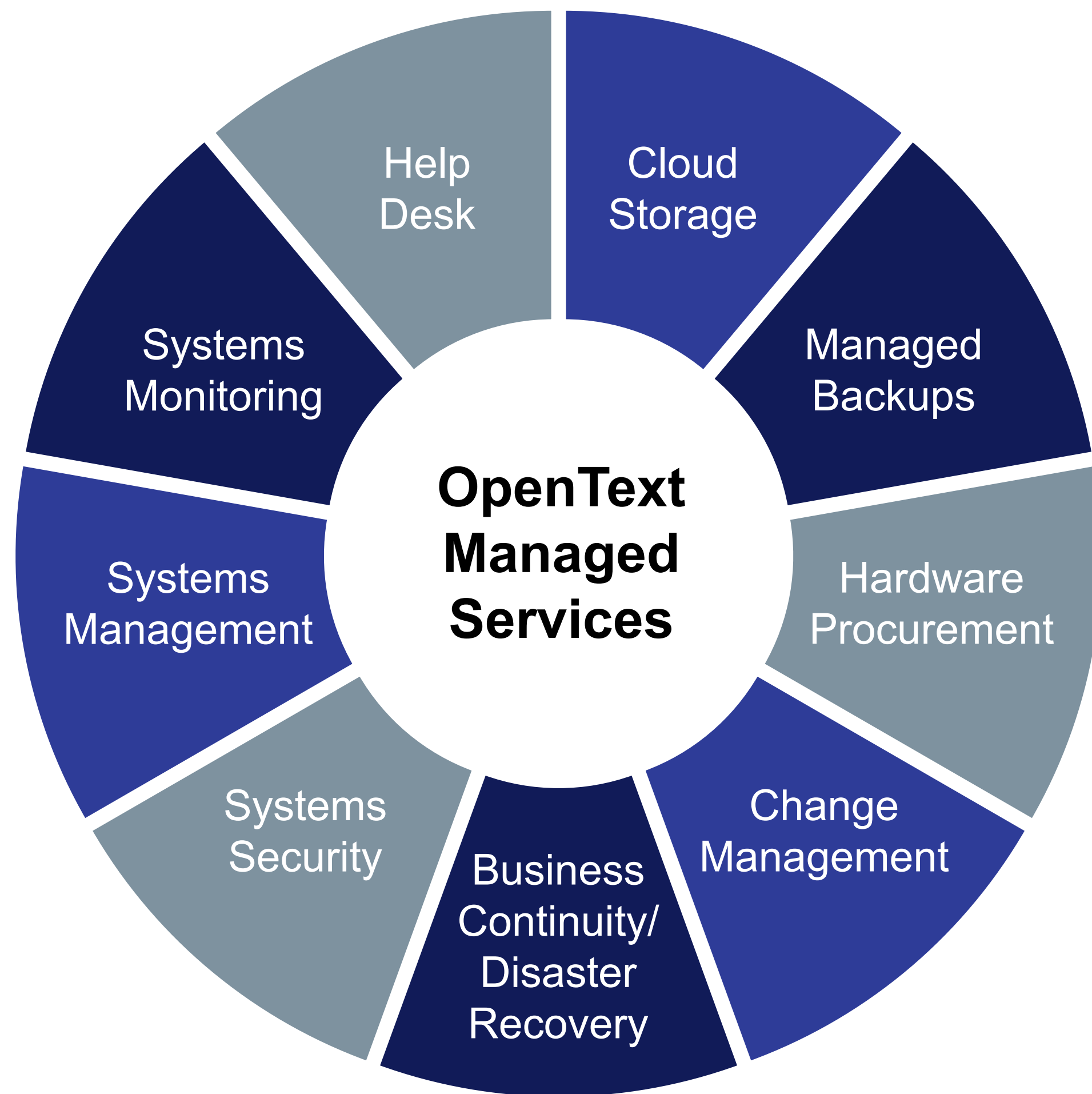
— Ben Denison,
Chief Technology Officer at the SFO

Meltdown, Spectre, Wannacry.

What to do with security nightmares like this?



Outsource to The OpenText Cloud



- 2,000 live customers (Global Examples: Nestle, Citi, Michelin, GM, Toyota)
- OpenText is responsible for security
- 99.99% Uptime
- Never upgrade again
- Based on standards: NIST, ISO, SOC, GDPR
- One contract, on SLA
- 1 Exabyte Under Management

opentext™ | Magellan™

A new narrative:

Data is for the Good

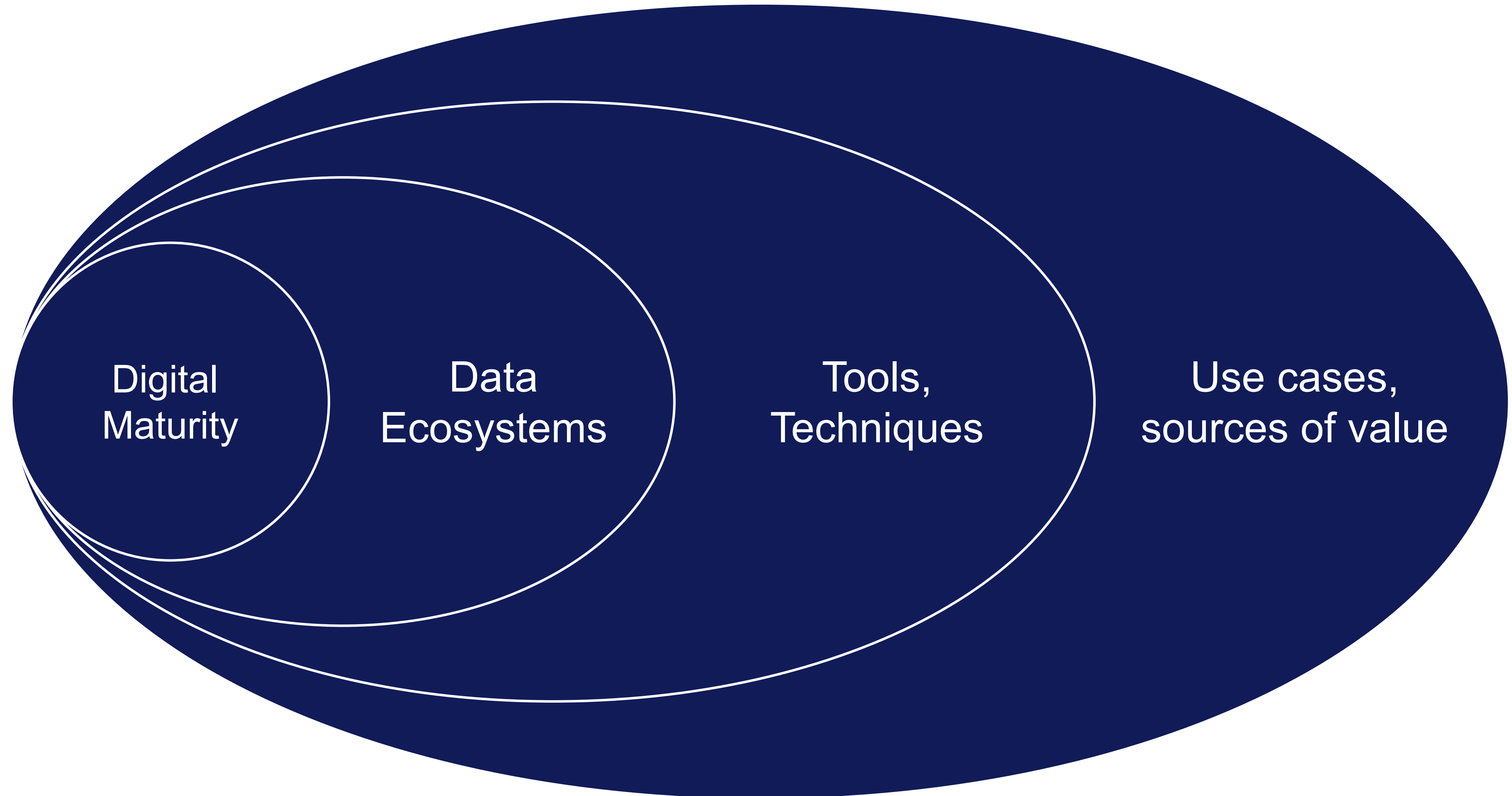
OpenText Artificial Intelligence



opentext[™] | Magellan[™]

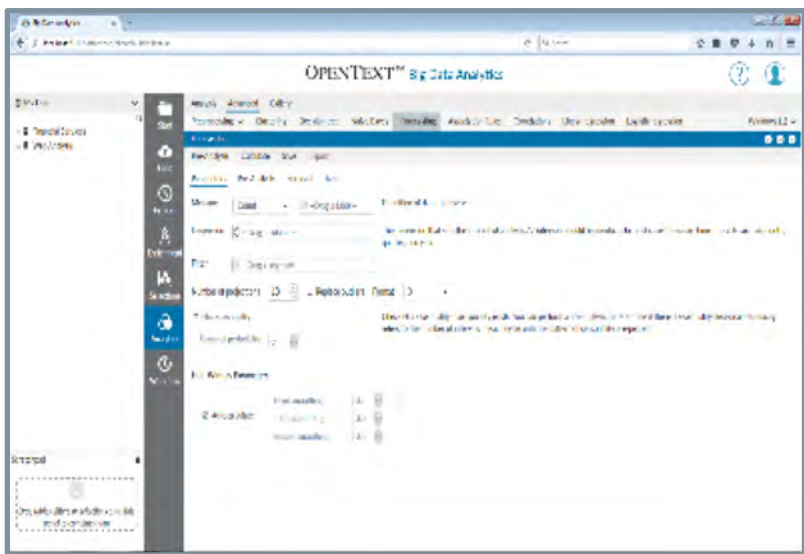
- Magellan = Actuate + Apache Spark + Nstein
- Run standalone or Pre-integrated to OpenText EIM
- Pre-packaged algorithms (via MLIB)
- Write your own algorithms (via R and other languages)
- Pre-certified x86 hardware configurations
- Built on Open Standards

4 Key Ingredients for AI



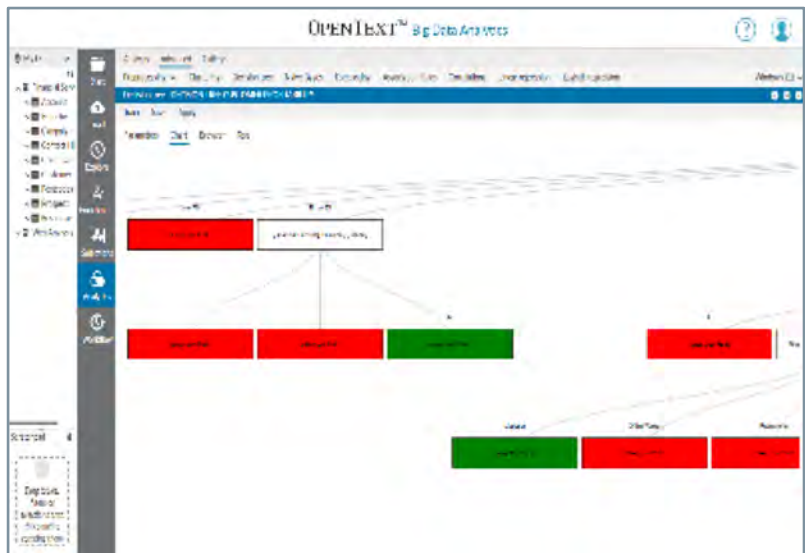
Emerging value areas, hundreds of use cases

Financial Services



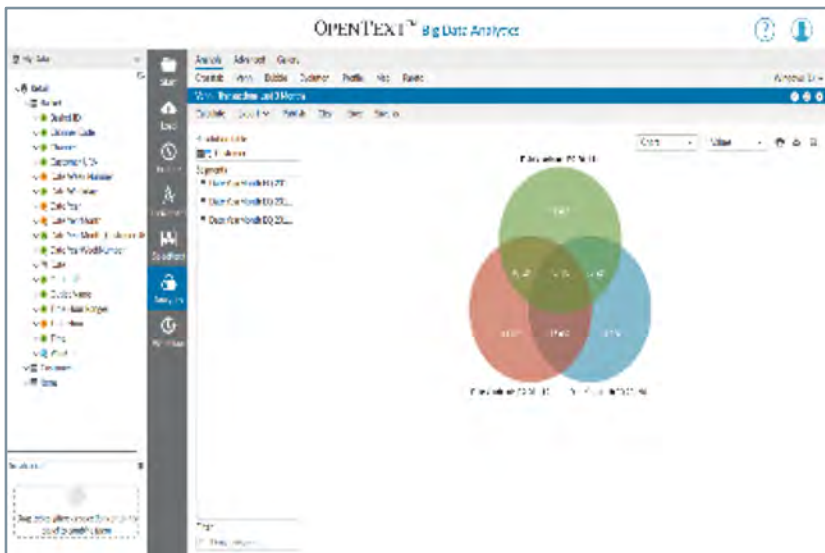
Regulatory Filing
Know Your Customer
Follow the Money
Fraud Prevention

Customer Experience



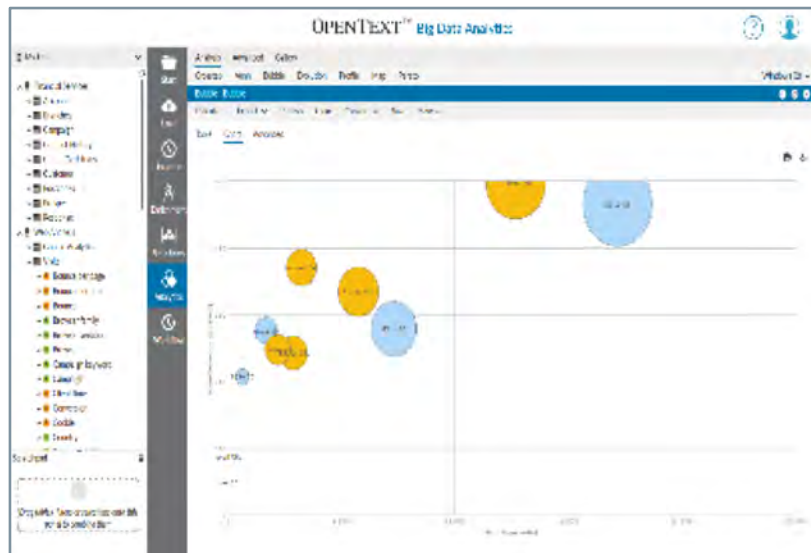
Product recommendations
Segmentation

Asset Industries



Predictive maintenance
Resource scheduling

Human Resources



Hiring
Retention
Potential
Case Management

Security

Table properties - web_log_site_visits			
Data source: Web Logs			
Database	Web Analysis	Table	Visits
Name	Width	Data Type	Format
Bounce per page	1	Integer	
Bounce per time	1	Integer	
Bounce	1	Integer	
Browser family	25	String	
Browser version	21	String	
Browser	17	String	
Campaign keyword	1	String	
Campaign	1	String	
Client time	8	Integer	
Conversion	1	Integer	
Cookie	1	String	
Country	6	String	
Customer URN	10	String	

Behavior
Logs & events
Data movement

Using Data for the Good

Protecting Marine Life



Reducing Incarceration



Right resources, right location



Transparency



Safety



Eliminating Pandemics



In Summary

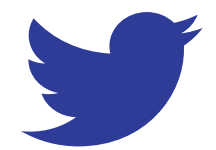
Intelligent and connected enterprises

Security is job #1

Data is for the **Good**

opentext™

Thank you



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