



BCNET
CONNECT

HIGHER ED & RESEARCH TECH SUMMIT

We Can't VPN Everything

Apr 26th, 2023



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X10 | TECHNOLOGIES

 netskope

X10 Technologies – Quick Intro

- 2 decades in business as a thought leader in enterprise systems and solutions supporting customers through their digital transformation and cyber resilience journey
- 24/ 7 Technical Support with 100% case resolution success rate
- Extensive technical bench with full-time resources



1 **Vancouver**
510-1199 West Pender Street, Vancouver, BC, V6E 2R1

2 **Calgary**
Sun Life Plaza West Tower 144-4 Avenue SW, Suite 1600 Calgary, AB, T2P 3N4

3 **Toronto**
2 Bloor Street West Suite 700 Toronto, ON, M4W 3R1

4 **Montreal**
1250 René-Lévesque Blvd W Suite 2200 Montreal, Quebec H3B 4W8

5 **San Diego**
501 W. Broadway, Suite 800/ 8th Floor San Diego, CA 92101

6 **Manila, Philippines**
Dominion Bldg. 833 A. Arnaiz Ave. Ave. Makati City

Areas of Expertise



Security

- Ethical Hacking
- Penetration Testing
- Red / Blue Teaming
- Vulnerability Assessments
- Governance and Compliance
- Security Architecture and Deployment
- Security Operations Center
- Cloud Security Architecture



Data Center and Cloud

- High Availability and Disaster Recovery
- Performance and Capacity Planning
- Hyperconvergence
- Cloud Migration



Computer Systems

- Systems Architecture and Integration
- Network and Systems Support
- Performance Analysis
- Deployment Services



Network Infrastructure

- Secure Architecture and Design
- Capacity Planning
- Deployment and Integration
- Network and Firewall Assessment
- Managed Services
- Telephony and Collaboration

Scale Computing Awards



**Scale Computing 2022
Evangelist Award**



**Scale Computing 2022
Heavy Hitter Award**

Edge Pioneer Partner of the Year Award for 2022

These awards recognize the X10 team's achievements in providing expertise in delivering Scale Computing solutions, timely technical support, and exceptional customer service commitment.



PREMIER'S AWARD
PROMOTING INNOVATION AND EXCELLENCE

**The Next Generation Network: Speed, Security, and
Equitable Access for all B.C. Public School Students**

Ministry of Education
and Partners

VANCOUVER ISLAND REGION
ORGANIZATIONAL EXCELLENCE CATEGORY
PREMIER'S AWARD 2017



BRITISH
COLUMBIA
BC Public Service

Where ideas work

Premier John J. Horgan



End-to-End Security

MANAGEMENT

SIEM / SOAR

Network Detection & Response

Cloud Detection & Response

Open XDR / MDR / SOC

Threat Intel Mgmt

Policies & Compliance

MFA / 2FA / SSO

Orchestration

Annual Security Assessments

PERIMETER

NGFW

NAC & CA

Physical Security

NETWORK

Patch Management

Segmentation

BACKUP AND DR

Ransomware Protection

Airgap

Immutability

DR Sites

HYBRID / CLOUD

SSE / SASE

ZTNA

DATA & COMPLIANCE

Access, Monitoring, and Encryption

Privacy

Data Loss Protection

END-USER COMPUTING

NGAV / XDR / EDR

Identity Detection

Email

Training

Device Management

End-to-End...

What if there's no end?

MANAGEMENT

SIEM / SOAR

Network Detection & Response

Cloud Detection & Response

Open XDR / MDR / SOC

Threat Intel Mgmt

Policies & Compliance

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End-to-End ...

What if there's no end?

Work from Home

- Workers going back to the office
- Not all the time
- Not all of them
- Expect that to settle out over a period of years

SaaS

- SaaS increasingly dominates Cloud conversation
- On premise may not even be an option from some S/ W vendors

New Connectivity Paradigm

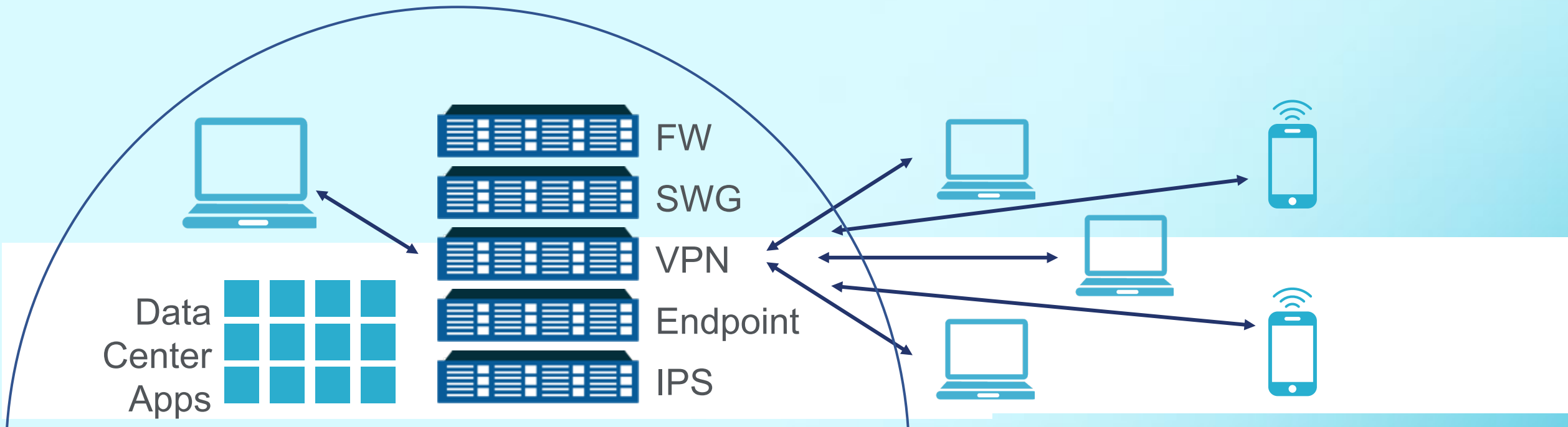
- Users outside the firewall
- If not all the time, some or most
- Connecting directly to SaaS
- Not just one..many SaaS
- Entirely new security architecture

- We surveyed the market
- Chose Netskope
- Gartner Accepts our Recommendation!!

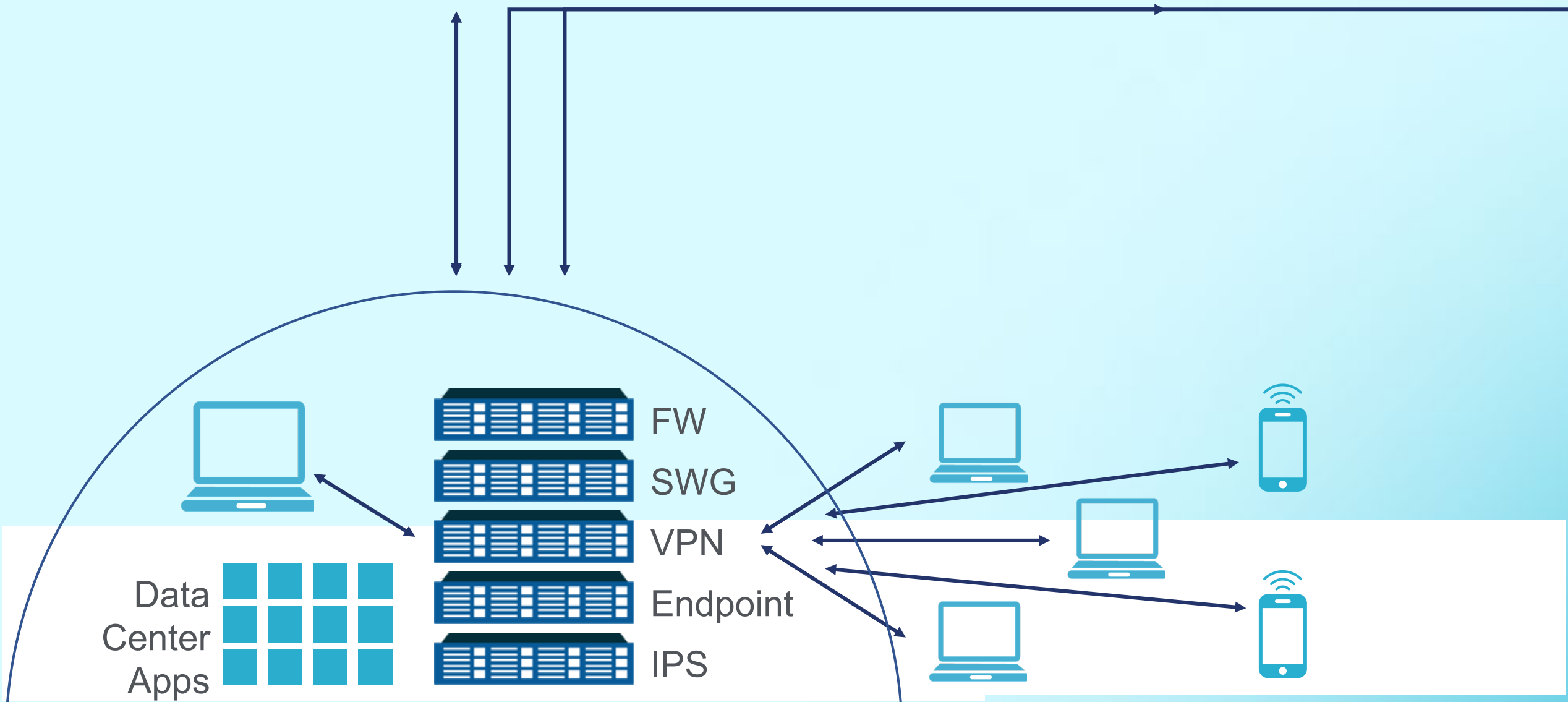
+ Value of SSE in Higher Education



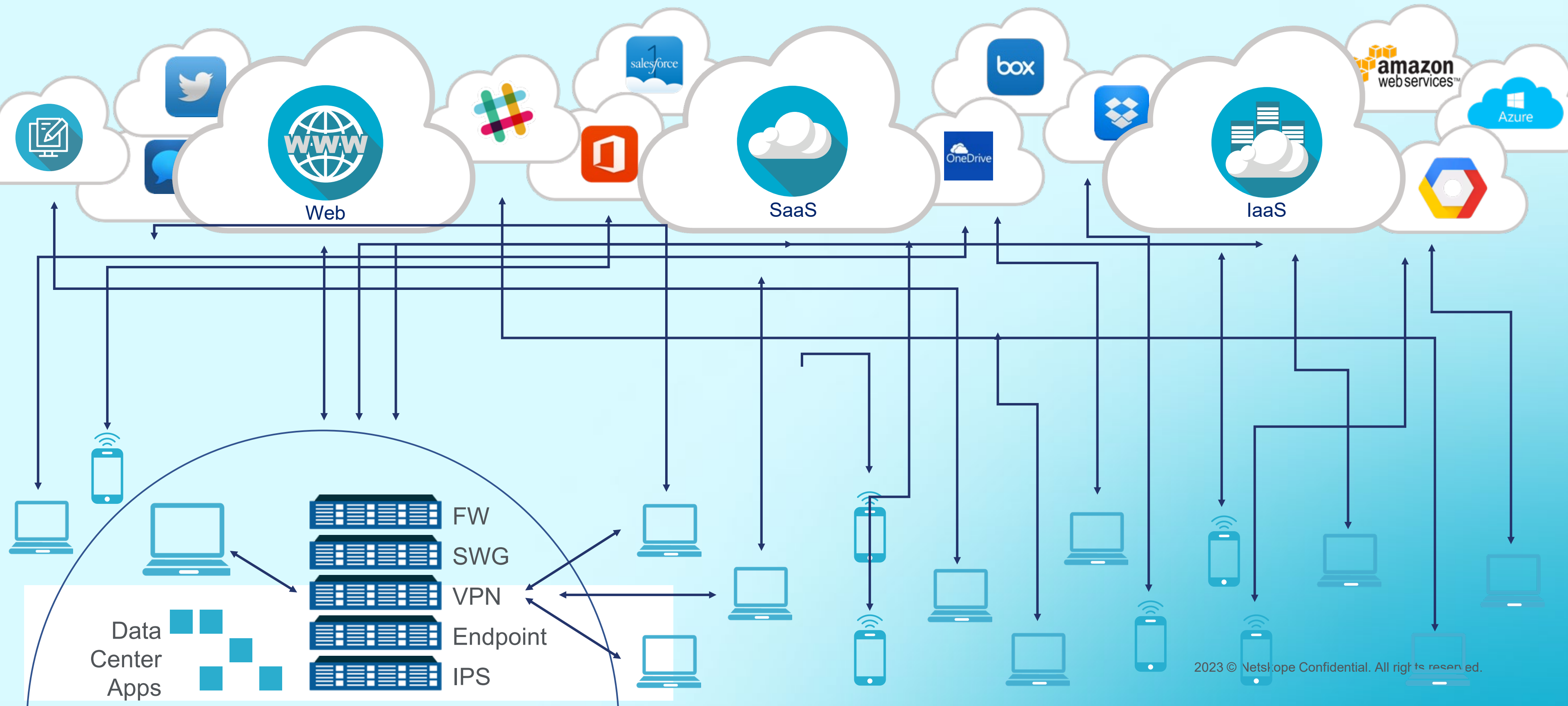
DC Centric-Based Architecture



Digital Transformation Makes the Perimeter Blurry



Where is the perimeter now?



APPLICATIONS



EXTERNAL APPS
(SAAS)

INTERNAL APPS
(DATA CENTER / IAAS)

Security Service Edge
(SSE)



USERS

WORK FROM ANYWHERE,
BYOD, THIRD PARTY

HQ AND
BRANCH

Let's discuss 3 main areas that need attention

Part 1 Risk to the business from Ransomware, Disruption or Data Leaks.

Part 2 Productivity and Agility

Part 3 Product Consolidation and Ease of use

Part 1

Risk to the Business

“Educational services follows an eerily similar trend to the majority of the other industries; it is experiencing a dramatic increase in **Ransomware** attacks.”

2022 Verizon Data Breach Report

“Higher education has unique vulnerabilities that make it a prime target for cyberattacks.” These vulnerabilities include new attack vectors as a result of the recent transition to online learning, the management of large quantities of “valuable research intelligence and proprietary student data,” the fact that “higher education institutions typically operate in more open information technology environments,” and a lack of investment in cybersecurity.”

HigherEd Dive by KPMG

Increase in Attacks + Increase in Vulnerability ⇒ Significantly increases the Risk

What motivates the attackers

To cause widespread disruption

DDOS attacks are common in Education. Use of well architected IAAS and reputed SAAS has reduced overheads , but has increased the data sprawl, which needs appropriate visibility and protection..

Financial Gain

Phishing and Ransomware attacks to extort large sums of money. This needs to be addressed regardless of the user or application location.

Valuable Data

Student/Staff information as well as Intellectual property can easily fall through the cracks.This data gets sold.

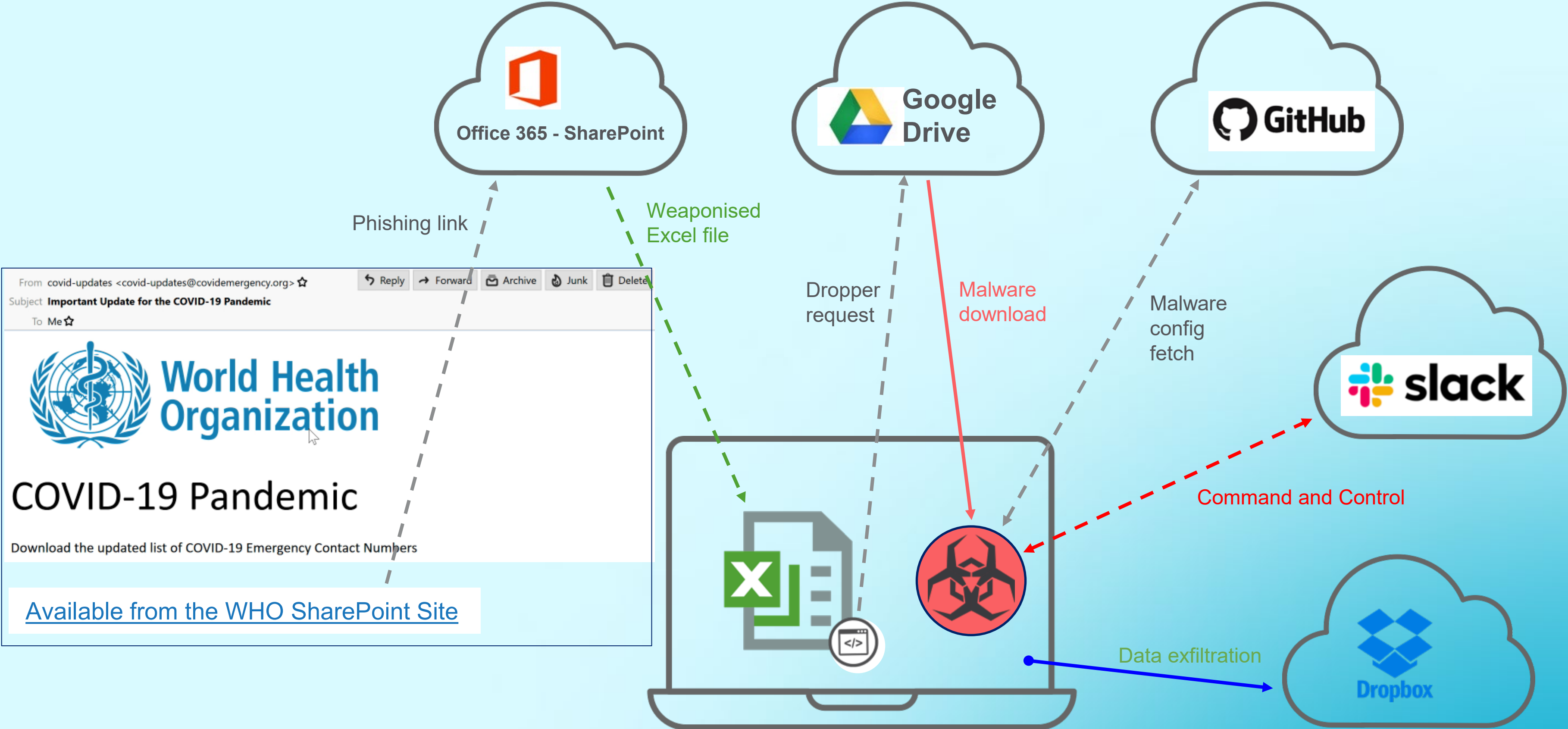
Risk of not doing anything ⇒ Disruption|Loss of Reputation|Financial Impact|Data Loss

Incidents:

[Memorial University](#) —> 15000 students personal information leaked in an email by mistake.

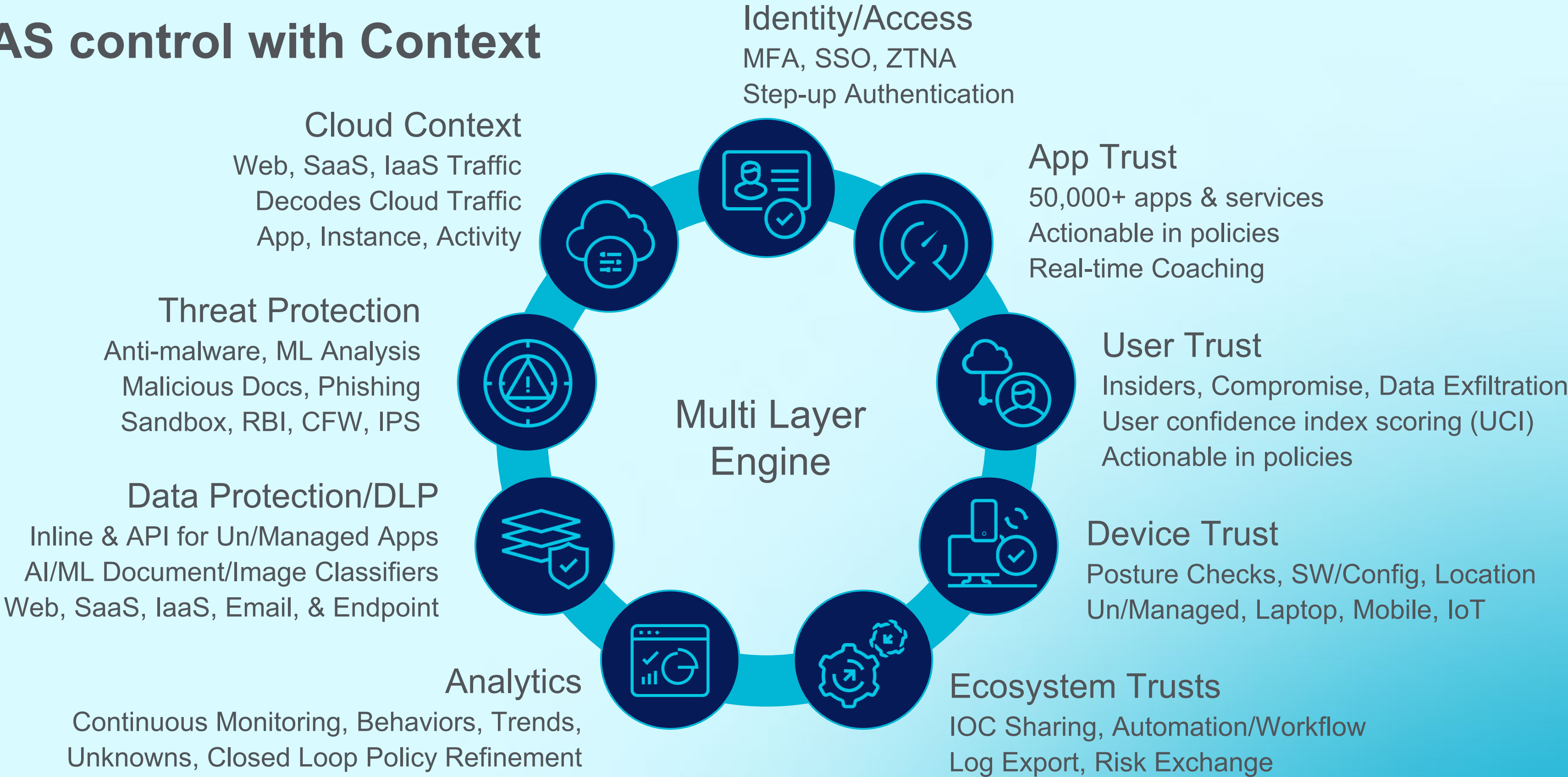
[University of Calgary](#) —> Paid Ransomware of 20k

The Modern Malware uses SAAS and IAAS



There is no silver bullet -> New Web needs New tools

SAAS control with Context



Part 2

Productivity and Agility

Productivity and SAAS usage go hand in hand

But we need to offset Risk

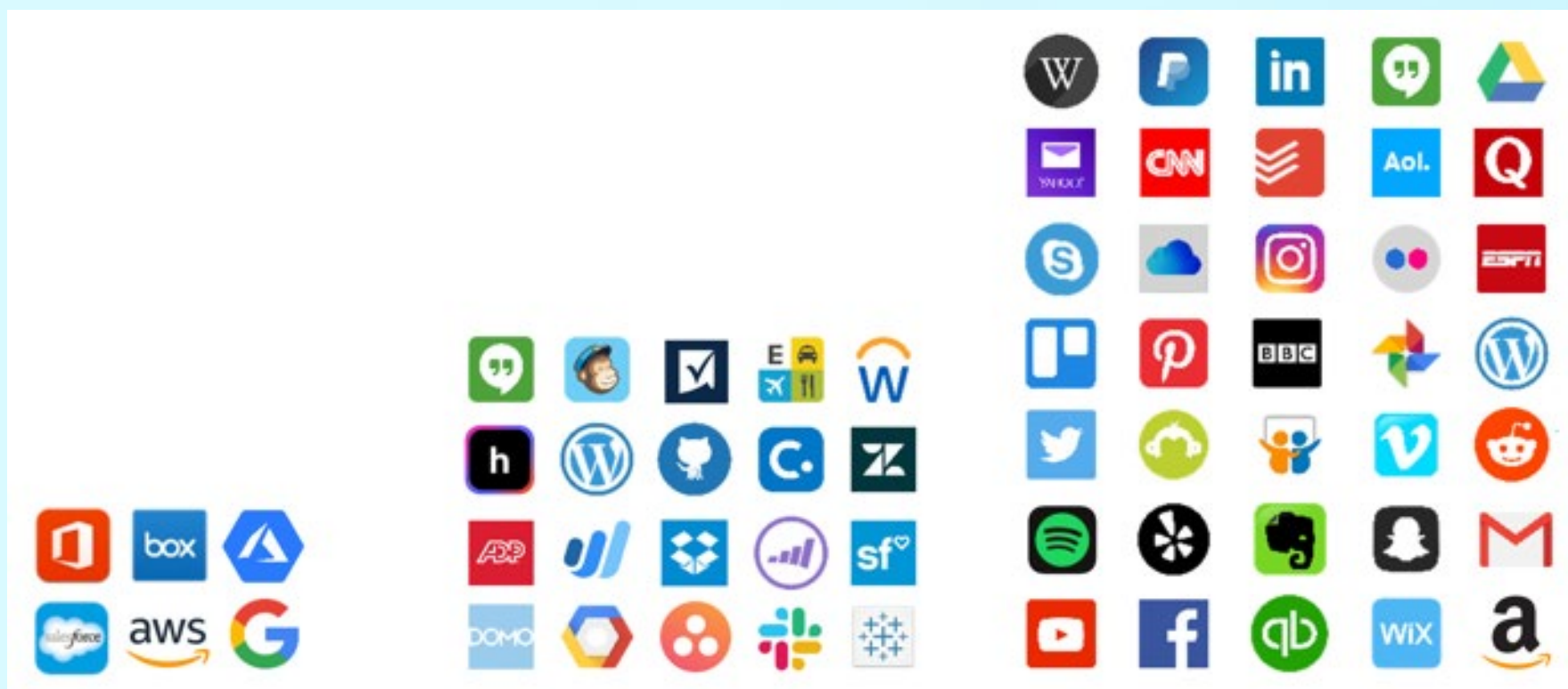
IT Dept: 1-5% Apps managed by IT

Business: Majority Apps are unmanaged

User: Choice of 50,000+ Apps

Cloud – 2400+ apps in use by the average company

The New Web – 50%+ of traffic is SaaS







Coaching and Awareness

Productivity done right!









The screenshot shows a web page for "Office 365 Password Reset". The page has a white background with a red header bar. The main heading is "Office 365 Password Reset" in black text. Below it, a message states: "Your password has expired. Please change your password immediately." A red asterisk followed by the word "Required" is visible. The Office 365 logo is prominently displayed in the center. Below the logo, there are three input fields: "Username *" with the value "achan@bobsbank.net", "Current Password *" with the value "sdfserwrdsa", and "New Password *" with the value "vxccxvgfhre". A grey modal window is overlaid on the right side of the page. It features a black icon of a classical building with columns and a pediment, with the word "UNIVERSITY" below it. The modal contains the following text: "ALERT! Potential Phishing Attempt Detected", "A potential phishing attempt has been detected and it is not recommended to post your corporate credentials to an online form. If you would still like to continue click on PROCEED or click on STOP to stop this activity.", and "This window will auto-close in 43 seconds". At the bottom of the modal are two buttons: "STOP" and "PROCEED".

Next-Gen Inspection

SWG

User	URL/Destination	Site Category	Threat	Policy Action
 Pat Smith Accounting	s3.amazon.com	 IaaS	 URL AV	 Allow or Block

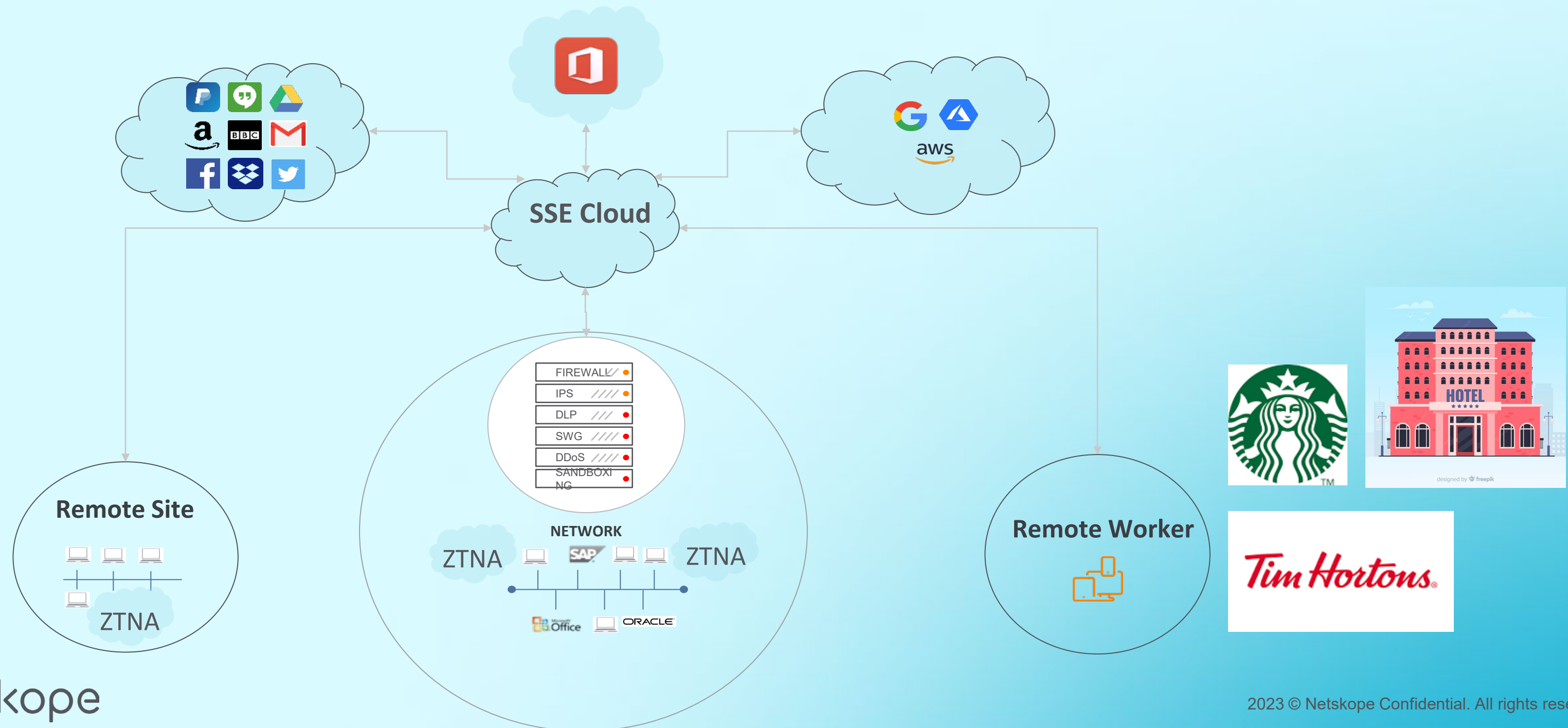


User	App	Instance	Risk	Category	Activity	Threat	Content	Policy Action
 Pat Smith Accounting	 GitHub	 ACME Co Instance Logged in as psmith @acme.com	 App Risk User Risk UBA	 Dev Tool	 Upload Share Create Edit Comment Etc.	 URL AV Sandbox RBI	 DLP Labels ML	 Allow Block Warn/Coach Encrypt Quarantine

Agility

Agility for Admins → **Unification of security services. Single policy construct and UI.**

Agility for Users → **High performance access to Apps from anywhere.**

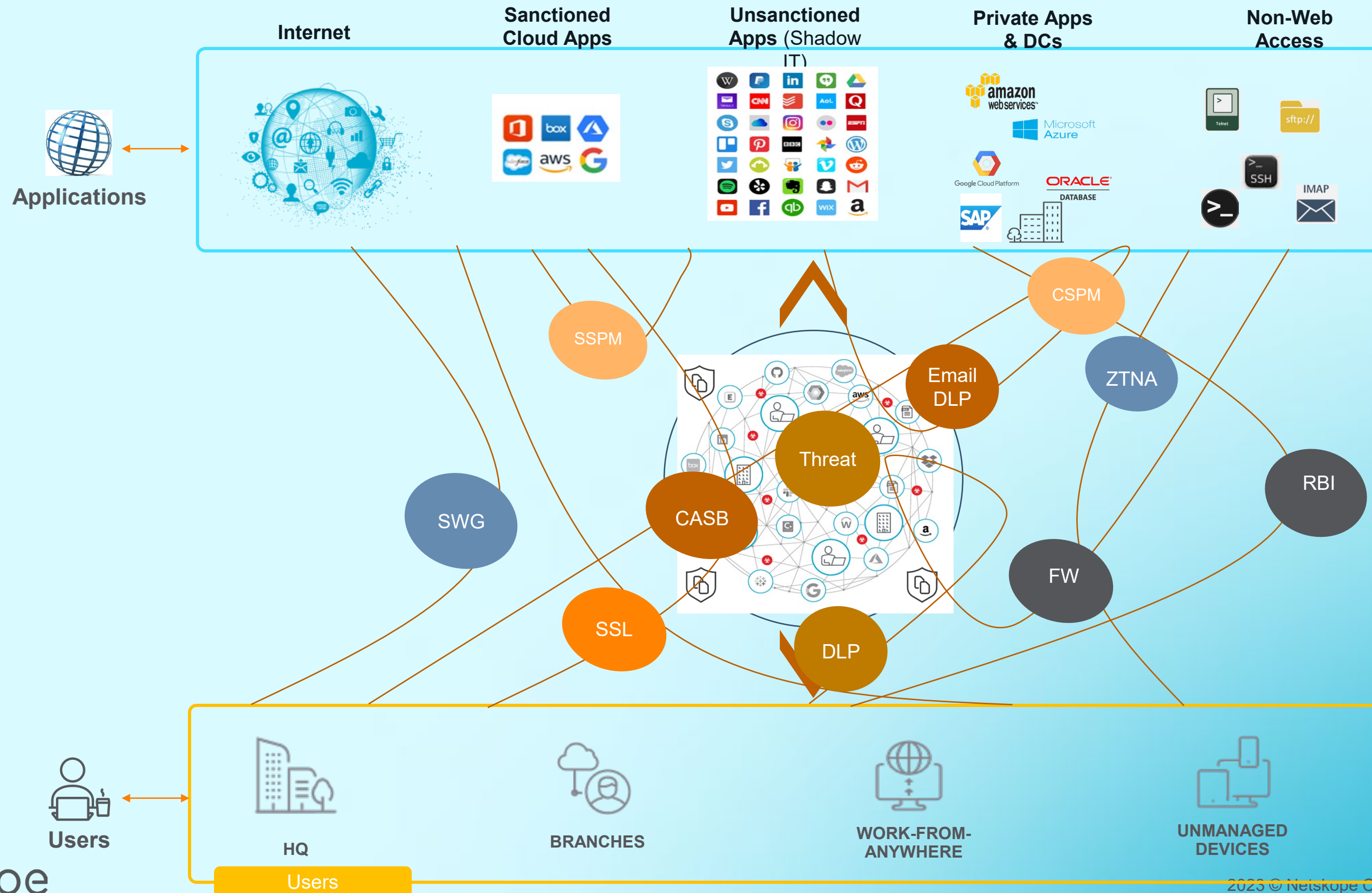


Part 3

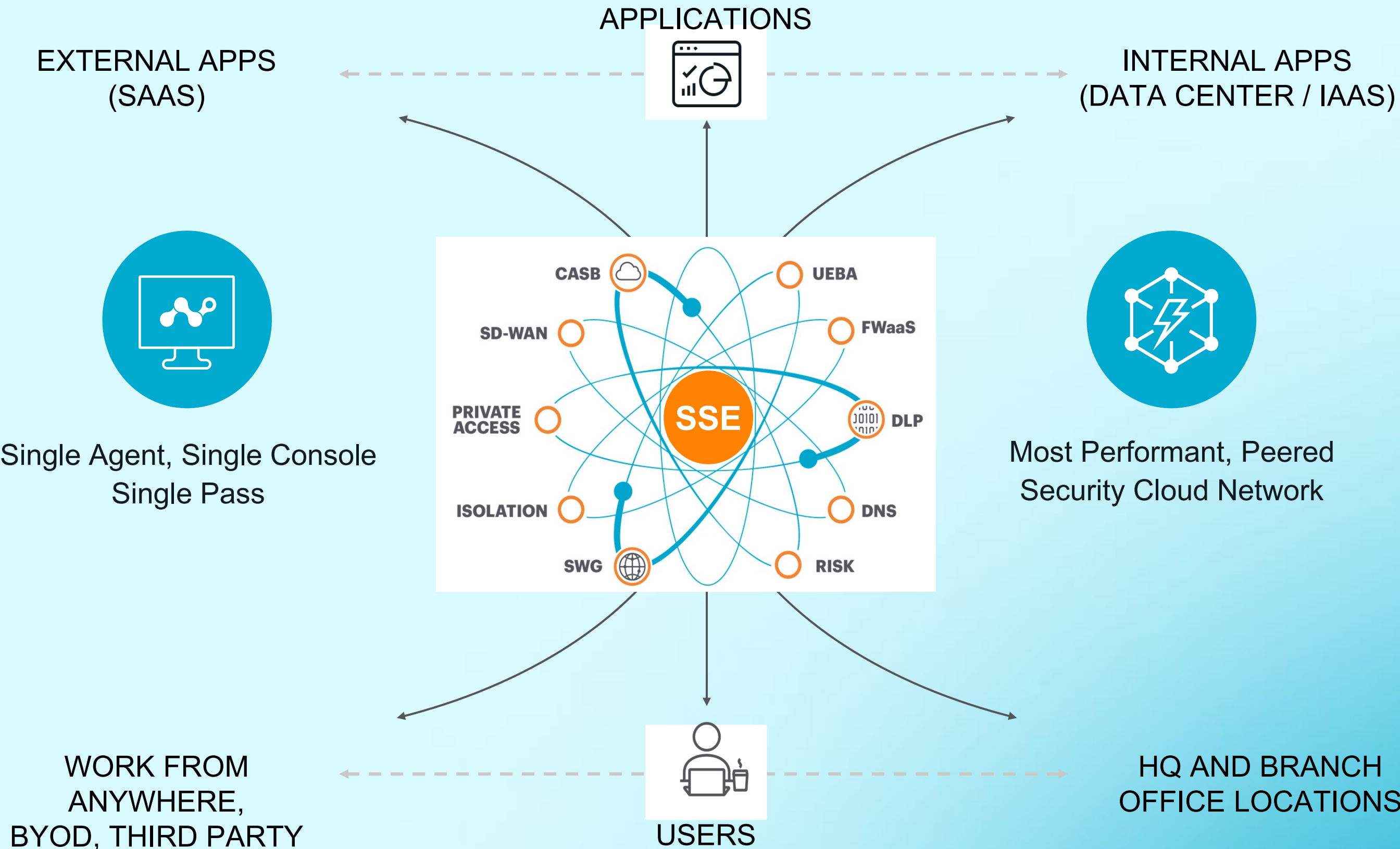
Product Consolidation and Ease of Use

Which of these two options looks better?

Option 1 - Individual components trying to work together



Option 2 - Unified SSE

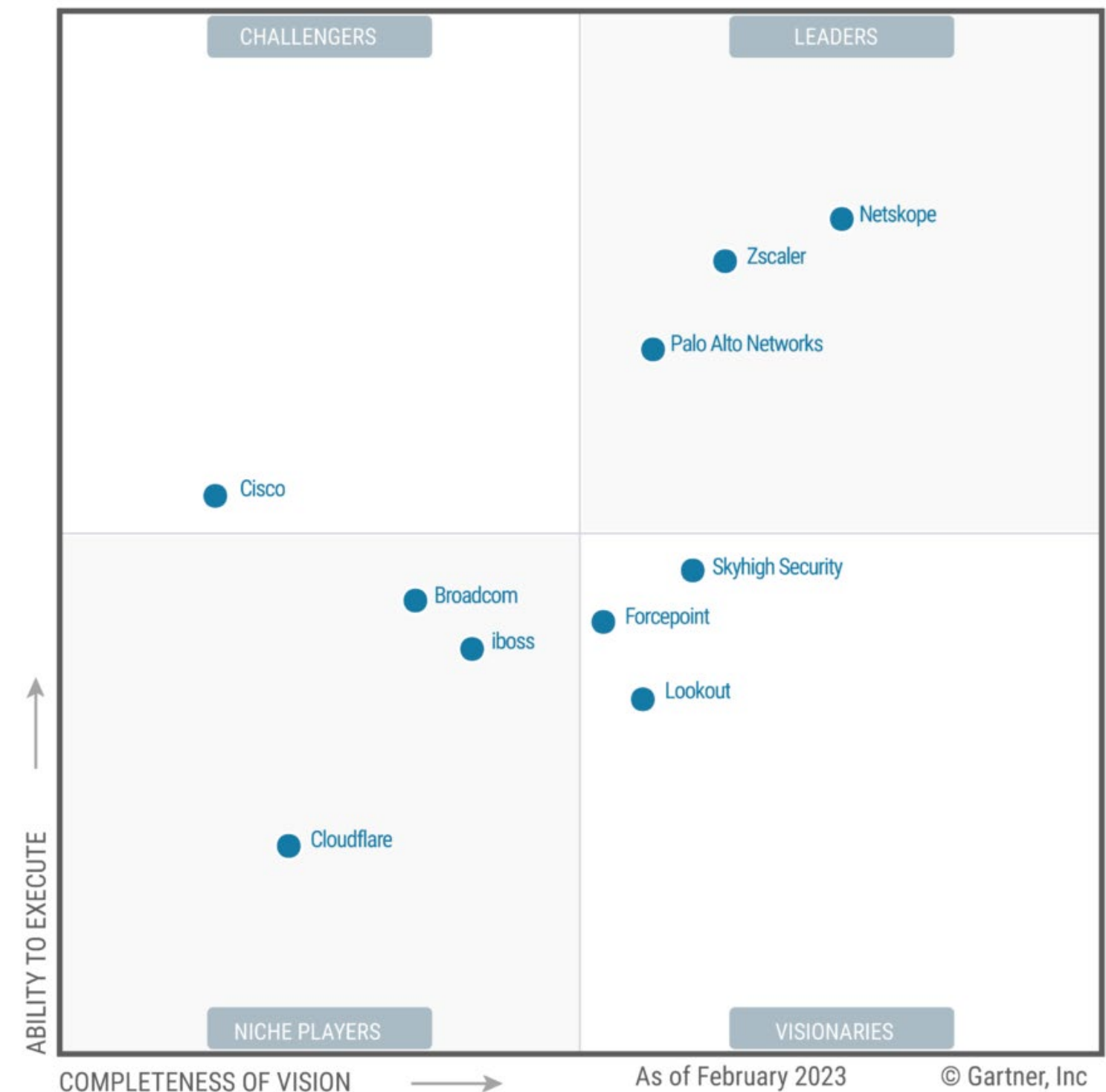


Summary

- Support direct-to-net, no backhauling
- Consolidate security into a cloud-native platform
- Reduce complexity and Reduce hardware
- Security for any user, any location, any app
- Protect data everywhere – endpoint to cloud
- Zero Trust Architecture including ZTNA
- Single console, unified policies, single agent
- Private global security network with low latency

Netskope Security Service Edge: Highest in Execution, Furthest in Vision!

Figure 1: Magic Quadrant for Security Service Edge



Source: Gartner

Thank you

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