# You've Got Cloud Security All Wrong — Why Identity and Data Security Are Paramount in a Cloud World

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# The 90s Were Cool … but …

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# Is This Leveraging the Cloud?

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# Transportation: Horse and Electric Cars ...

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# We Tell You That This Is Cloud Security



As of July 2020

**Plateau will be reached:**
○ less than 2 years   ○ 2 to 5 years   ● 5 to 10 years   △ more than 10 years   ⊗ obsolete before plateau
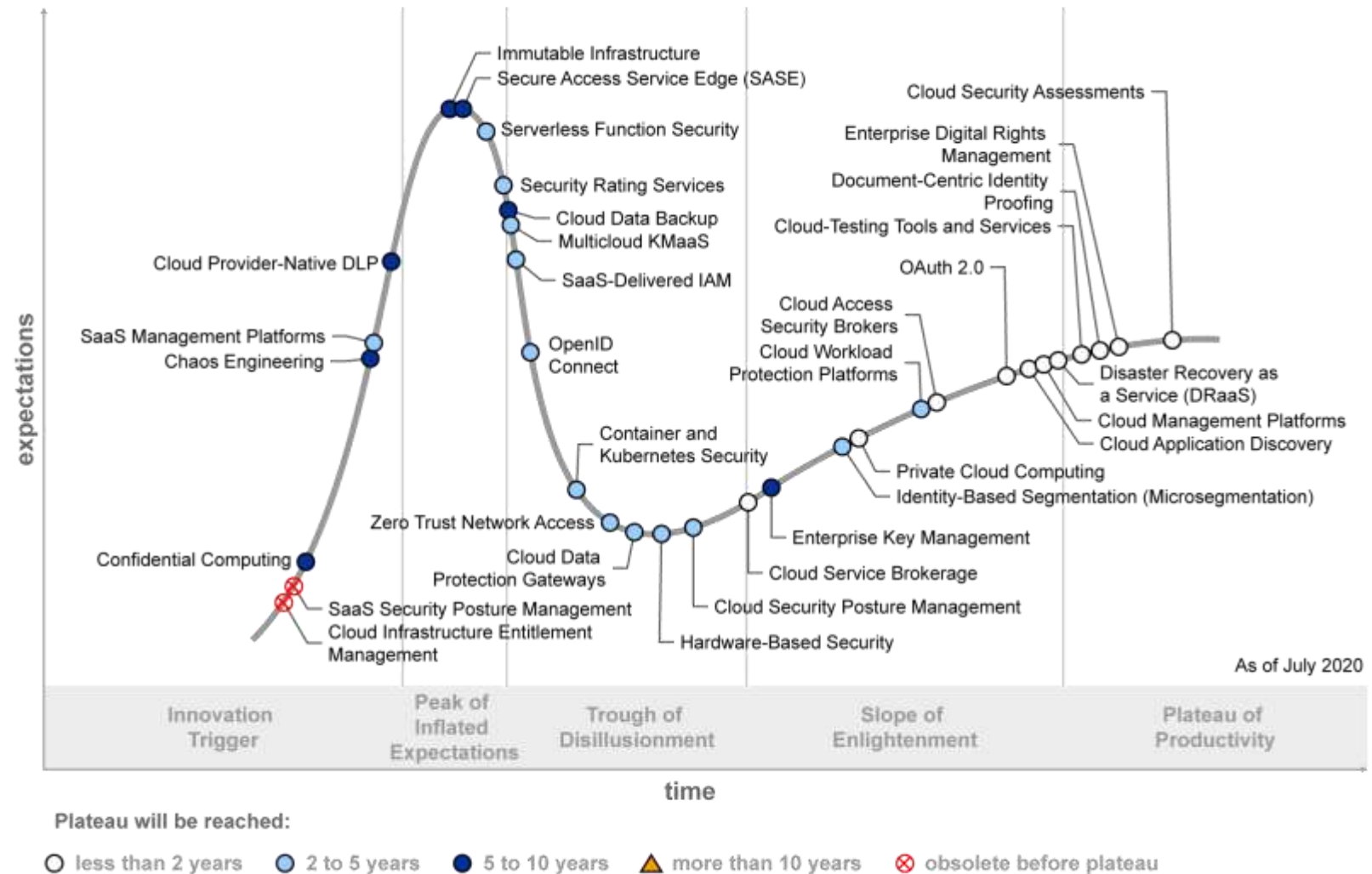
From "Hype Cycle for Cloud Security, 2020," 17 July 2020 (G00448013)

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Clear Skies but We Know —
The Future Is Cloudy

# Key Issues

1. Cloud is here to stay so we must move on!

2. What are the modern day approaches and recommendations?

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# It Was Easy to View the World as Fortresses and Moats

# But That's Not the Case Anymore!

- The network is no longer a position of advantage.

- Identity is now the new perimeter.

- And your data is flowing everywhere!

- Need to embrace the future!

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# It's About Digital Trust!

**Digital Business**

**Digital Trust**

People

Process

Technology

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# A Lot of Silos

IAM

Network Security

Data Security

Application Security

...
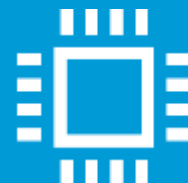
n-Security tool(s)

All of these are still important —
but we're about to see a major change ...

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# Network Versus Identity-Based Access

## VPN/Network

- Network based access
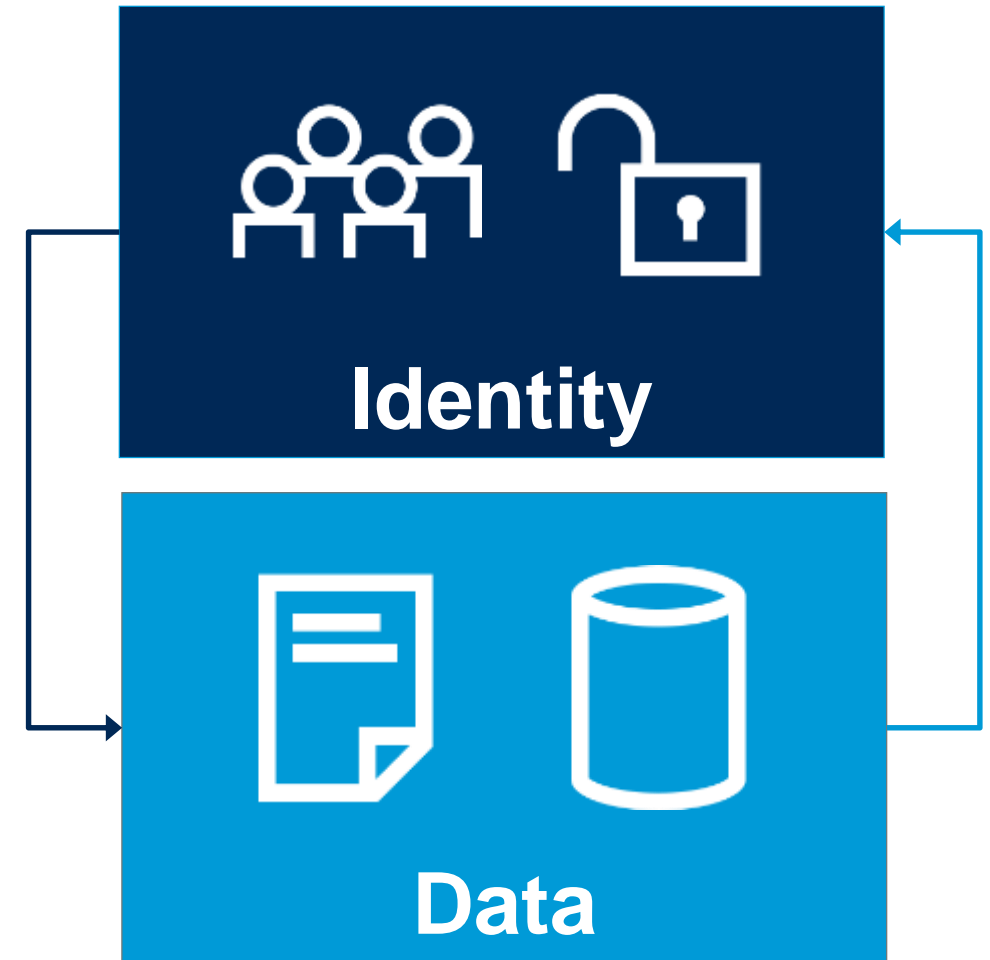- Trust — due to being in the network

## ZTNA

- Zero trust network access
- Identity-based access
- Entity and contextual trust

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# Through 20____, >99% of cloud security failures will be the customer's fault.

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# The Cloud Focuses Our Attention on What Matters: Data and Identity

| IaaS |
|---|
| People |
| Data |
| Applications |
| Runtime |
| Middleware |
| Operating System |
| Virtual Network |
| Hypervisor |
| Servers |
| Storage |
| Physical Network |

| PaaS |
|---|
| People |
| Data |
| Applications |
| Runtime |
| Middleware |
| Operating System |
| Virtual Network |
| Hypervisor |
| Servers |
| Storage |
| Network |

| SaaS |
|---|
| People |
| Data |
| Applications |
| Runtime |
| Middleware |
| Operating System |
| Virtual Network |
| Hypervisor |
| Servers |
| Storage |
| Network |

CSP Responsibility

Customer Responsibility

Identity

Data

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# So What Does This Mean for You?

- You have a responsibility to establish and maintain trust

- Emphasize now on identity and data

- Aim for zero trust with adaptive trust as the goal (CARTA!)
    - Zero trust is just the first step!

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# Key Issues

1. Cloud is here to stay so we must move on!
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Remember It's About Access!
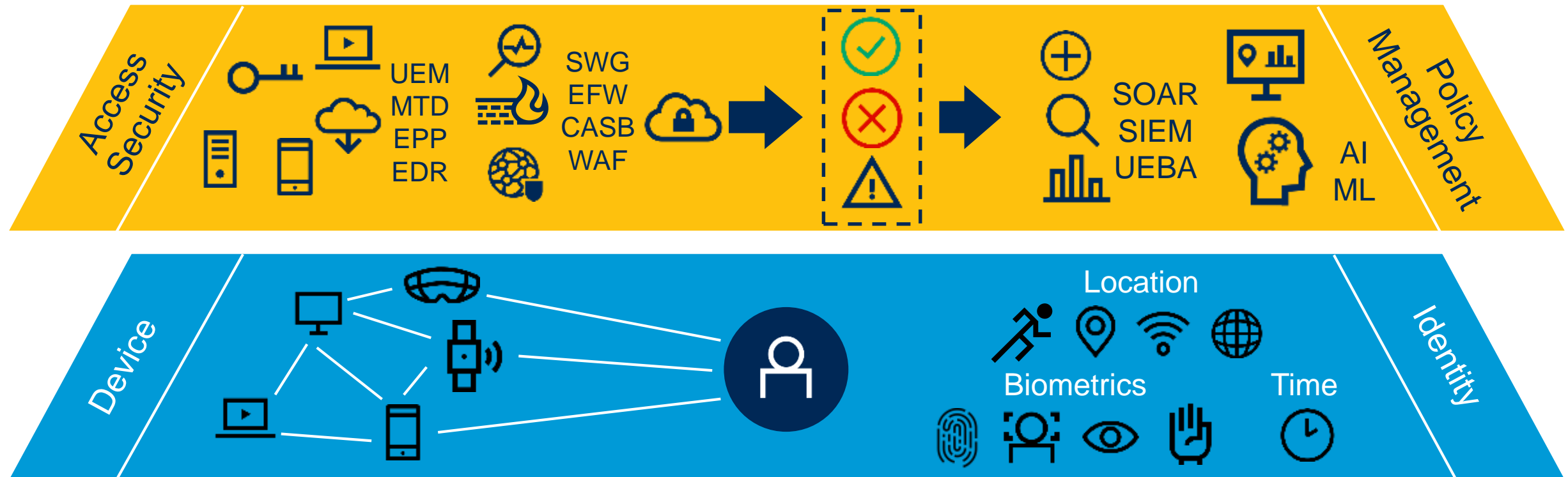
# Identity and Access Management Defined



**IAM** ensures that the **right** people get the **right** access to the **right** resources at the **right** times for the **right** reasons, enabling the **right** business outcomes.

IAM = Identity and Access Management
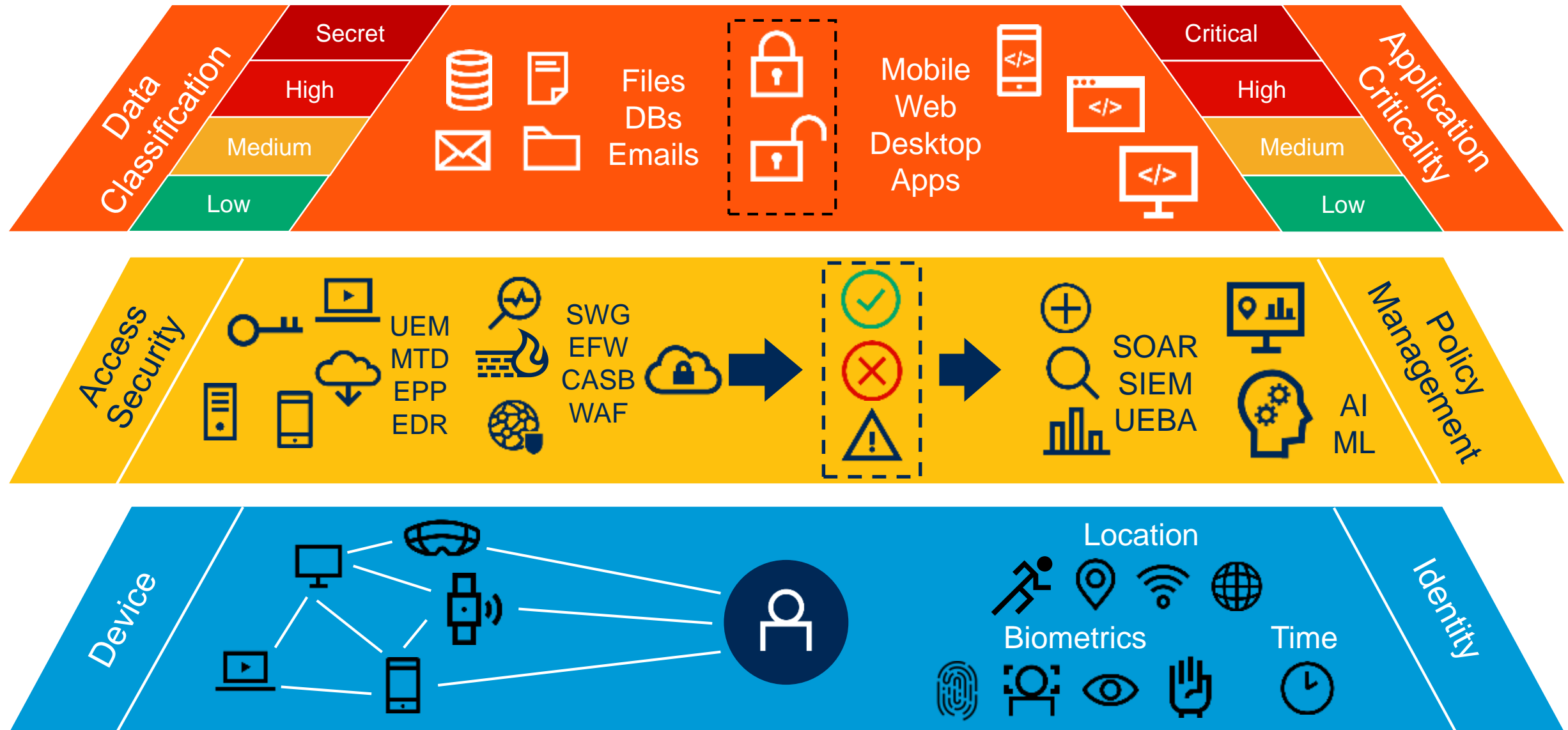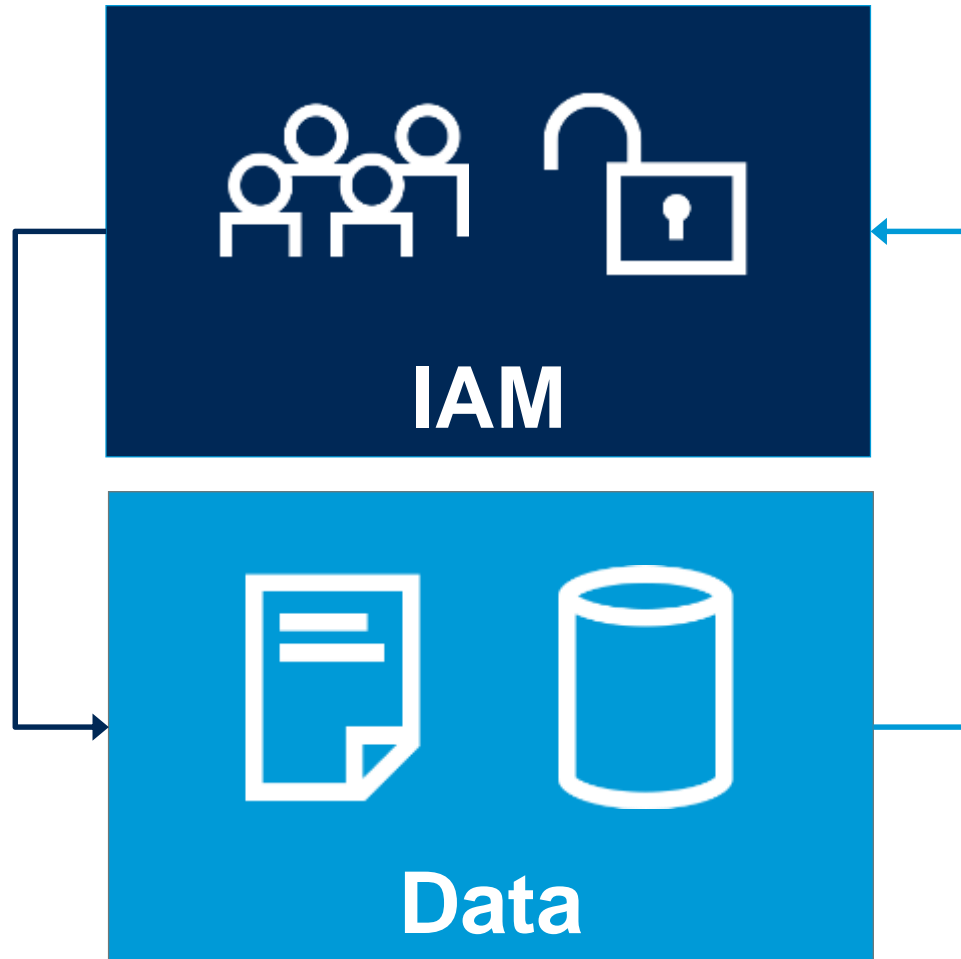
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# Identity Is the New Perimeter

Secure Access and Automate Policy

# Securing the Data and Applications

# IAM and Data Security Market Movements
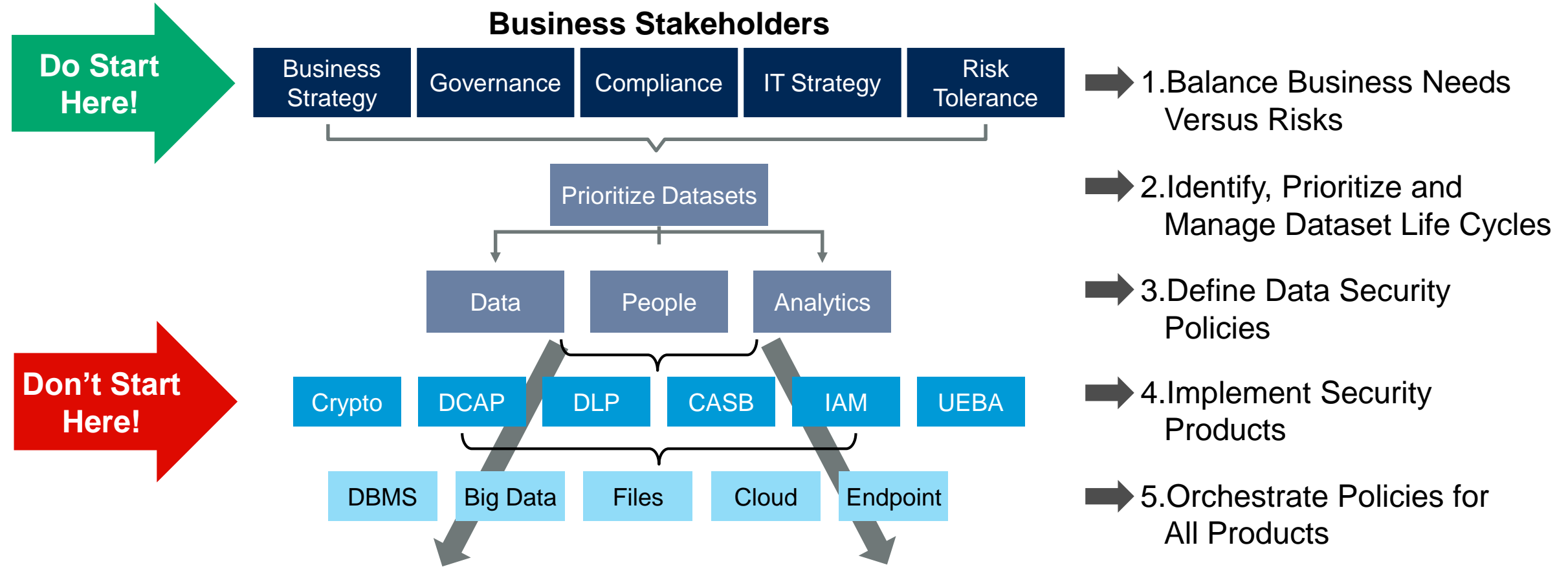
**This is happening right in front of us!**

# Cool — So Now What?

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# Then Develop a Data Security Governance Strategy

**DSG Framework**

**Business Stakeholders**

**Do Start Here!** →

| Business Strategy | Governance | Compliance | IT Strategy | Risk Tolerance |
|---|---|---|---|---|

→ 1. Balance Business Needs Versus Risks

**Prioritize Datasets**

→ 2. Identify, Prioritize and Manage Dataset Life Cycles

| Data | People | Analytics |
|---|---|---|

→ 3. Define Data Security Policies

**Don't Start Here!** →

| Crypto | DCAP | DLP | CASB | IAM | UEBA |
|---|---|---|---|---|---|

→ 4. Implement Security Products

| DBMS | Big Data | Files | Cloud | Endpoint |
|---|---|---|---|---|

→ 5. Orchestrate Policies for All Products

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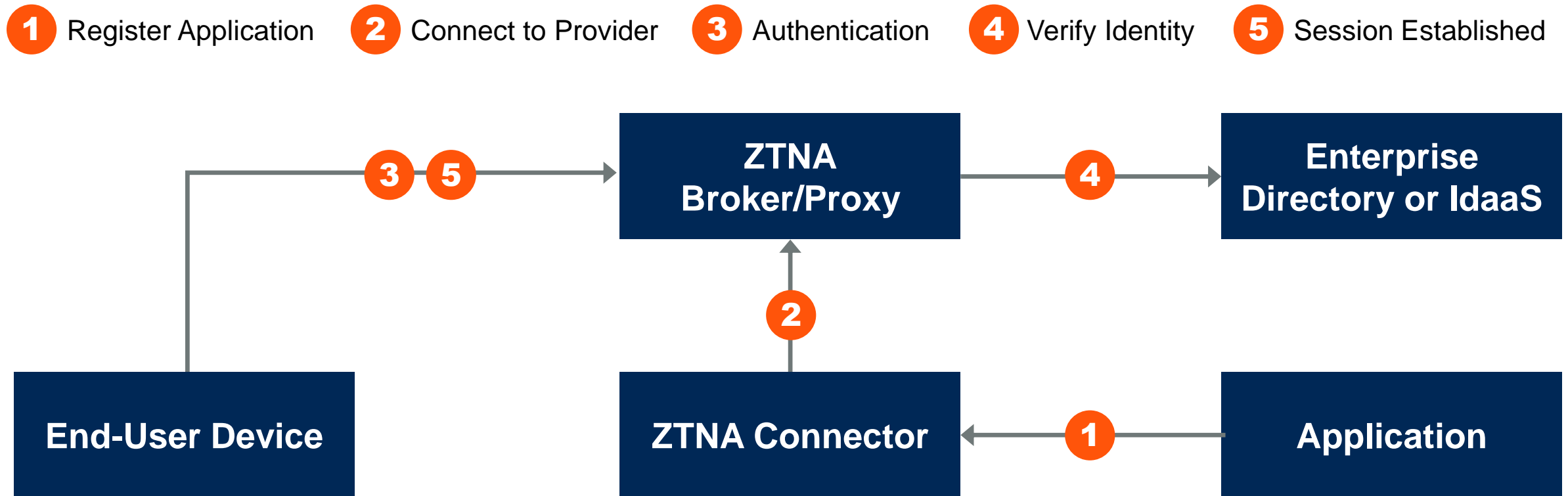# Cloud Security Strategy Complete

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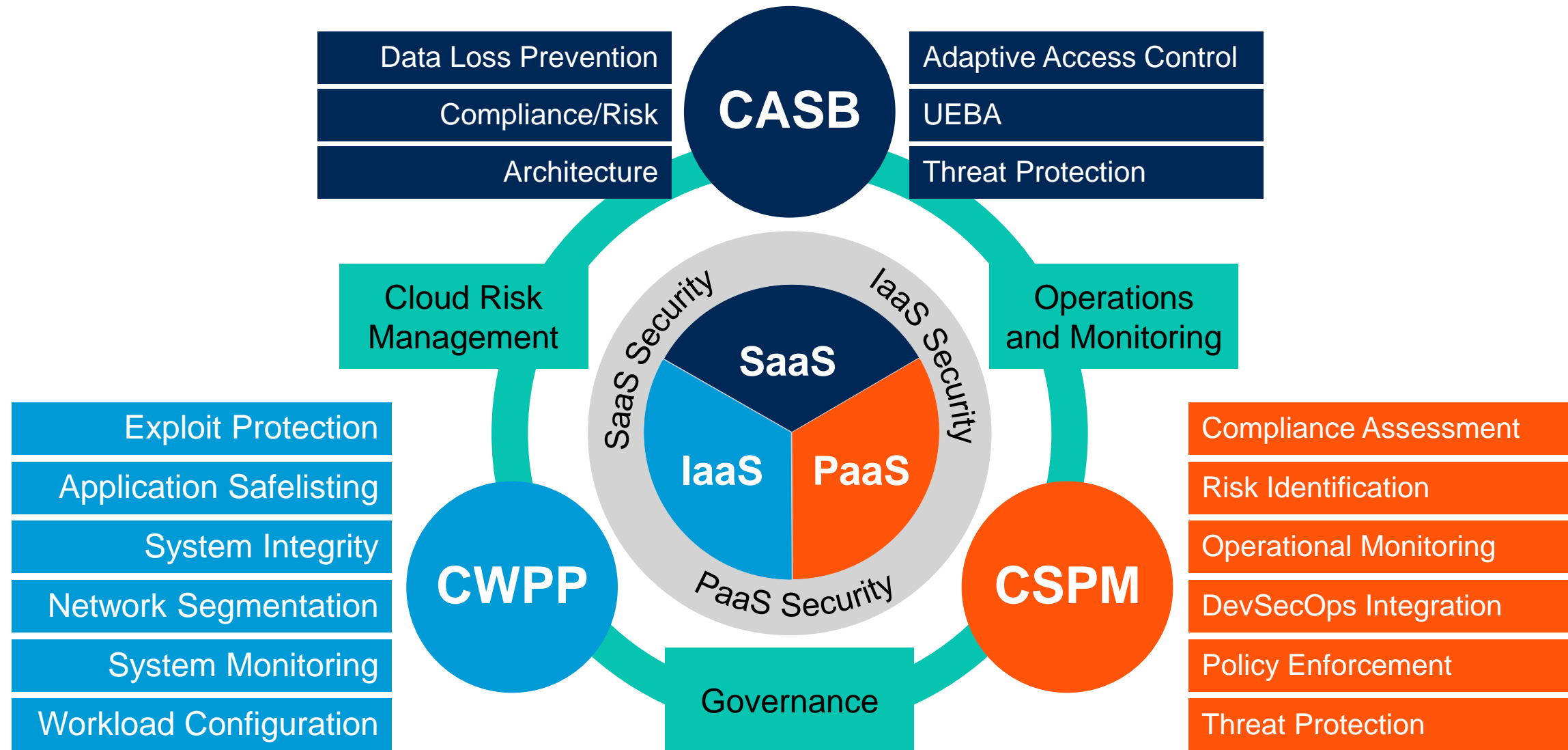
# ZTNA: Identity-Centric and Data-Centric Protection

## Conceptual Model of Service-Initiated ZTNA

**1** Register Application    **2** Connect to Provider    **3** Authentication    **4** Verify Identity    **5** Session Established

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# Check Out These Sessions at This Virtual Summit

- Outlook for IAM
- Outlook for Data Security
- Outlook for Cloud Security
- A Pragmatic Approach to Implementing a ZT Security Architecture
- Applying CARTA to Access Management

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# Recommendations

- ✓ Orient strategies around identity and data security.

  – Humans and !Humans (Machines!)

- ✓ Review and revise existing IAM and data security tools.

- ✓ Evaluate and deploy CASB for SaaS governance.

- ✓ Evaluate and implement ZTNA for employee-facing and partner-facing applications (at least one this year).

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# Recommended Gartner Research

○ **Mitigate Common IaaS Security Risks With Identity and Access Management**
Felix Gaehtgens and Steve Riley (G00311111)

○ **Hype Cycle for Cloud Security, 2020**
Steve Riley, Jay Heiser and Tom Croll (G00448013)

○ **Hype Cycle for Identity and Access Management Technologies, 2020**
Ant Allan (G00450324)

○ **Hype Cycle for Data Security, 2020**
Brian Lowans (G00448204)

○ **10 Best Practices for Successful CASB Projects**
Neil MacDonald (G00336456)

○ **Market Guide for Zero Trust Network Access**
Steve Riley, Lawrence Orans and Neil MacDonald (G00726817)

○ **Use the Data Security Governance Framework to Balance Business Needs and Risks**
Brian Lowans, Bart Willemsen and Marc-Antoine Meunier (G00465140)

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