AWS re:Invent

Why Well-Architected Cloud?

35%
was the amount of wasted cloud spend by cloud users in 2019
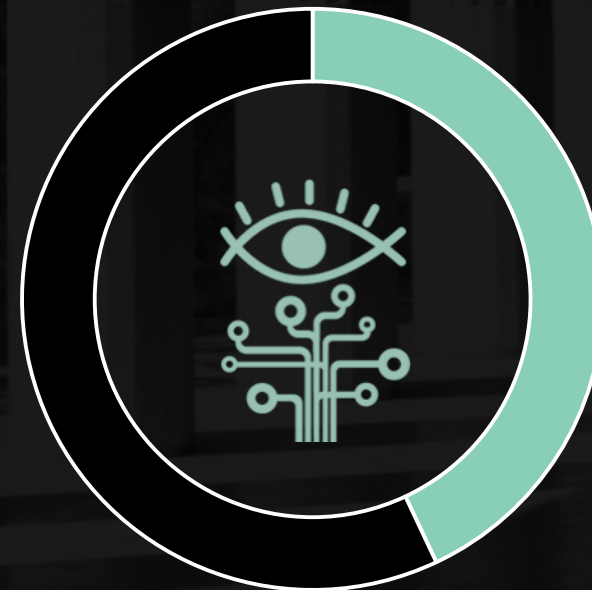
38%
SOCs globally are struggling with compliance trying to protect cloud workloads

43%
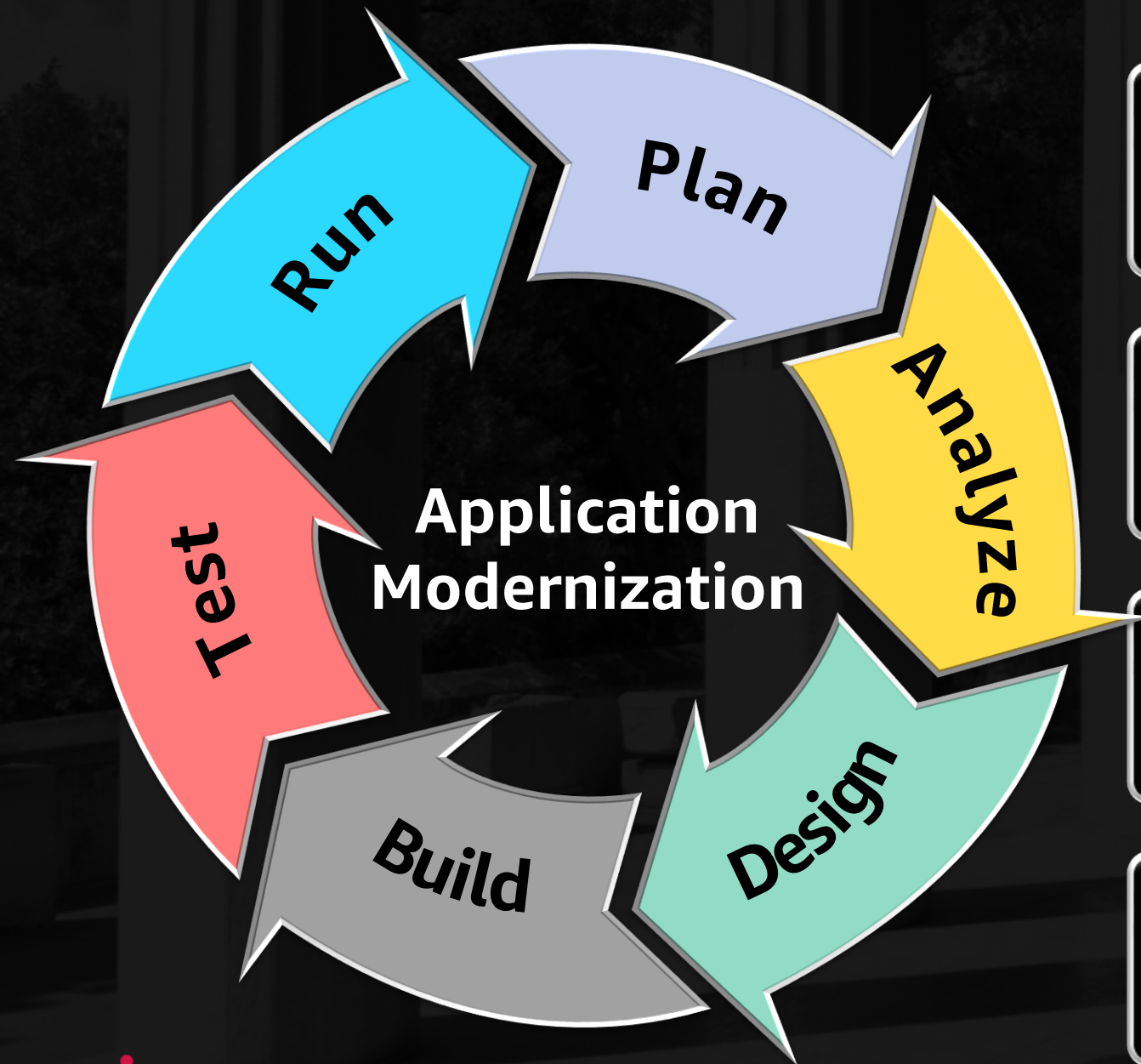SOCs globally are struggling with visibility into infrastructure security

62%
organizations globally rank misconfiguration of the public cloud platform as the biggest security threat

Misconfiguration/wrong setup of public cloud platform by the users

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Sources: RightScale 2019 State of the Cloud Report from Flexera (Stat 1)
2018 Cloud Security Report, Cybersecurity Insiders, Crowd Research Partners (Stats 2, 3, and 4)

Benefits of a Cloud Architecture Framework

U-Nav Cloud Assessment

CloudForte®

Build and Deploy Faster

Lower or Mitigate Risks

Continuous Improvements

Data-Led Decisions

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CloudForte®

TS
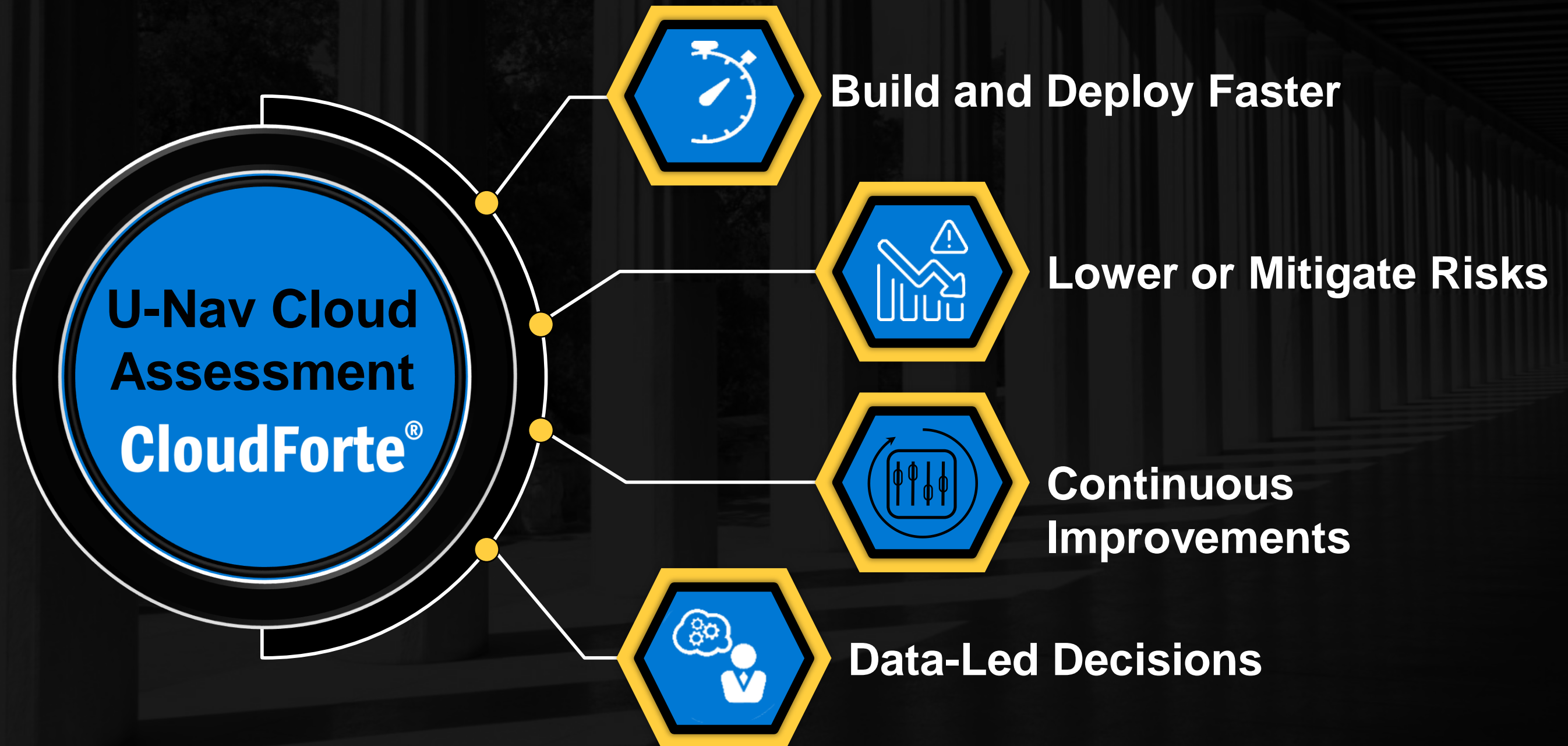
Unisys Cloud Architecture Navigator™

Review and Optimize your cloud workloads using Unisys Cloud Architecture Navigator™

Define a Workload

Define a workload based on one of your existing cloud applications.

Define Workload

Workloads

< 1 >

Search by workload name

Generate Report | Edit | Delete

Name	No. of Milestones	Percentage Complete	High Risk	Medium Risk	Created By	Last Updated
○ Healthcarew1	1	100 %	43	2		Jul 18, 2019 12:57 PM UTC +05:30
○ Automotive Wl Assessment	1	75 %	29	0		Jul 18, 2019 11:10 AM UTC +05:30

Unisys Cloud Architecture Navigator (U-Nav)
Do Cloud the Right Way. Do It Securely. Do It Consistently.

Review for Best Practices

Ongoing Assessment

Optimize and Remediate

Identify the workload to review and answer a series of questions

Review your answers against the pillars

- Operational Excellence
- Security
- Reliability
- Performance Efficiency
- Cost Optimization
- **Application Modernization**

Get related best practices

Generate a report

Review results in a single dashboard

Automated Scan

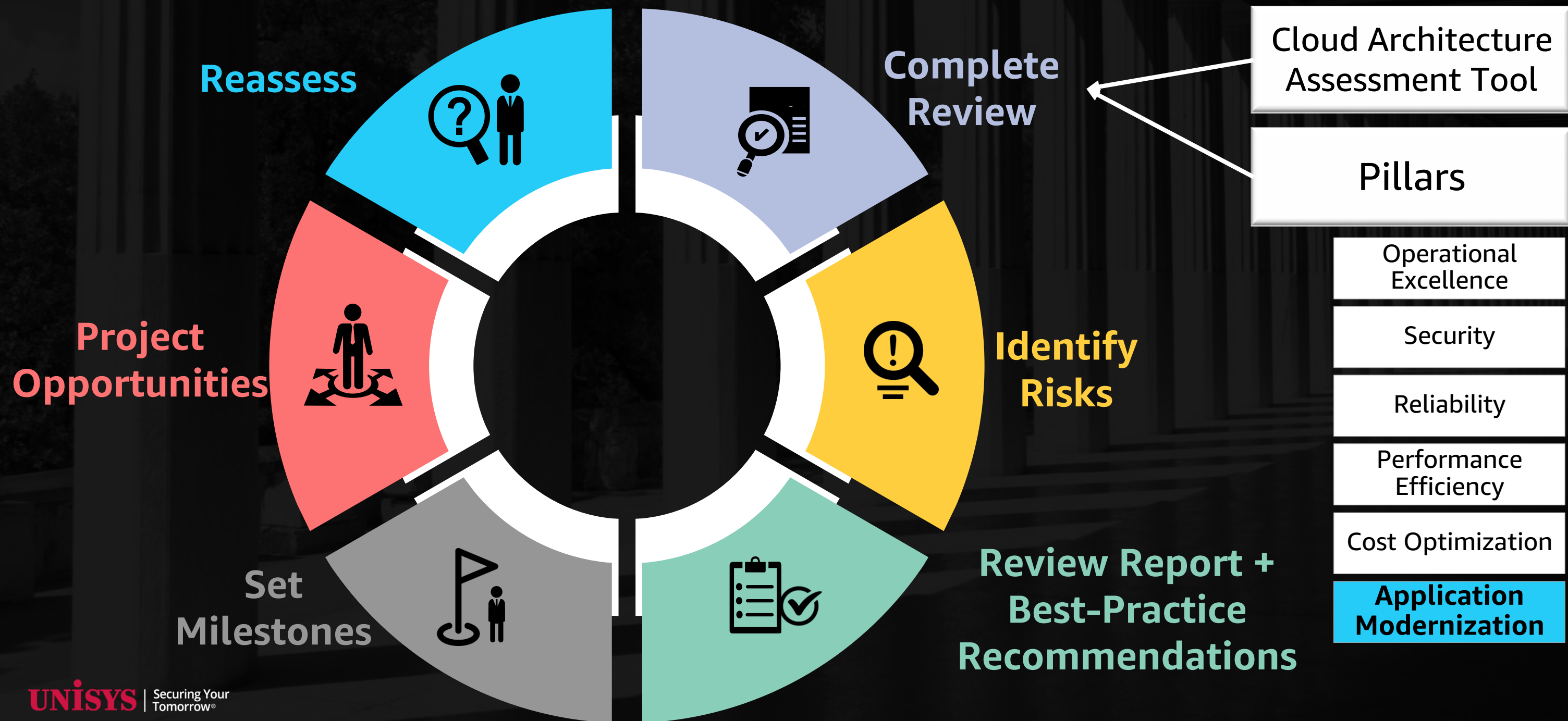Best-Practice Policies

Reports and Results

Scheduled Remediation

Unisys Architect Enabled

Cost, Security, and Performance Optimization

The Application Modernization Pillar

Pre-Migration Review
Pre-migration application
review report and best practices

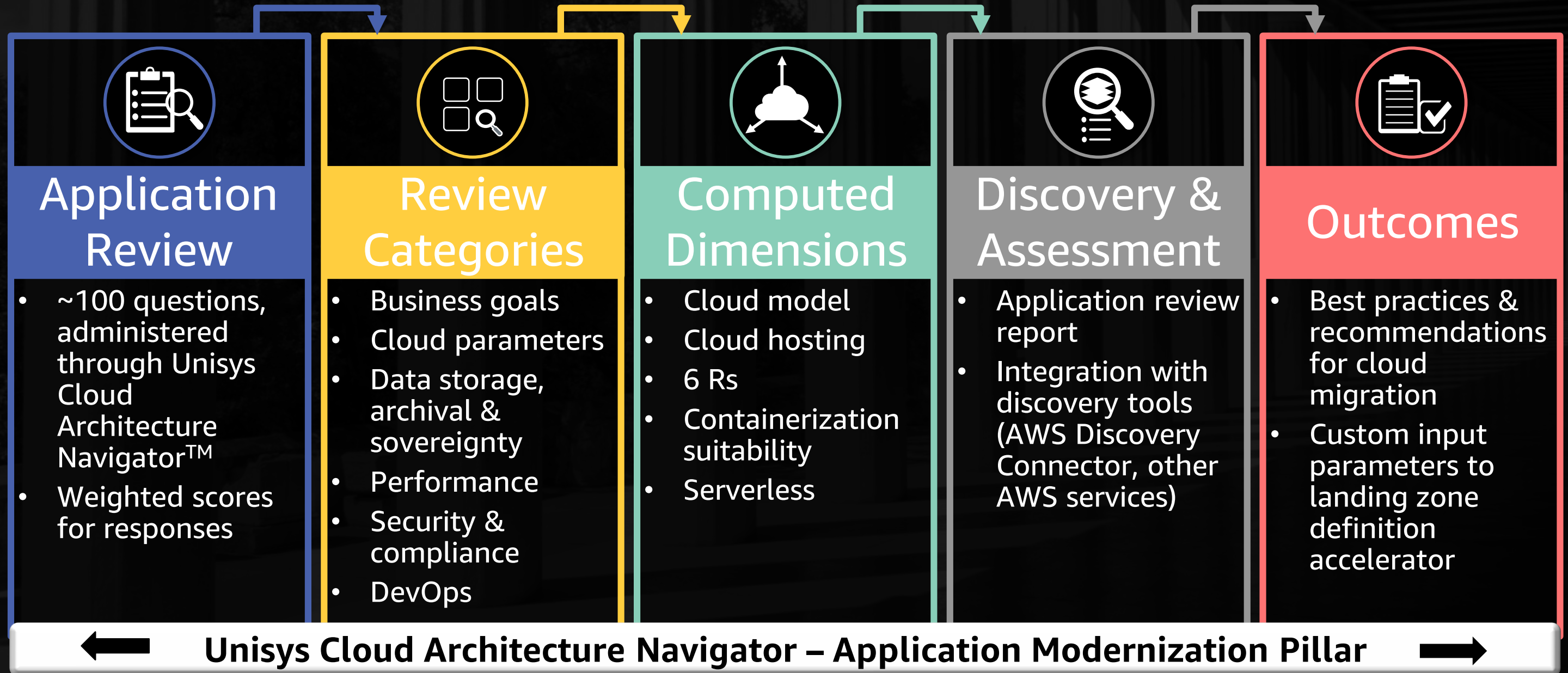**Automated Integration with Accelerators to:**
1. Implement application landing zones & implement logging and monitoring
2. Implement compliance controls: PCI, SOC, HiTrust

Best Practices
1. Post-migration application review
2. U-Nav integration with discovery tools
3. U-Nav integration with application analysis

Pre-Cloud Migration Application Review Process Flow

Application Review

- ~100 questions, administered through Unisys Cloud Architecture Navigator™
- Weighted scores for responses

Review Categories

- Business goals
- Cloud parameters
- Data storage, archival & sovereignty
- Performance
- Security & compliance
- DevOps

Computed Dimensions

- Cloud model
- Cloud hosting
- 6 Rs
- Containerization suitability
- Serverless

Discovery & Assessment

- Application review report
- Integration with discovery tools (AWS Discovery Connector, other AWS services)

Outcomes

- Best practices & recommendations for cloud migration
- Custom input parameters to landing zone definition accelerator

← **Unisys Cloud Architecture Navigator – Application Modernization Pillar** →

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Application Modernization Sample Questions (2/2)

Computed Dimension	Attributes	Sample Questions
DevOps	Maturity & Recommendations	• Is CI/CD implemented for this application?
Landing Zone	Definition Parameters	• Will your application be accessed by external resources? • Does your application follow a centralized approach for Identity management (AD)? • Does your application need high availability deployment with complex security requirements?
Cost	Implementation Optimization & Recommendations	• Is your application spend based on demand?
Performance	Implementation Maturity & Recommendations	• Do you have a structured performance measurement system for this application?
Security	Implementation Maturity & Recommendations	• Do you have adequate Internet security in place, through anti-DDOS, firewalls, intrusion detection & prevention, TLS, anti-virus, anti-malware, etc.?
Reliability	Implementation Maturity & Recommendations	• Do you have a streamlined DR mechanism implemented for this application?
Operational Efficiency	Implementation Maturity & Recommendations	• Do you have structured application monitoring solution in place?

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Application Modernization Considerations and Related Attributes

Cloud Model
- IaaS
- PaaS
- Serverless

6 Rs
- Re-platform
- Re-host
- Refactor
- Replace
- Retire
- Retain

Cloud Hosting
- Public Cloud
- Private Cloud
- Hybrid Cloud

Containerization
- Recommendations

DevOps
- Maturity & Recommendations

Landing Zone
- Definition Parameters

Cost Optimization
- Implementation Optimization & Recommendations

Security
- Implementation Maturity & Recommendations

Performance
- Implementation Maturity & Recommendations

Reliability
- Implementation Maturity & Recommendations

Operational Efficiency
- Implementation Maturity & Recommendations

How Does Your Cloud Rate?

Pillar	High Risk	Medium Risk	Well Architected	Not Applicable	Answered/ Total
Security	7	1	1	0	9/10
Cost	5	4	2	0	11/14
Reliability	2	0	1	0	3/5
Performance	1	1	0	0	2/4
Operations	4	1	1	0	6/6
Application Modernization	6	2	1	0	9/11

High 25   **Medium** 9   **W/A** 6

Application-Specific Recommendations Sample

Review Attribute: Landing Zone Recommendations (Application-Specific)
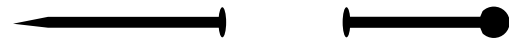
- Implement a landing zone

- Implement both public & private subnets

- Implement a hub-and-spoke pattern shared services VPC that offers common infrastructure support services and provides application-to-application peering

Are You Doing These Things?

U-Nav Cloud Assessment

Helping cloud architects utilize a milestone-based approach

Taking a data-driven approach to reviewing cloud architectures for application workloads

Leveraging best practices across key cloud pillars including Application Modernization

Providing guidance on improvement and remediation

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Do Cloud Right
Do It Securely
Do It Consistently

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Please complete the session survey in the mobile app.