Securing The Future With Quantum-Safe Solutions

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Quantum computing will solve today's unsolvable problems, opening up
A NEW REALM OF POSSIBILITIES.
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THE "QUANTUM"
RACE IS ON
Microsoft
Google
rigetti
IBM
D:Wave
The Quantum Computing Company™
intel
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THE CHALLENGE
Quantum computing will break today's public key encryption standards.
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QUANTUM COMPUTING WILL PUT AT RISK
Confidentiality
Roots of Trust
Identity Management
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TIMELINE TO QUANTUM CHALLENGE:

2026

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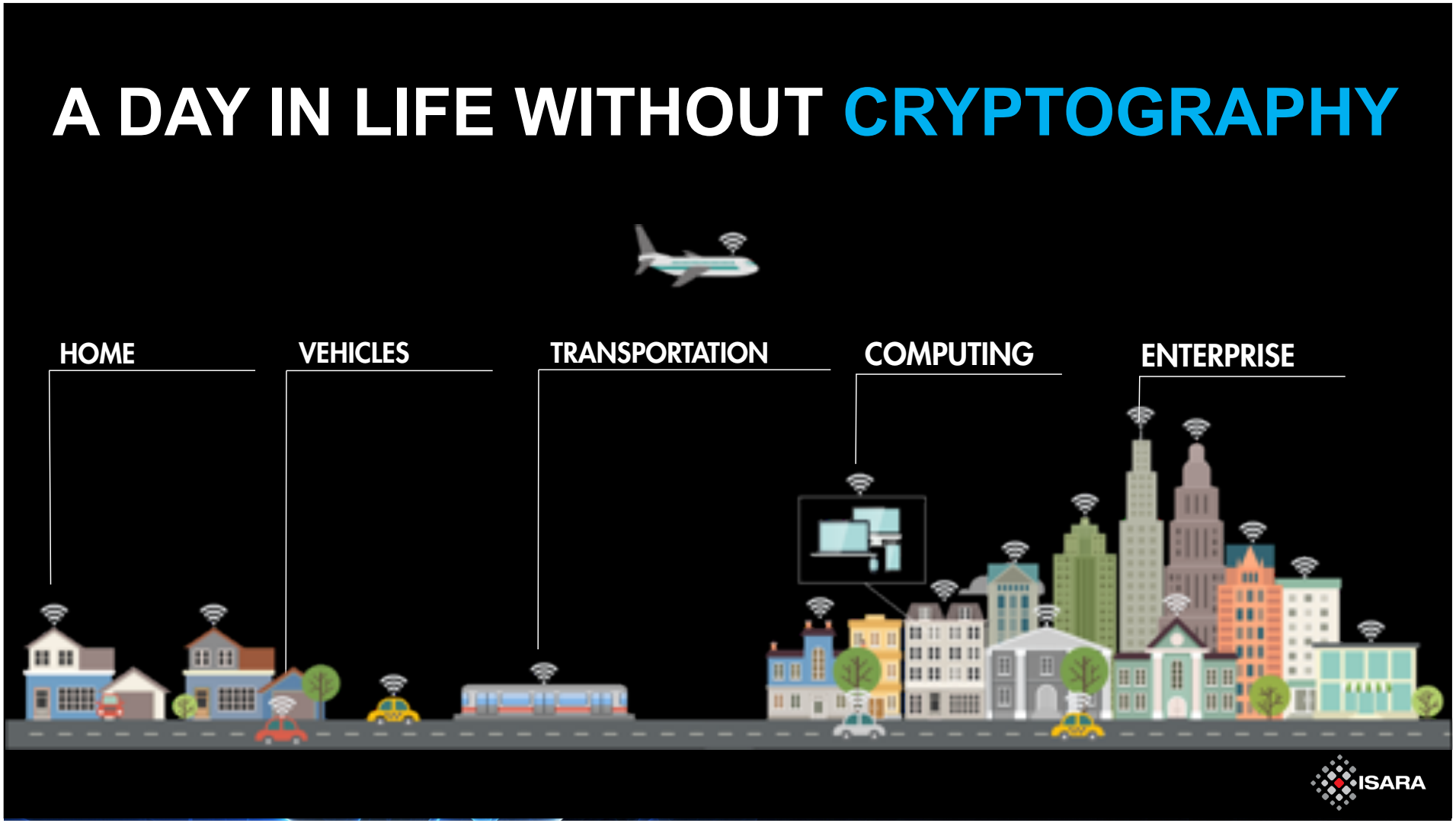
A DAY IN LIFE WITHOUT CRYPTOGRAPHY



THE COST OF DATA BREACHES CONTINUE TO RISE

Global Average Cost Per Incident

$4M

⬆29% since 2013

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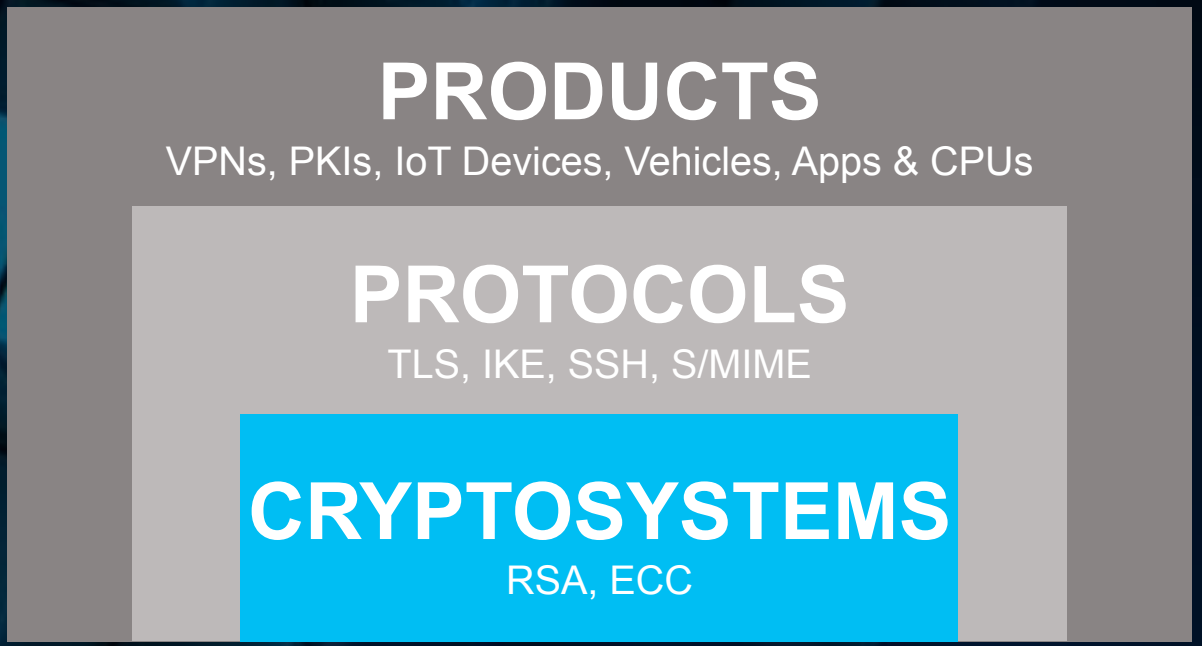
WHAT'S VULNERABLE?



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QUANTUM-SAFE CONSIDERATIONS

- Life of your secrets
- Threat horizon
- Ability to integrate tools
- Upgrade costs
- Value of your assets
- Key infrastructure
- Critical technologies

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SUCCESS IS A
SEAMLESS
(and cost effective)
MIGRATION
…with no impact to end user experience.
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PATHWAYS TO QUANTUM SAFETY

Quantum Key Distribution (QKD)

Quantum Random Number Generation (QRNG)

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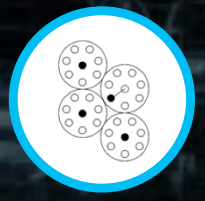
Quantum-Safe Cryptography

THE "NEW" MATH

Hash-based signatures

Isogeny-based

Multivariate-based



Code-based

Lattice-based

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SUCCESS REQUIRES
STANDARDS
NIST
National Institute of
Standards and Technology
U.S. Department of Commerce
ETSI
IETF
Accredited Standards
Committee X9 Inc.
Financial Industry Standards
ISO
ITU
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NEXT STEPS…

Start now.
Identify secrecy obligations.
Start prototyping.
Engage vendors.
Consider the long-term.


QUANTUM-SAFE
The next generation
of cybersecurity
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ISARA's SOLUTIONS

RADIATE SECURITY SUITE

Optimized library of quantum-safe algorithms and migration tools.

PROFESSIONAL SERVICES

Architecture and design
Migration planning
Custom Implementation
Contract Research

LICENSING

Custom licensing for OEM's and Security Solutions Developers

TESTING & PILOTING

Full end to end test environment
Pilot set-up and monitoring

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CLEARING THE PATH TO QUANTUM-SAFE SECURITY

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