

# THE JOURNEY TO QUANTUM SAFETY

What can executives & cybersecurity professionals do to prepare for the post-quantum era?

## HOW WILL QUANTUM TECHNOLOGIES CHANGE THE WORLD?

Quantum technologies allow you to **solve** complex problems quicker than ever before.



Cybersecurity, big data & AI, critical infrastructure, scientific & medical research, economic analysis, IoT

Just some of the areas quantum technologies will improve.

**\$13.3bn USD**

The overall quantum technology market value by 2023<sup>1</sup>.



Some of the countries and regions investing in quantum research.

Honeywell Intel

Google Rigetti

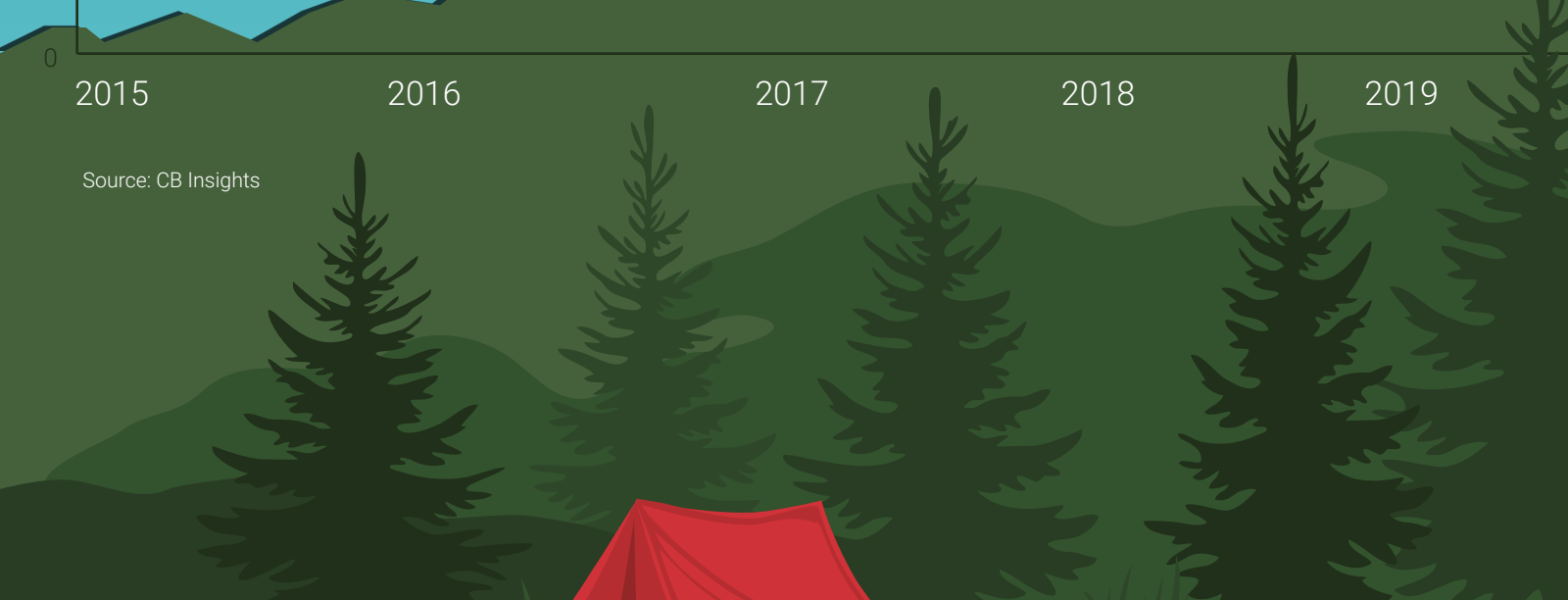
Microsoft IBM

Some of the organisations investing in commercialising quantum tech.

<sup>1</sup>Quantum Technology Market: Computing, Communications, Imaging, Security, Sensing, Modeling and Simulation 2018 – 2023, Research and Markets

## A GROWING AWARENESS

Quantum tech is developing at an **exponential** rate, and people are noticing.



Source: CB Insights

## THE ROLE OF QUANTUM IN CYBERSECURITY

**72%** of organisations believe quantum computing will affect them within 5 years<sup>2</sup>.

**Download now, decrypt later**  
A technique cyber-criminals use where encrypted data is stolen now & decrypted when tech is available.

**8 hours**  
The time in which a quantum computer could break today's encryption<sup>3</sup>.



<sup>2</sup>Thales 2020 Data Threat Report  
<sup>3</sup>MIT Technology Review (<https://www.technologyreview.com/s/613596/how-a-quantum-computer-could-break-2048-bit-rsa-encryption-in-8-hours/>)

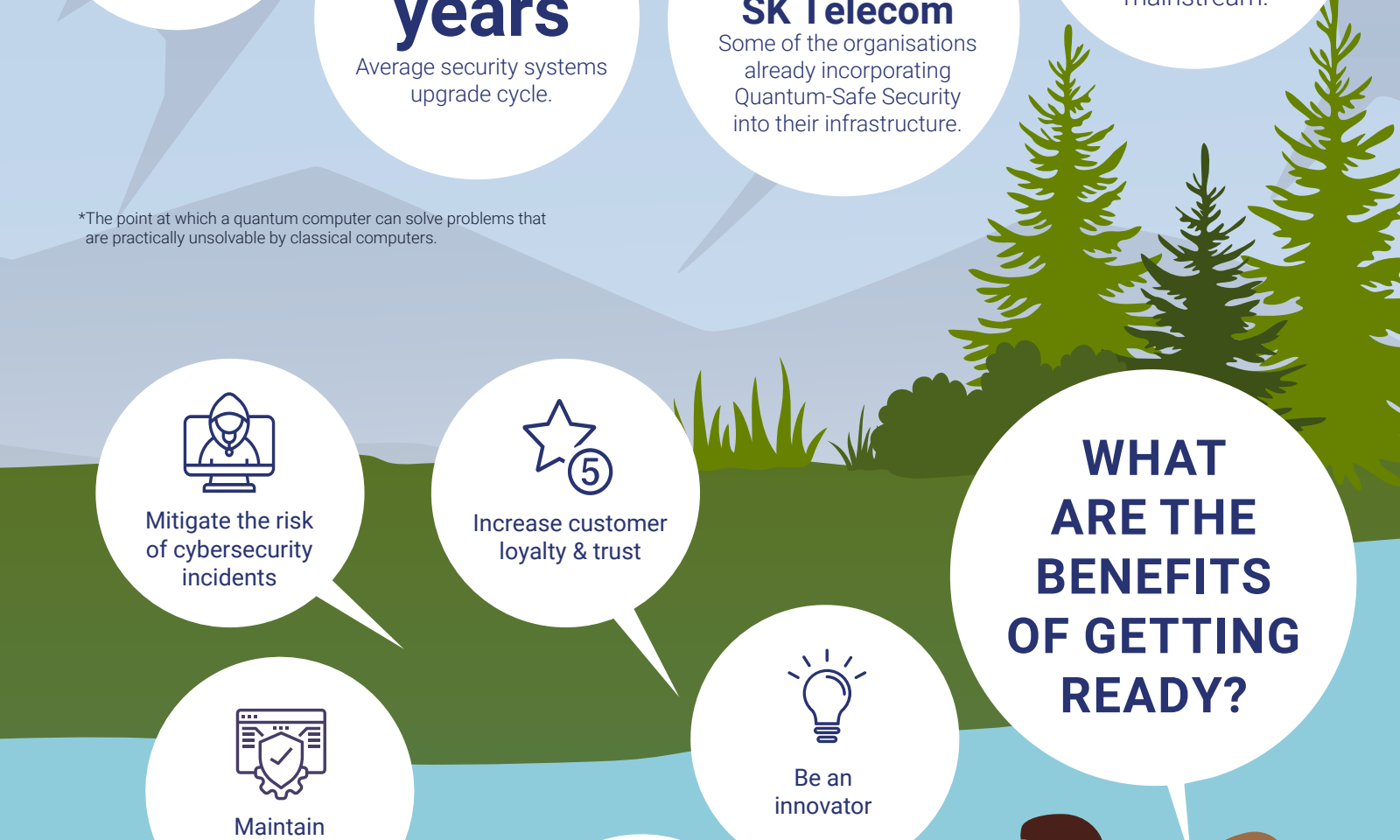
## INTRODUCING QUANTUM-SAFE SECURITY

Thankfully, quantum-safe technologies already exist that **safeguard** you against classical & quantum attacks.



## WHY SHOULD YOU START PREPARING?

The rapid pace of change means it's time to ready yourself for the quantum age **today**. Being proactive & responsible ensures staff, customers & assets are protected.



\*The point at which a quantum computer can solve problems that are practically unsolvable by classical computers.



## THE STEPS TO QUANTUM-SAFE SECURITY



## FIND OUT MORE



More on Quantum-Safe Security



The Executive's Guide to Quantum-Safe Security



Quantum-Proofing Your Organisation

## BUILDING A TRUSTED FUTURE

ID Quantique is the world leader in Quantum-Safe Security and Quantum Sensing. Our solutions and expertise helps organisations across the world leverage quantum technologies today, and prepare themselves for the post-quantum era.

T: +41 22 301 83 71 | E: [info@idquantique.com](mailto:info@idquantique.com) | W: [idquantique.com](http://idquantique.com)

[@IDQuantique](https://twitter.com/IDQuantique) [in](https://www.linkedin.com/company/id-quantique) ID Quantique

