

2018 THALES DATA THREAT REPORT

Trends in Encryption and Data Security

U.S. HEALTHCARE EDITION

2018 THALES DATA THREAT REPORT

NOW IN ITS SIXTH YEAR



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1,200+ SENIOR IT SECURITY EXECUTIVES SURVEYED GLOBALLY | 500 U.S. TOTAL | 100 U.S. HEALTHCARE | 100 GLOBAL HEALTHCARE

HEALTHCARE DATA SECURITY – CODE RED

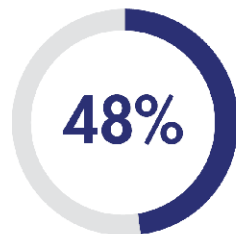
BREACHED EVER



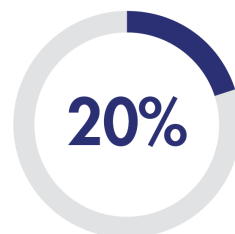
77%

More than 3 out of 4 large U.S. healthcare organizations have now been breached. The highest of any vertical we measured

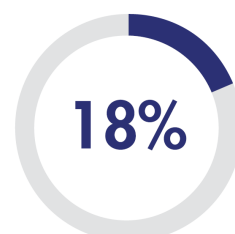
BREACHED IN THE LAST YEAR



2018



2017



2016



Rates of breaches in the last year at federal agencies are up 2.5x from 2016 in this year's results

BREACHED ... AGAIN!



10%

breached both in the last year and previously

HEALTHCARE FEELING VULNERABLE TO DATA THREATS

Rates of extremely vulnerable to data threats



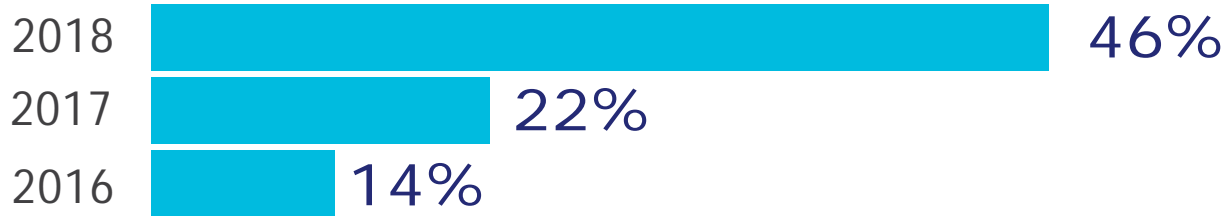
“More than three-fourths (77%) of U.S. healthcare respondents reported at least one breach at some time in the past - the highest among all U.S. verticals.”

Garrett Bekker – Principal Analyst for Information Security, 451 Research
Author of the 2018 Thales Data Threat Report

HEALTHCARE ORGANIZATIONS ARE RESPONDING

INCREASING SPENDING – RATES OF MUCH HIGHER SPENDING

Healthcare IT Security spending increases. Rates of “Much Higher” spending increases by year.



IMPLEMENTING DATA SECURITY TOOLS

Implementing now, or planning to implement these top tools for protecting sensitive data in 2018.



65%
Data masking



60%
Identity and access management



59%
Database and file encryption



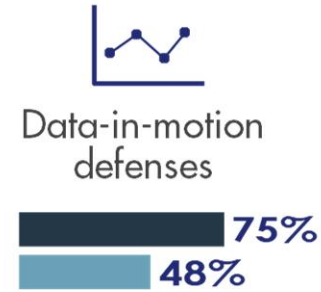
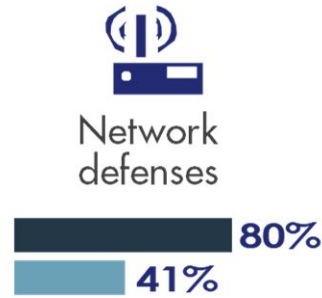
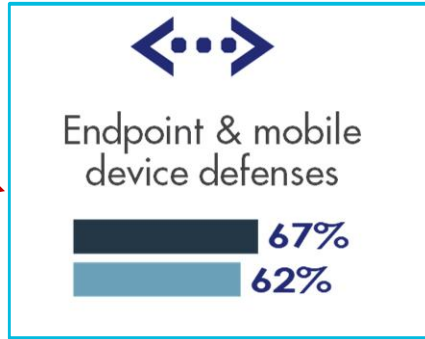
57%
Encryption in the cloud

BUT HOW EFFECTIVE WILL THAT INCREASED SPENDING BE?

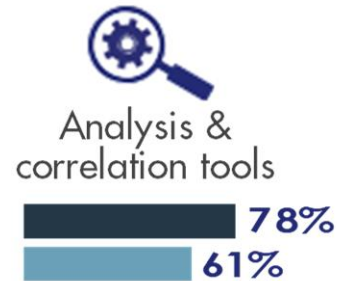
"U.S. HEALTHCARE PLANS TO SPEND THE MOST ON SECURITY FOR ENDPOINT AND MOBILE DEVICES, DESPITE RANKING THESE AS LEAST EFFECTIVE."

Garrett Bekker – Principal Analyst for Information Security, 451 Research

Least effective
but highest
spending
increase



Highly effective
but lowest
spending
increase



■ Spending Increase

■ Rated Effective

DIGITAL HEALTHCARE INITIATIVES INCREASE RISK FOR DATA

New environments require new approaches to protecting citizen data, government secrets and other sensitive information



95% use digital transformation technologies with sensitive data
(cloud, big data, IoT, containers, blockchain and mobile payments)

MASSIVE ADOPTION COMPOUNDS THE PROBLEM



DEPLOYING SENSITIVE DATA TO THE CLOUD

Multi-cloud usage compounds the problem



63% using 3 or more IaaS or PaaS providers



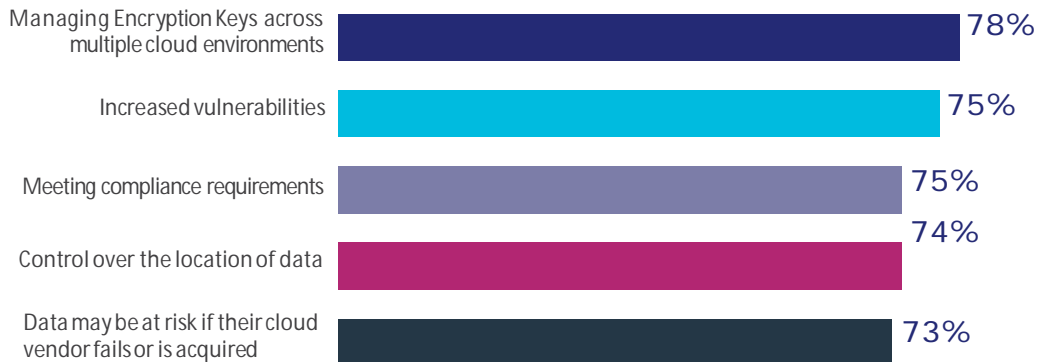
52% using 3 or more PaaS providers



48% Using more than 50 SaaS applications, where data is inherently harder to control

CONCERNS ARE HIGH

(rates of very/extremely concerned)



AND RATES OF ENCRYPTION USAGE TODAY ARE LOW



Only **32%** using encryption in the cloud today

CONTROLLING DATA IN THE CLOUD

HEALTHCARE GETS IT – CONTROL THE KEYS TO CONTROL THE DATA



48% Local control of encryption keys



29% Local control of cloud encryption keys

Control of sensitive data protected with encryption hinges on control of the encryption keys

“The healthcare vertical has emerged as a prime target for hackers. While a stolen credit card has a time-limited value (the card number can be changed), PHI and electronic medical records (EMR) are stuffed with immutable data that can and do fetch hundreds of dollars per stolen record on illegal online markets.”

Garrett Bekker – Principal Analyst for Information Security, 451 Research
Author of the 2018 Thales Data Threat Report

HEALTHCARE ADOPTION OF BIG DATA IS HIGH

SENSITIVE DATA USE COMPOUNDS PROBLEMS



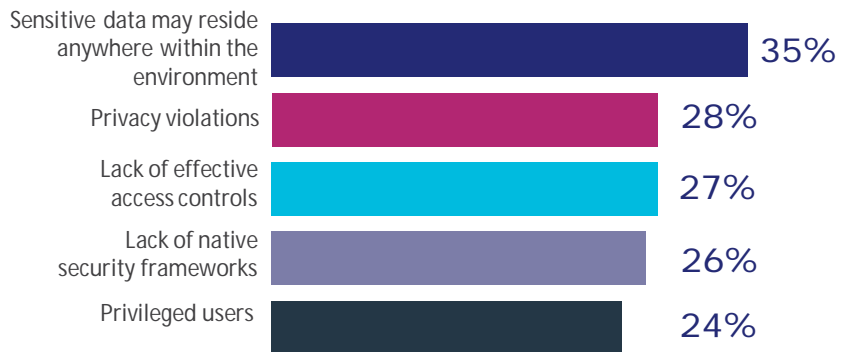
96%
now use big data



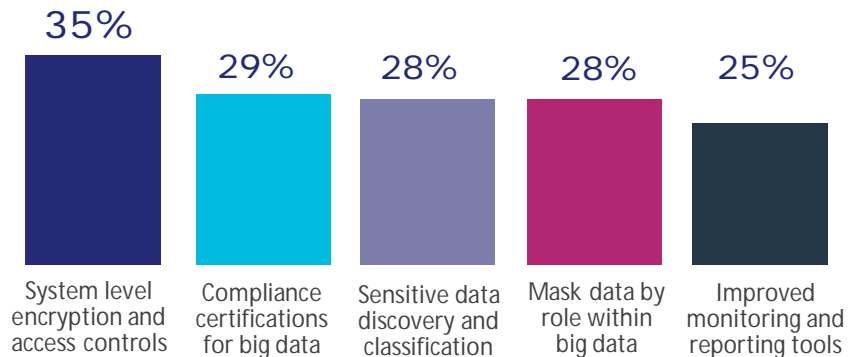
38% are using sensitive data
within big data environments today



Top concerns for sensitive data within
big data environments



What's needed to speed
Big Data adoption?



IIOT IN HEALTHCARE

ENCRYPTION REQUIRED



92% Using or planning to use IIOT this year



31% are using sensitive data with IIOT applications

Top IIOT uses in healthcare



Medical

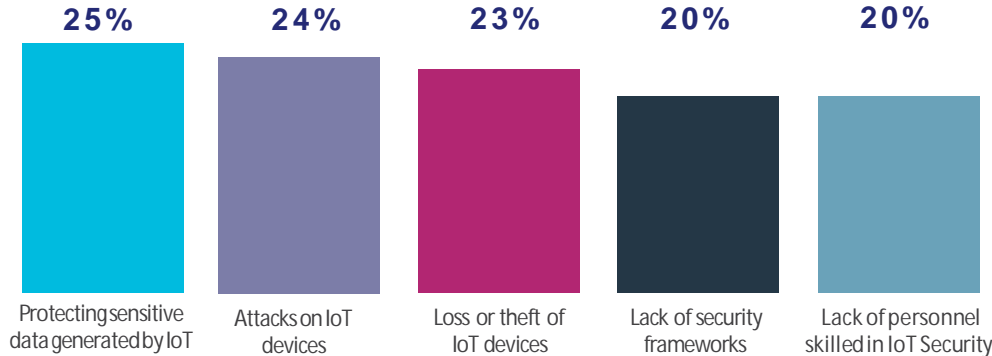


Environmental



Scientific and Personal/Wearables

Top concerns with IIOT



Encryption a key tool enabling safe use of IIOT



Encryption establishes secure identity with digital birth certificates for IIOT devices



Encryption protects data-in-transit



Encryption protects data on devices

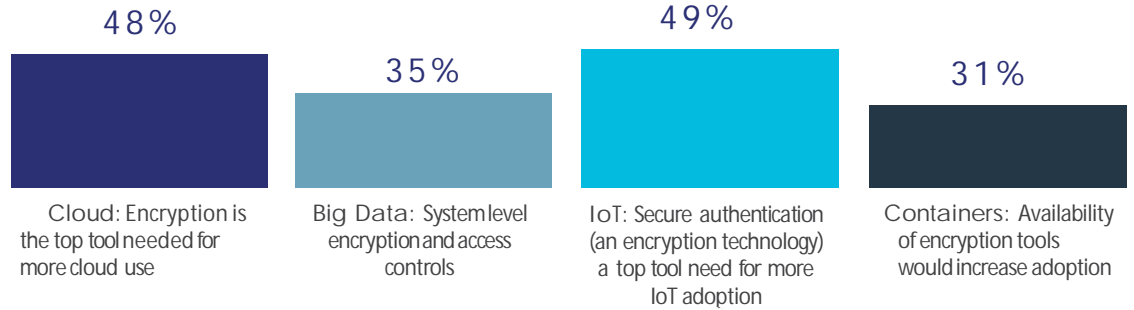


Encryption and access controls help organizations meet compliance requirements for back end data stores

ENCRYPTION – A CRITICAL TOOL FOR PROTECTING SENSITIVE DATA

Encryption tools are needed to drive digital healthcare initiatives

Good news – In spite of low funding, most organizations are implementing or planning to implement data security tools this year



Identity and access management



Database or file encryption



Privileged user access management



Native cloud encryption



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