



# CYBER CRIME BY MUSA KHUMALO

  
**iTOO**<sup>TM</sup>  
EXPERT AT RELATIONSHIPS  
EXPERT AT SAFETY

haveibeenpwned.com

## WORLD ECONOMIES (BY SIZE)

① US



② CHINA



③ **CYBERCRIME**

④ JAPAN



⑤ GERMANY



⑥ INDIA



## THE RISING COST OF CYBERCRIME

\$3 TRILLION  
2015

\$6 TRILLION  
2021

\$10.5 TRILLION  
2025

SPONSORED BY:



INTRUSION

CYBERCRIME

MORE PROFITABLE THAN

GLOBAL DRUG TRADE

CYBERCRIME COSTS MORE PER YEAR THAN ALL NATURAL DISASTERS

RESEARCH BY



# Landscape – Ransomware on the rise

**85%**



INCREASE IN VICTIMS  
COMPARED TO 2020

**144%**



AVERAGE DEMAND IN 2021

**78%**



AVERAGE PAYMENT  
IN 2021

Victim shaming is on the rise

Ransomware-as-a-Service is quickly lowering the technical bar

Attackers are making increasing use of zero-days

On average, we calculated that actual payments ended up being

**42.87%**

OF THE INITIAL RANSOM AMOUNT

**85%**



IN PUBLICLY POSTING VICTIMS  
ON LEAK SITES COMPARED  
TO 2020

**2021**



Average Ransom Demand



Average Ransom Paid

\* Based on 1 USD = 16 ZAR

Unit 42 Ransomware Threat Report 2022

## 2014: Dragonfly attack on pharma suppliers

In September 2014, it emerged that a cyber-espionage campaign had turned its focus to the pharma industry.

## 2017: NotPetya attack on Merck

One of the most devastating cyberattacks in history, the NotPetya attack was first and foremost a Russian attack against Ukraine. However, it affected hundreds of companies as a form of 'collateral damage'.

## 2020: Attacks on Pfizer/BioNTech and AstraZeneca

Dr Reddy's data breach wasn't the only attack on a vaccine maker. In December 2020, the European Medicines Agency (EMA) announced that it had been subject to a cyber attack. During the breach, some documents relating to the Pfizer/BioNTech vaccine had been unlawfully accessed.

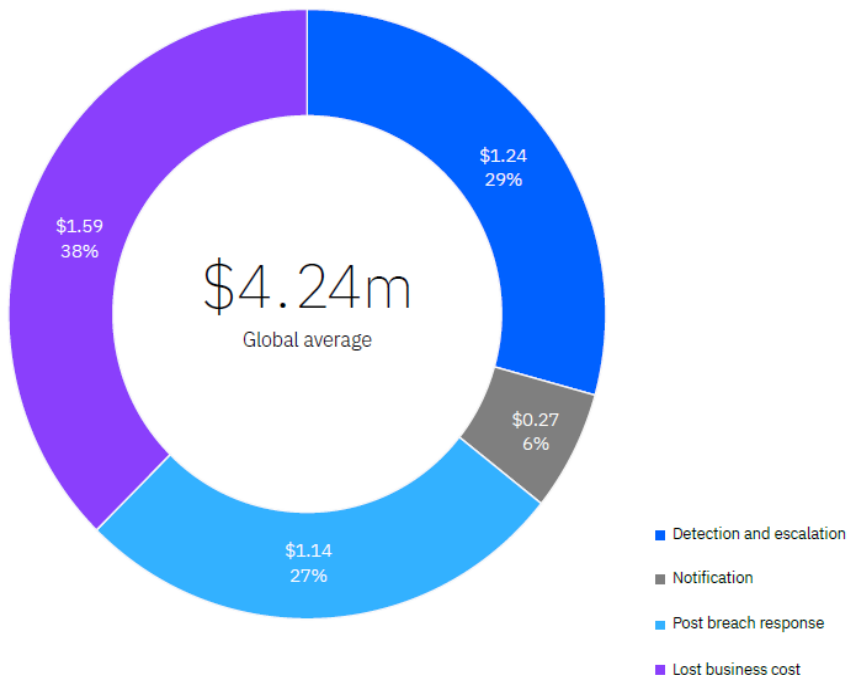
## Over 3.6m records exposed in Dis-Chem cyber attack

## TransUnion cyber attack – hackers demand R225 million ransom

Staff Writer 18 March 2022

## Average total cost of a data breach divided into four categories

Measured in US\$ millions



HEALTHCARE REMAINS THE **#1 ATTACKED INDUSTRY** AND ONE OF THE LEAST PREPARED TO DEAL WITH A BREACH

AVERAGE COST OF A BREACH IN SA – **US\$ 3,21m** UP FROM **US\$ 2.14m\***

MOST COMMON TYPE OF RECORD COMPROMISED – **CUSTOMER PII 44%\***

AVERAGE DURATION TO DETECT AND CONTAIN – **287 DAYS\***

AVERAGE LOSS OF BUSINESS ACCOUNTS FOR – **38% OF TOTAL COST\***

**75%** OF COMPANIES WERE HURT BY A RANSOMWARE ATTACK, UP FROM **61%\*\***

WHEN FACED WITH A RANSOMWARE ATTACK, **64%** OF COMPANIES **PAID THE RANSOM**, YET NEARLY **4 OUT OF 10** OF THEM FAILED TO RECOVER THEIR DATA. \*\*

**89% OF HEALTHCARE ORGANIZATIONS** HAVE EXPERIENCED A DATA BREACH INVOLVING LOSS OF OR THEFT OF PATIENT DATA.

\*IBM – Cost of a data breach report 2021

\*\* Mimecast – State of email security 2022





BYOD

Passwords

Wi-Fi hotspots

Think before you  
click

Antivirus

Default  
passwords

Remote wipe

Cloud storage

USB charging

Updates and  
patches

Geo tagging

Cyber insurance

# WHAT DOES IT COVER

## Incident Response

- Incident triage
- Data and system recovery
- Forensic investigations
- Legal guidance
- Crisis management
- Notification costs
- Remediation services
- Cyber extortion

## Financial Impact

- Business interruption
- Increased cost of working
- Fines and penalties

## Liability

- Defence and settlement
  - Compromised data
  - Environment used to cause damage to others
- Digital media liability

# CYBER INSURANCE – BROADER THAN YOU'D THINK

- NETWORK SECURITY BREACH
- PRIVACY BREACH
- INCLUDES:
  - CORPORATE ESPIONAGE
  - CYBER EXTORTION
  - DENIAL OF SERVICE
  - DOWNSTREAM ATTACK (YOUR ENVIRONMENT DAMAGING OTHERS)
  - HACKING
  - INSIDER AND PRIVILEGE MISUSE (INTERNAL AND SERVICE PROVIDER)
  - MALWARE
  - PHYSICAL THEFT AND LOSS (DEVICES AND HARD COPY DATA)
  - THREATS POSED BY A 3RD PARTY ACCESS OR USAGE OF 3RD PARTY SYSTEMS



# CLOSING THOUGHTS

CYBER CRIME IS ON THE **RISE** AND SA IS NOT IMMUNE

**POPIA** AND GDPR

HACKING IS **INDISCRIMINATE**

NO SECURITY IS **INFALLIBLE**

DISGRUNTLED **STAFF** AND ACCIDENTS CAN TRIGGER AN INCIDENT

CAN'T PASS THE BUCK, YOU REMAIN THE **DATA CUSTODIAN**

**DAMAGES** CAN BE SIGNIFICANT, DIRECTORS ARE EXPOSED

EFFECTIVE **INCIDENT RESPONSE** IS KEY





THANKS!

Any questions?



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