Cyber Security

Introduction

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Regional Chief Information Security Officer (West of Scotland)

HEFESTIS Ltd (formally UCSS Ltd)

CISOShare and DPOShare Services

Joined end of July 2018

University of Glasgow for 14yrs, Information Security Officer

Glasgow Caledonian University 4yrs, Sys Admin and Security

Cyber Security

❑ An organisational risk issue NOT an IT issue

❑ Concerned with Confidentiality, Integrity and Availability of information.

❑ Composed of behavioural, organisational and technical controls

Cyber Threat Landscape

Increasing technology and expanding stores of information

Cyber attack Services and anonymity

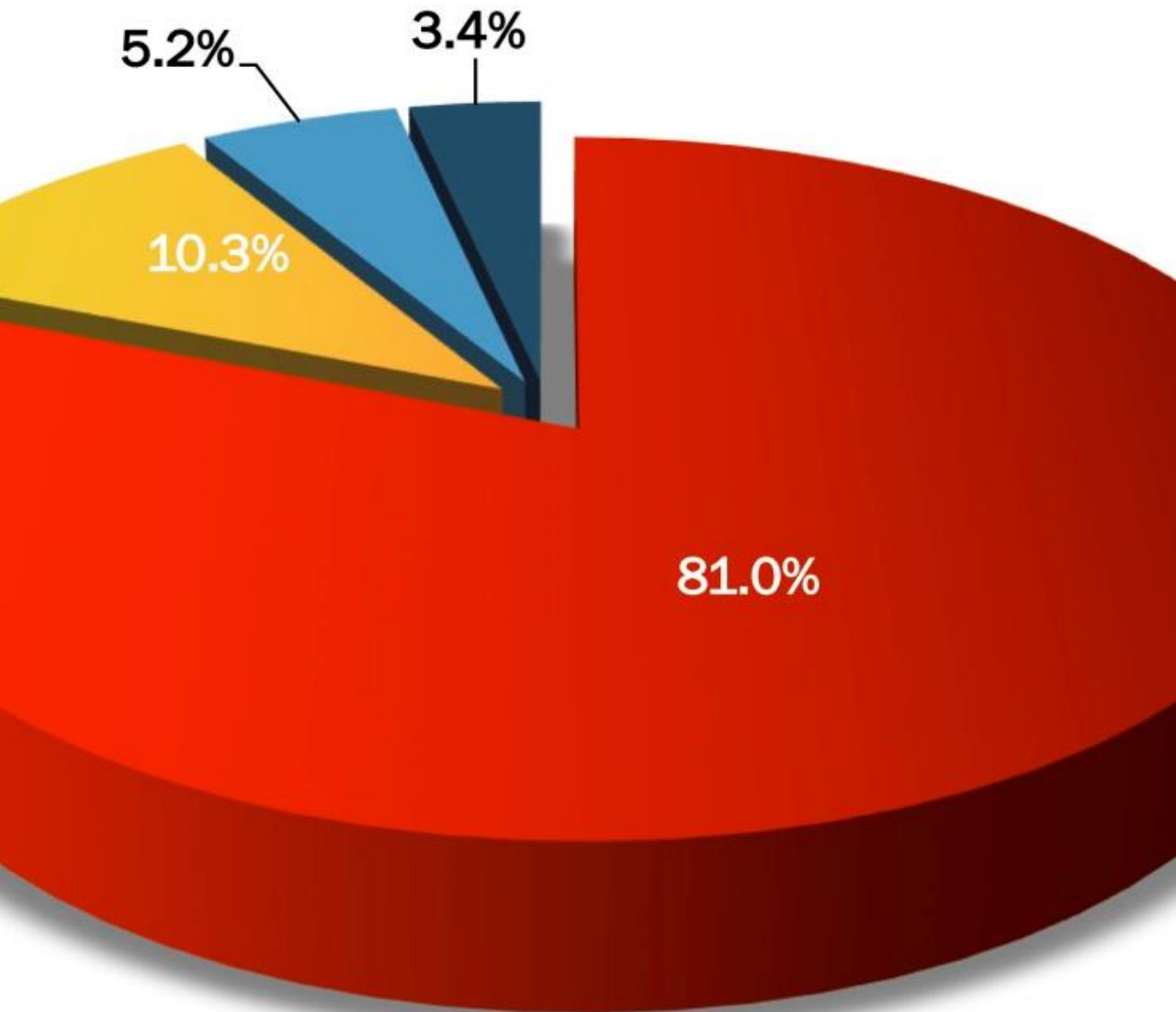Cyber threats are very active and growing

Cyber Threat Actors

Include:
- ❑ Government Sponsored
- ❑ Organized Crime
- ❑ Hacktivists
- ❑ Internal User Error
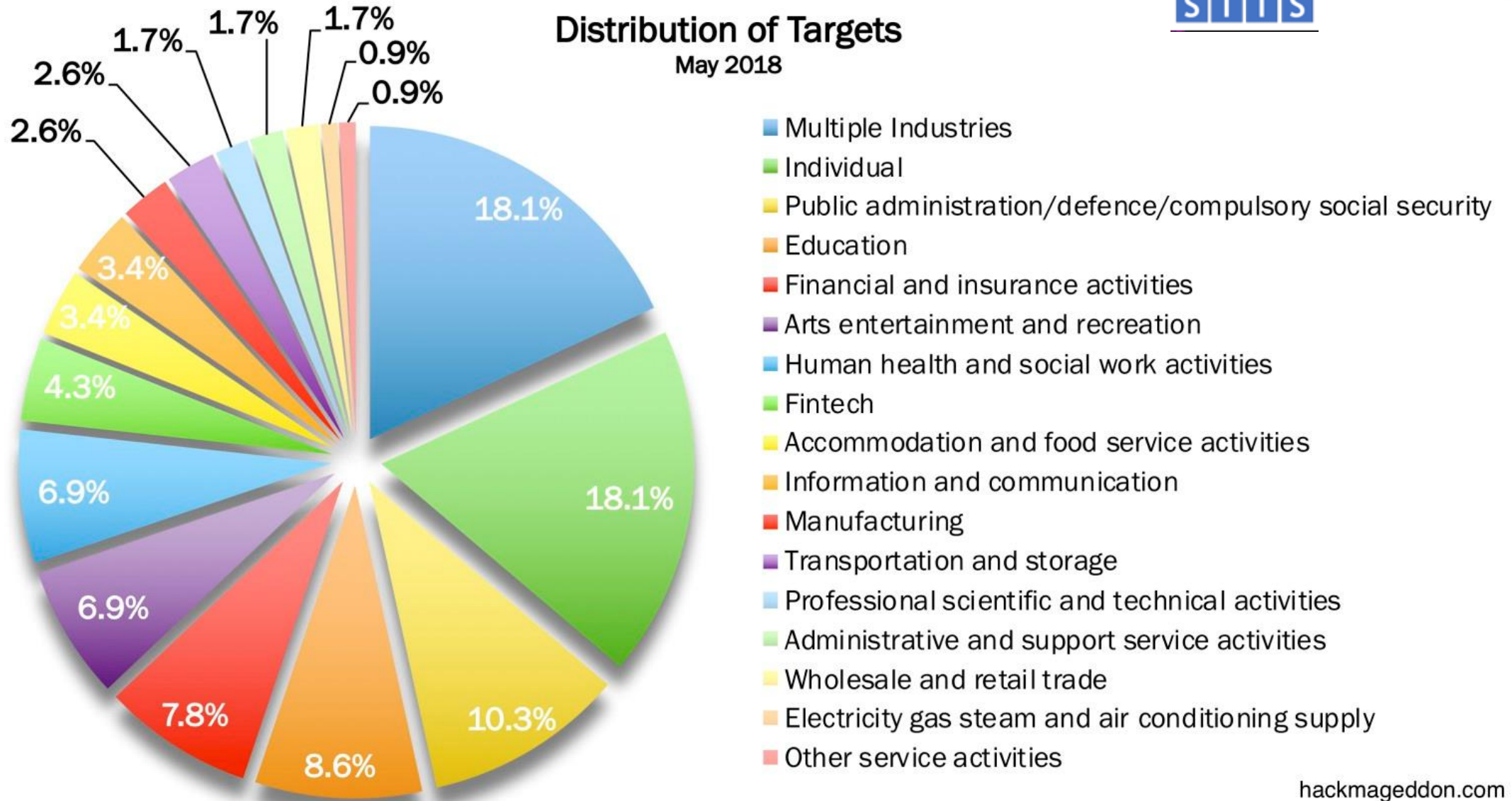
Motivations Behind Attacks
May 2018

5.2%   3.4%
10.3%
81.0%

Motivations

Cybercrime: 81%
Cyber espionage: 10.3%
Cyber warfare: 5.2%
Hacktivism: 3.4%

Distribution of Targets
May 2018

- Multiple Industries
- Individual
- Public administration/defence/compulsory social security
- Education
- Financial and insurance activities
- Arts entertainment and recreation
- Human health and social work activities
- Fintech
- Accommodation and food service activities
- Information and communication
- Manufacturing
- Transportation and storage
- Professional scientific and technical activities
- Administrative and support service activities
- Wholesale and retail trade
- Electricity gas steam and air conditioning supply
- Other service activities

18.1%
18.1%
10.3%
8.6%
7.8%
6.9%
6.9%
4.3%
3.4%
3.4%
2.6%
2.6%
1.7%
1.7%
1.7%
1.7%
0.9%
0.9%

hackmageddon.com

Edinburgh Uni Hit by Major Cyber-Attack

Phil Muncaster
UK / EMEA News Reporter , Infosecurity Magazine
Email Phil
Follow @philmuncaster

The website of Edinburgh University was still down at the time of writing after the institution suffered a major cyber-attack during its Freshers' Week.

A university spokesman told the *Edinburgh Evening News* that it has "rigid measures in place" to protect IT systems and data.

Cyber Security Risks

❑ Reputational

❑ Financial

❑ Business operations

▶ No organisation can have zero risk

▶ Realisation that it is not an if, but when an incident occurs

▶ Increasing maturity levels in Cyber Security reduces that risk

▶ SLCollege recognise this risk within the College Risk Register

Cyber Risk Reduction

❑ **Appropriate governance, oversight, policies, procedures and practices**

  ❑ SLC - Internal ICT Strategy Group; Cyber Resilience Group

  ❑ SLC - Quarterly IT Security reviews

  ❑ SLC - Annual accreditation for Cyber Essentials Plus

❑ **Ensuring the awareness of staff and students to cyber threats**

  ❑ SLC mandatory staff training; newsletter articles; poster campaign

❑ **Invest in suitable technical solutions**

  ❑ SLC-Updated the firewall plus desktop security software within the last 18 months giving added functionality and significantly reducing risk

Reducing the sector risk

- ❑ Scottish Government Public Sector Action Plan
    - ❑ SLC Achieved all actions as per the deadlines set in the PSAP

- ❑ Cyber Essentials / Cyber Essentials Plus
    - ❑ SLC Achieved CE Plus in April 2018 – re-accreditation annually

- ❑ Awareness, training and Education programmes
    - ❑ SLC has a programme of awareness raising and training which will be ongoing and refreshed on a regular basis

Reducing the sector risk

❑ Community sharing e.g. CiSP, HEFESTIS, Jisc, UCISA

  ❑ SLC are active participants in all of the above services and subscribe to various other information forums

  ❑ SLC review and action all early warnings issued from Scottish Govt, NCSC, etc.

❑ Achieving a greater cyber security maturity via Frameworks and Standards e.g. NIS D, NIST CSF, ISO27001

  ❑ SLC Business Impact Assessment completed in Jan 2018 matched our maturity level – higher than average for the sector - against the NIST Framework and we will continue to monitor and improve our maturity level against this standard

Board Responsibilities

❑ Lead from the top, and the front

❑ Understand and address the risk

❑ Approve structures and empower decision makers

Benefits

Strategic Benefits

College decision making is improved through the high visibility of risk exposure.

Financial Benefits

Providing financial benefit to the organisation through the reduction of losses and improved "value for money" potential.

Operational Benefits

Being prepared for most eventualities, being assured of adequate contingency plans.