Centre for High Performance Computing 2025 National Conference



Contribution ID: 467 Type: not specified

A Holistic Cyber Security Readiness Assessment Tool for Organisations in Developing Countries

Monday, 1 December 2025 14:30 (30 minutes)

Organisations in developing countries face uneven cybersecurity readiness shaped by national laws, institutional capacity and market conditions. This paper proposes a Holistic Cybersecurity Readiness Assessment (CSRA) that links an External Cybersecurity Environment Assessment (Tier 1) with an Internal Readiness Self-Assessment (Tier 2) across governance, people, pro-cess and technology. The tool integrates a structured review of standards and national initiatives with practitioner input to derive profiling dimensions and factors of relevance. The paper presents the instrument design, scoring approach, and reports an initial pilot to examine face and content validity The contribution is a practicable method that aligns organisational control priorities with the external context so that improvement plans are defensible and se-quenced. Early findings suggest the two-tier linkage clarifies dependencies be-tween regulation, capacity and internal practices. The paper concludes with limitations and next steps for broader validation across multiple national settings.

paper concludes with limitations and next steps for broader validation across multiple national setting. Presenting Author Email Student or Postdoc? Institute Registered for the conference? CHPC User

CHPC Research Programme

Primary author: AGYEMANG, Raymond

Presenters: AGYEMANG, Raymond; FURNELL, Steven (University of Nottingham); MULLER, Tim

Session Classification: ISSA