

Security – Connecting the Trends!

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Emerging Innovation Trends.....

▶ Connected Lifestyle

- Social networking
- Borderless sharing of Information

▶ Pervasive Computing

- Increased footprint of intelligent devices
- Network is the “Internet”, blurring boundaries
- On-demand computing power.. Cloud based

▶ Digital Consumers & New Commerce

- Mobility – Self Service – Personalization
- Increased transaction volumes – New payment modes

▶ Smarter Organization

- Simplify – Connect – Collaborate
- Sustainability thru automation
- Integrated security posture

Emerging Trends..... mapping threats

▶ Connected Lifestyle

- Social Engineering – Identity & Intellectual Property thefts

▶ Pervasive Computing

- Un-patched, wrongly configured devices
- Access to compute power on demand with malicious intent
- Poisoned community Images in virtualized environment
- Data Privacy

▶ Digital Consumers & New Commerce

- Identity Thefts and Targeted “for profit” attacks
- Vulnerabilities at application layer

▶ Smarter Organization

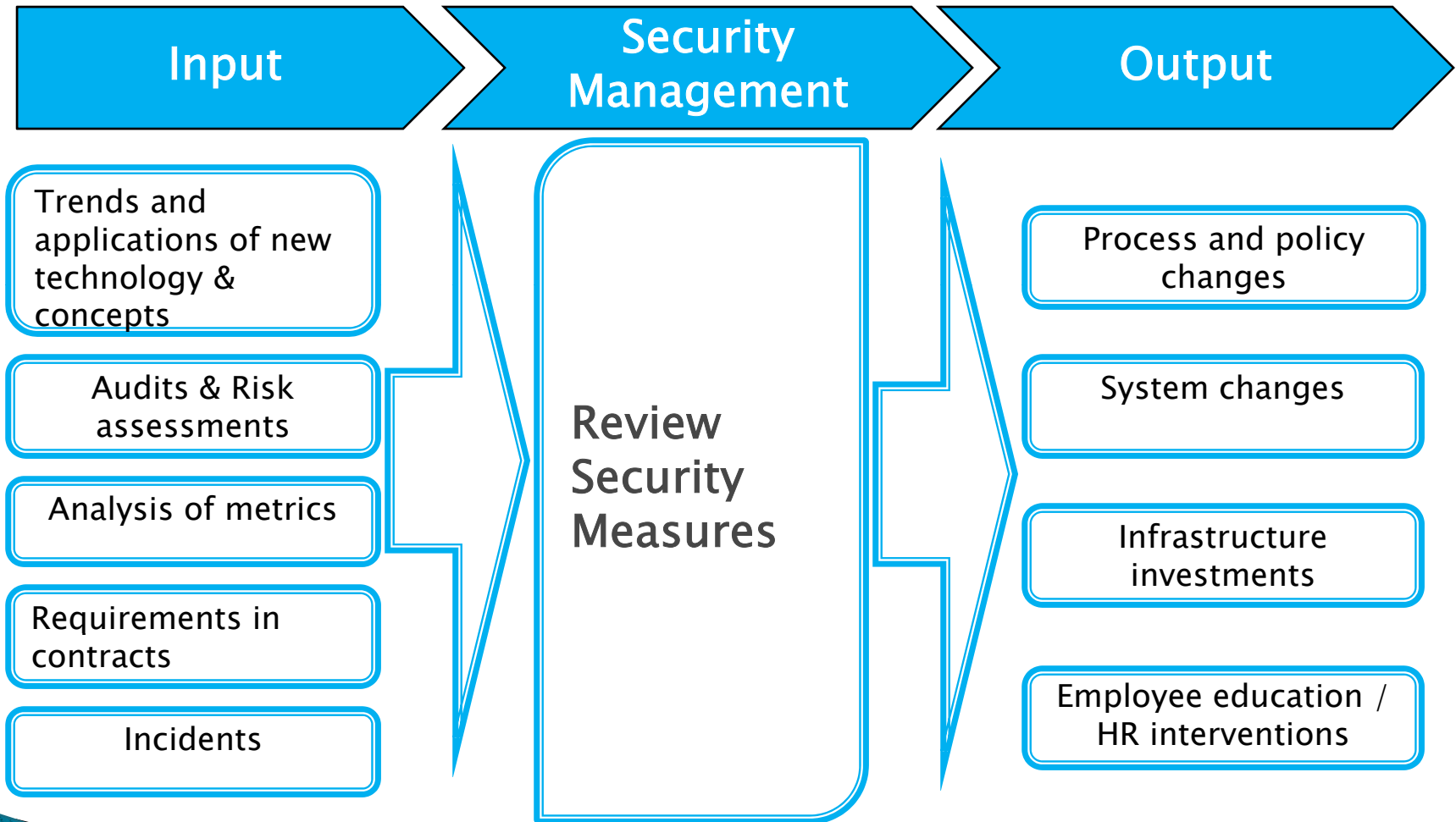
- Abuse of Access to information
- Mobile/ Distributed workforce

Evolving Security Challenges ...

- ▶ Insider abuse of access to data
- ▶ Theft of Proprietary Information
- ▶ Misuse of Internet access
- ▶ Infringement of Intellectual Property
- ▶ Virus, Worms, Spyware, P2P,
- ▶ Attacks on Internet exposed systems
- ▶ Unauthorized Software
- ▶ Physical access to facilities
- ▶ Securing virtual environments
- ▶ Securing end-points, network, content, application.....

... to be addressed thru right mix of
Governance, Technology & Automation

Security Management Framework...



Mindset change.....

Reactive, Predictive & Proactive

Security by design, not an after thought... Illustrating a few activities,

- ▶ Formal risk assessment exercise of “what can go wrong” and “mitigation strategies”
- ▶ Compliance to the regulatory environment
- ▶ Readiness on a continuous basis and not on the eve of the audit
- ▶ Robust and independent internal audit mechanism
- ▶ Peer group collaboration for pro-active security posture
- ▶ Regular and periodic interaction with security agencies
- ▶ Continuous Communication
 - Awareness, quiz, channel for whistleblower, security tips, etc.

Security metrics...

Analysis-based continuous improvements with right measurements ... Typical metrics applicable are,

- ▶ **Health Management Metrics** for systems
(Desktops/laptops/server/switches/etc.) – Patches, Anti-Virus/Spam
- ▶ **Software management Metrics** – authorized/unauthorized, License compliance
- ▶ **Identity Life Cycle Management Metrics** – Access provisioning / revocation / monitoring
- ▶ **Reconciliation Metrics** – IT asset inventory with health management systems
- ▶ **Change Management Metrics** – Unapproved changes, Post facto approvals
- ▶ **Audit Metrics** – Compliance monitoring, configuration monitoring
- ▶ **Incidents Metrics** – Security incidents, data loss, IP and copyright violation
- ▶ **BCP & DR Metrics** – BCP Tests conducted, DRRs trained
- ▶ **Physical Security Metrics** – Access control, inventory control
- ▶ **HR Metrics** – Background verifications, disciplinary actions

In Summary...

We need the right mix of Governance, Technology & Automation

Patch Compliance from OS to

Application & Configuration compliance

Security Measures with monitoring to

Sense-and-Respond capabilities

Application development to

Trusted Application development methods

Security measures in Silos to

Integrated Security posture

Thanks

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