

On the application of Nash's Equilibrium to Healthcare Information Risk Management

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information

Security

Data supporting activities
 ↓
 Business requirements

Confidentiality	Ethical requirements
Intégrity	
Availability	Management controls

Absence of unacceptable risk

Discontinuity
 Dysfonction
 Disaster

negative



Threat
 ↓
 Pb(Ev)

Vulnerability
 ↓
 Pb(Exploit)

$$\sum \begin{matrix} Pb(EX_{(n)}) \rightarrow \Delta \neg Rt_{(n)} \\ Pb(EV_{(n)}) \rightarrow \Delta \neg Rt_{(n)} \end{matrix} \times \text{impact}$$

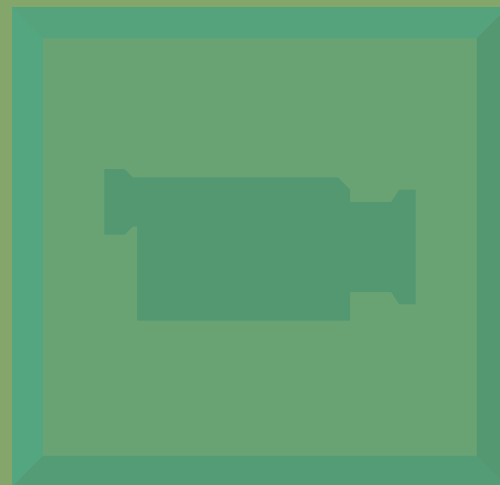
Externalize

Detection measures
 Incident response
 Assurance measures

Transfer	Avoid
Accept	Mitigate

Protection Measures

What about health information?



Categories of risks

Legal

Fire

Operational

Virus

Terrorism

Material damages

Immaterial

Health

Pandemic

Market risks

Liquidity

Strategic

Theft

Accident

Political



Credit

Error

Hacker

Financial

Environmental

Fraud

Economic

Flood



Insurance

Solutions ?

- Risk management
- Simulation
- Research



Merci

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