



Building Control System Cyber Defense Forum

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INTELLIGENT BUILDINGS AND CYBERSECURITY

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CABA Board of Directors



CABA Vision Statement

“CABA accelerates growth in the connected home and intelligent buildings sectors.”

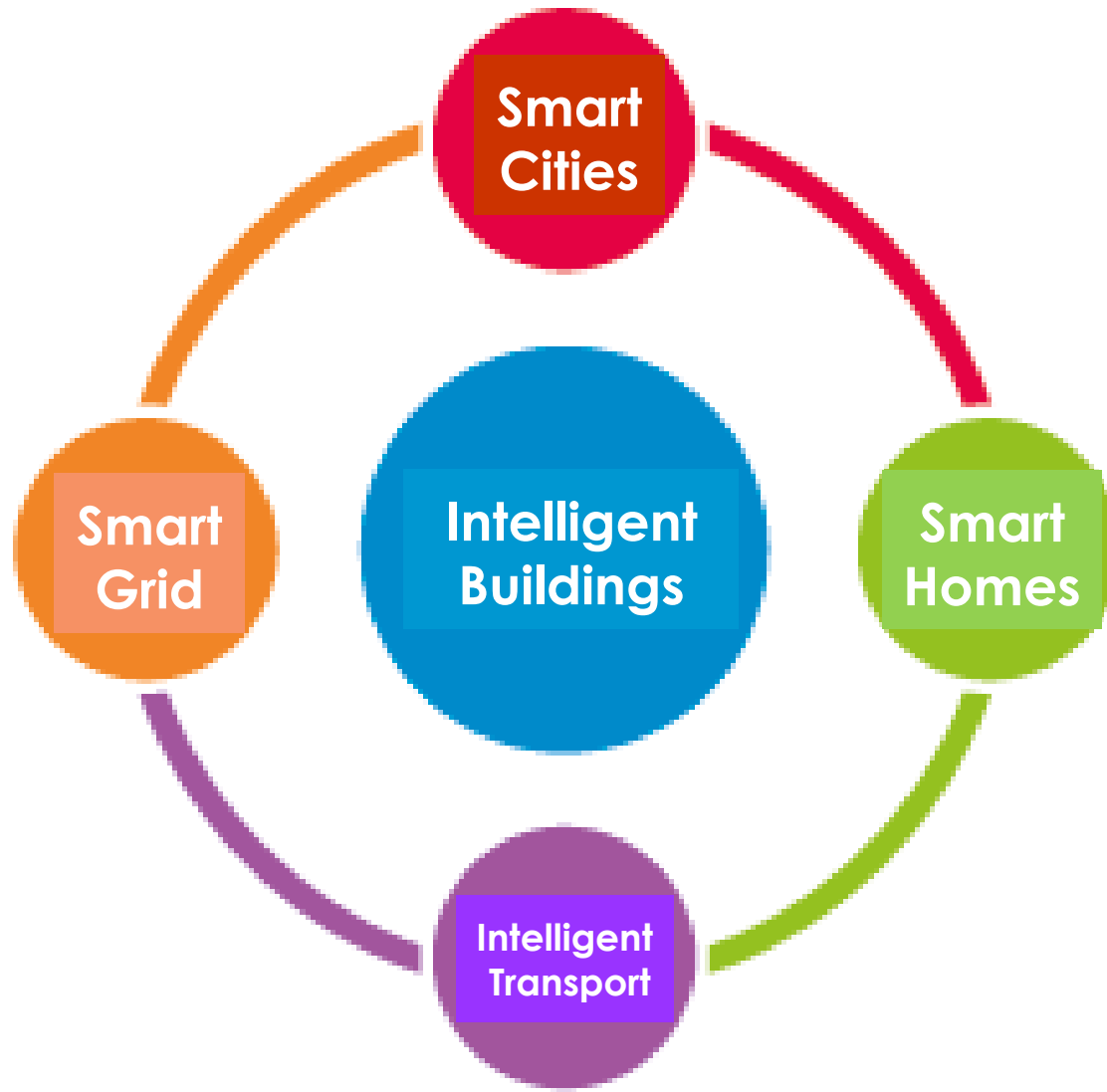
- **The Continental Automated Buildings Association (CABA) is an international not-for-profit industry association, founded in 1988, dedicated to the advancement of connected home and building technologies.**
- **The organization is supported by an international membership of over 325 organizations involved in the design, manufacture, installation and retailing of products relating to home and building automation.**
- **Public organizations, including utilities and government are also members. CABA's mandate includes providing its members with research, services and networking opportunities.**
- **CABA also encourages the development of industry standards and protocols, and leads cross-industry initiatives.**
- **CABA maintains the largest “connected home and intelligent buildings” research library in the world.**



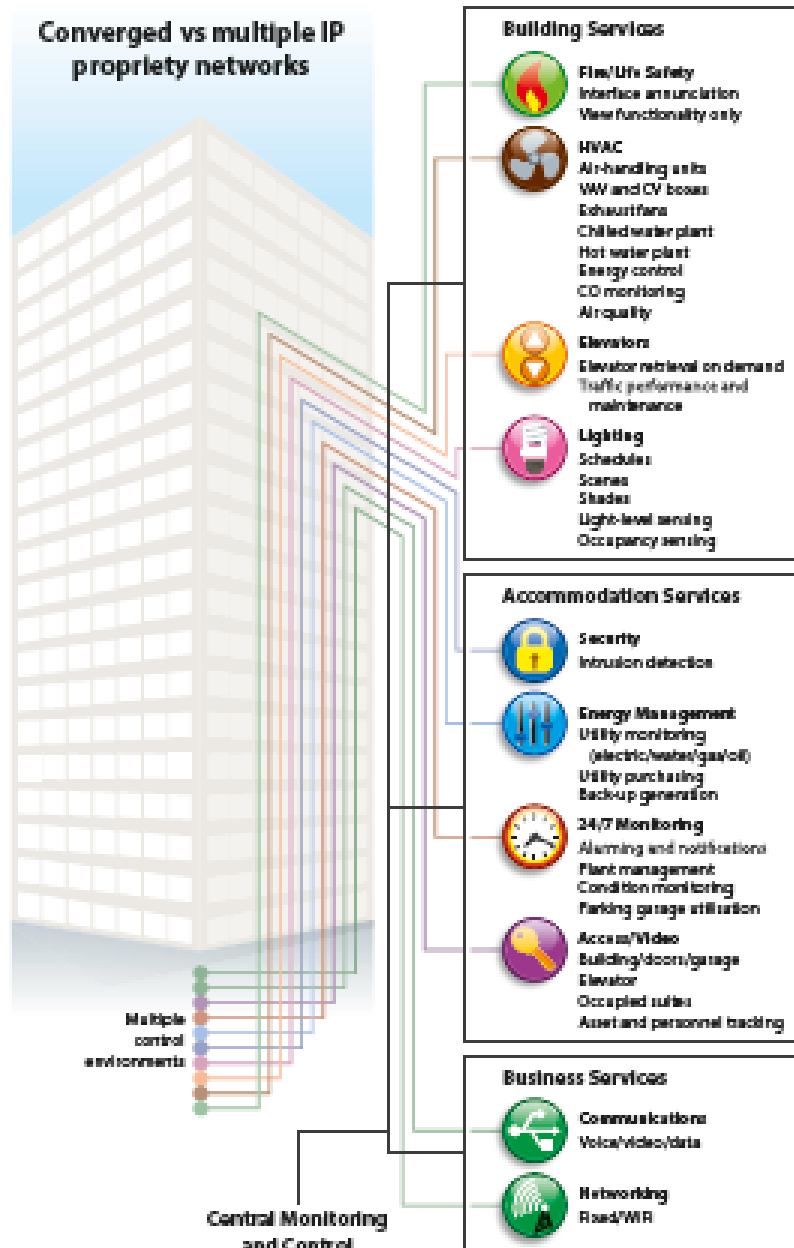
For more information on this research project, go to:
<http://www.caba.org/CABA/Research/Intelligent-Buildings-Cybersecurity.aspx>

What is an Intelligent Building?



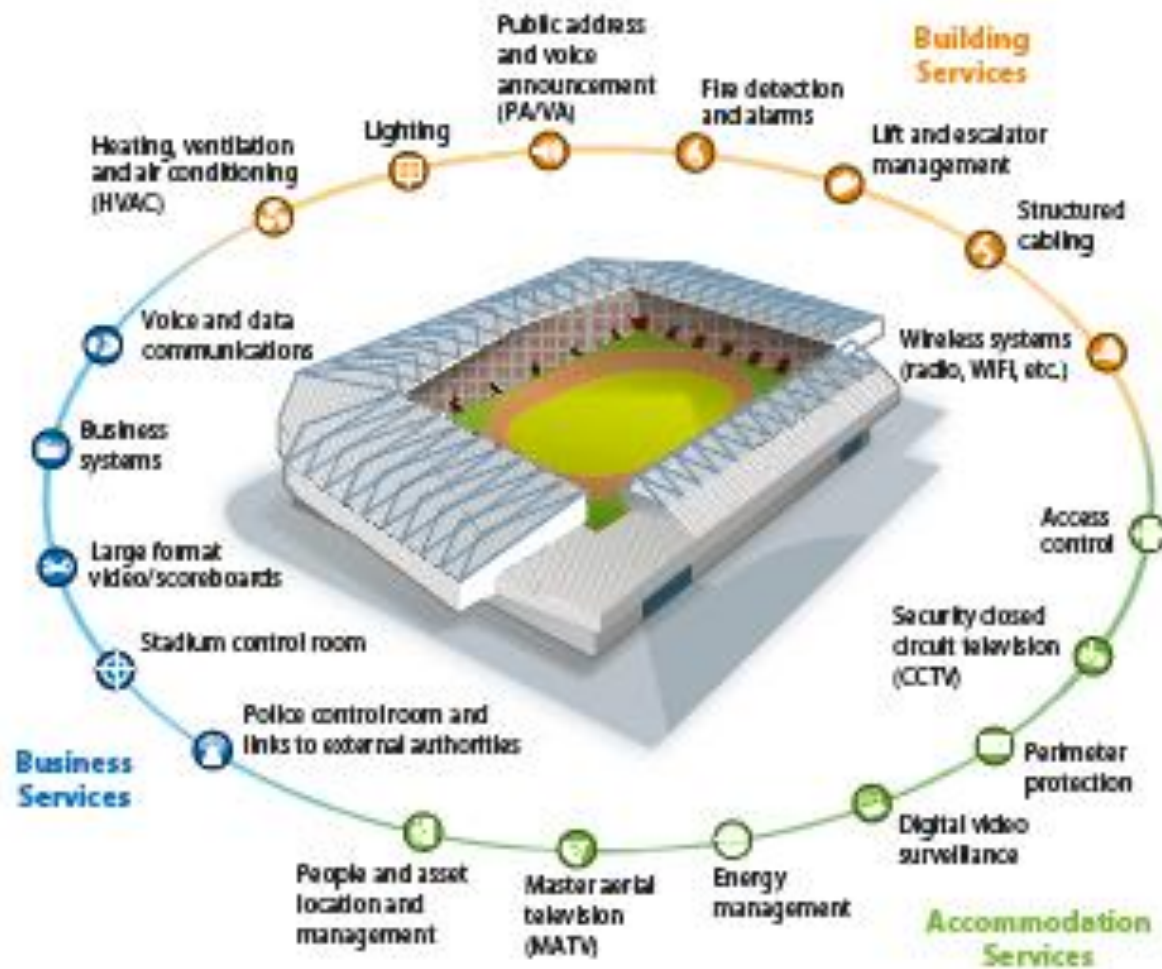


“Intelligent Buildings are part of an increasingly integrated build environment.”

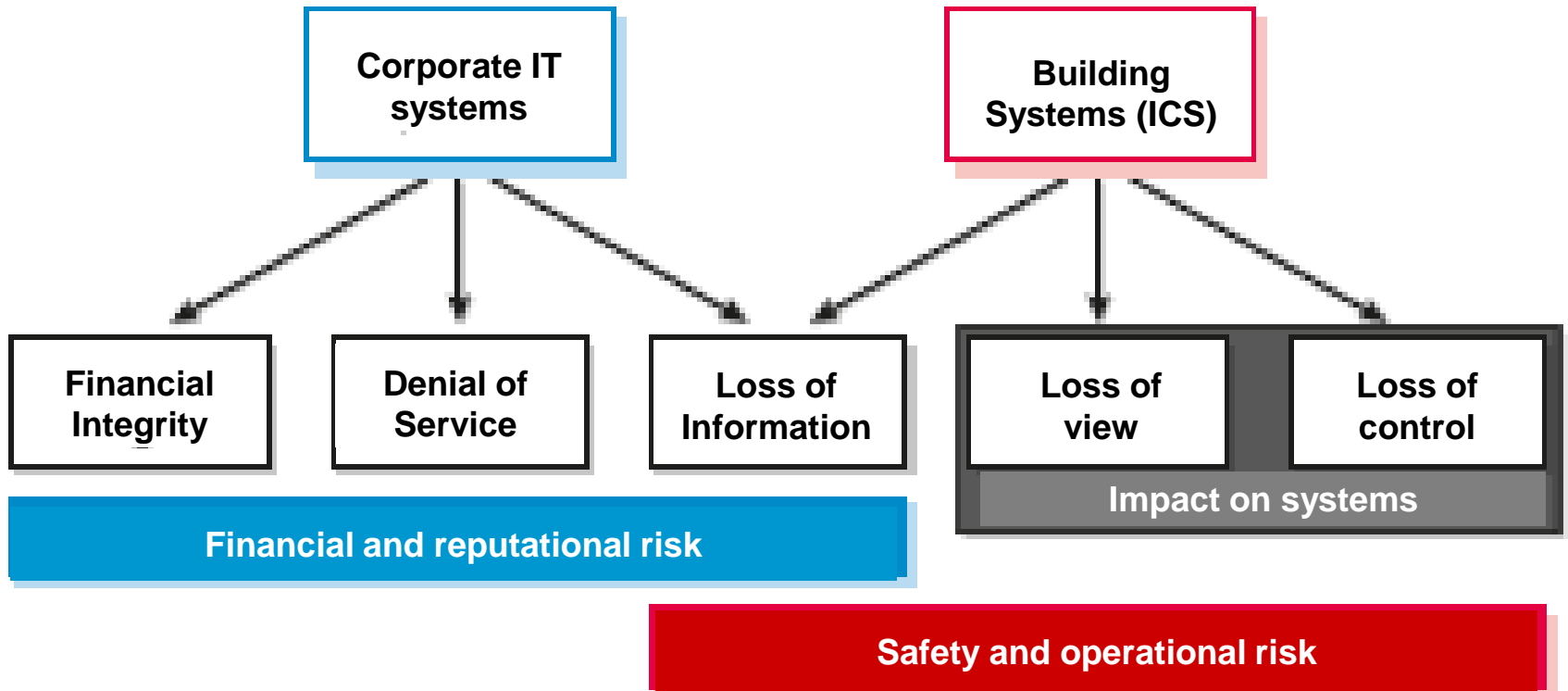


- **Building Services**
- **Accommodation Services**
- **Business Services**

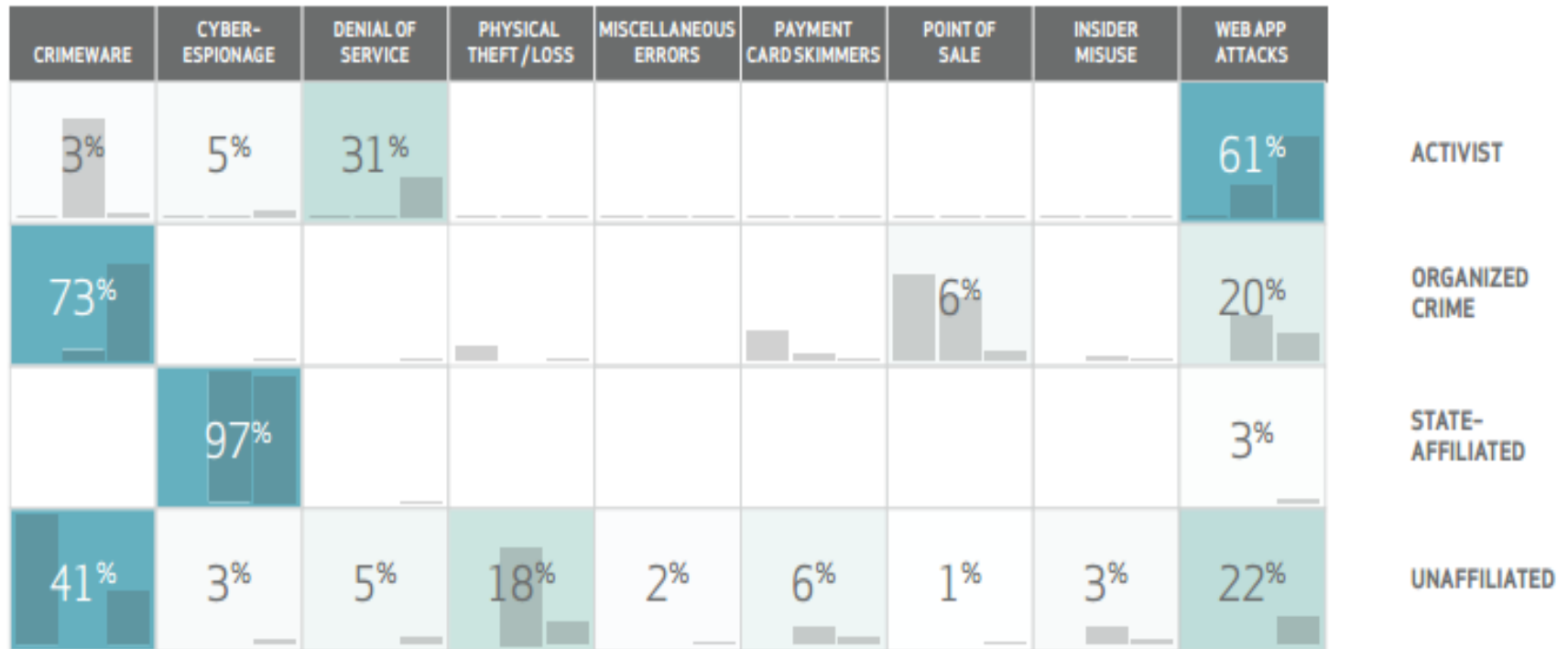
Case Study – IP Based Systems – Sports Stadium

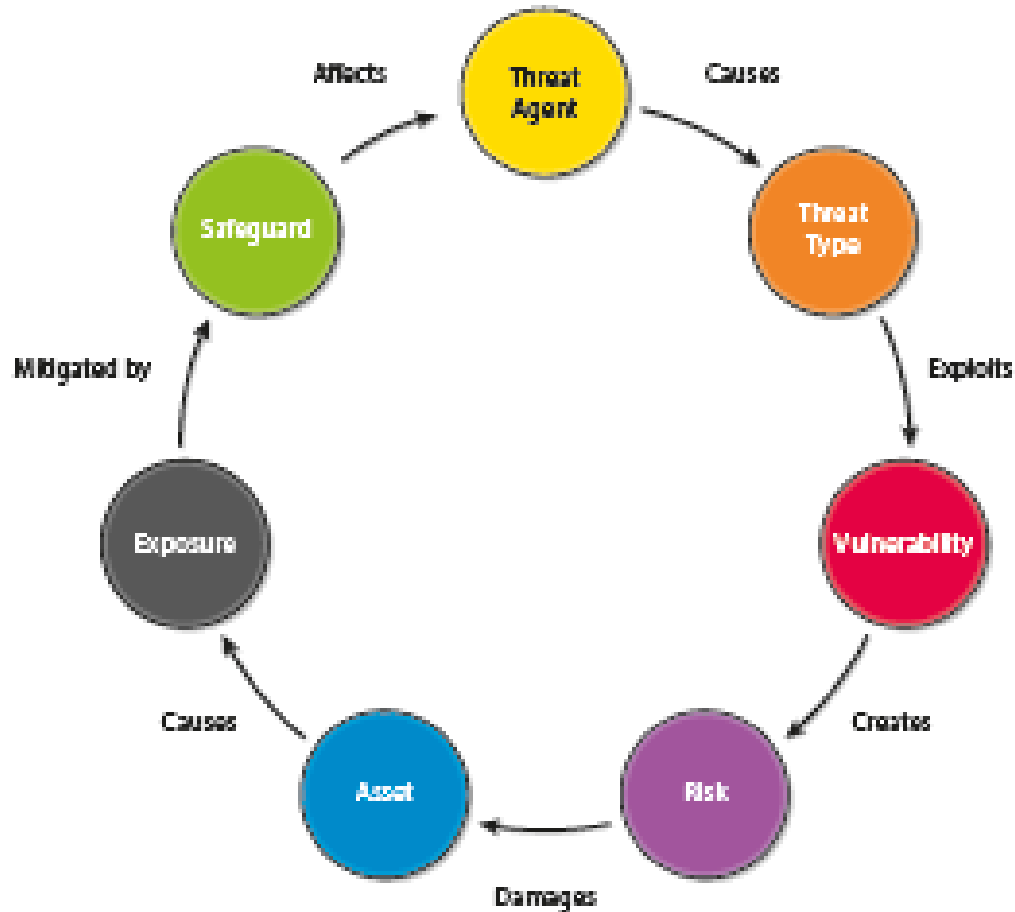


Risks Arising from Compromised Systems



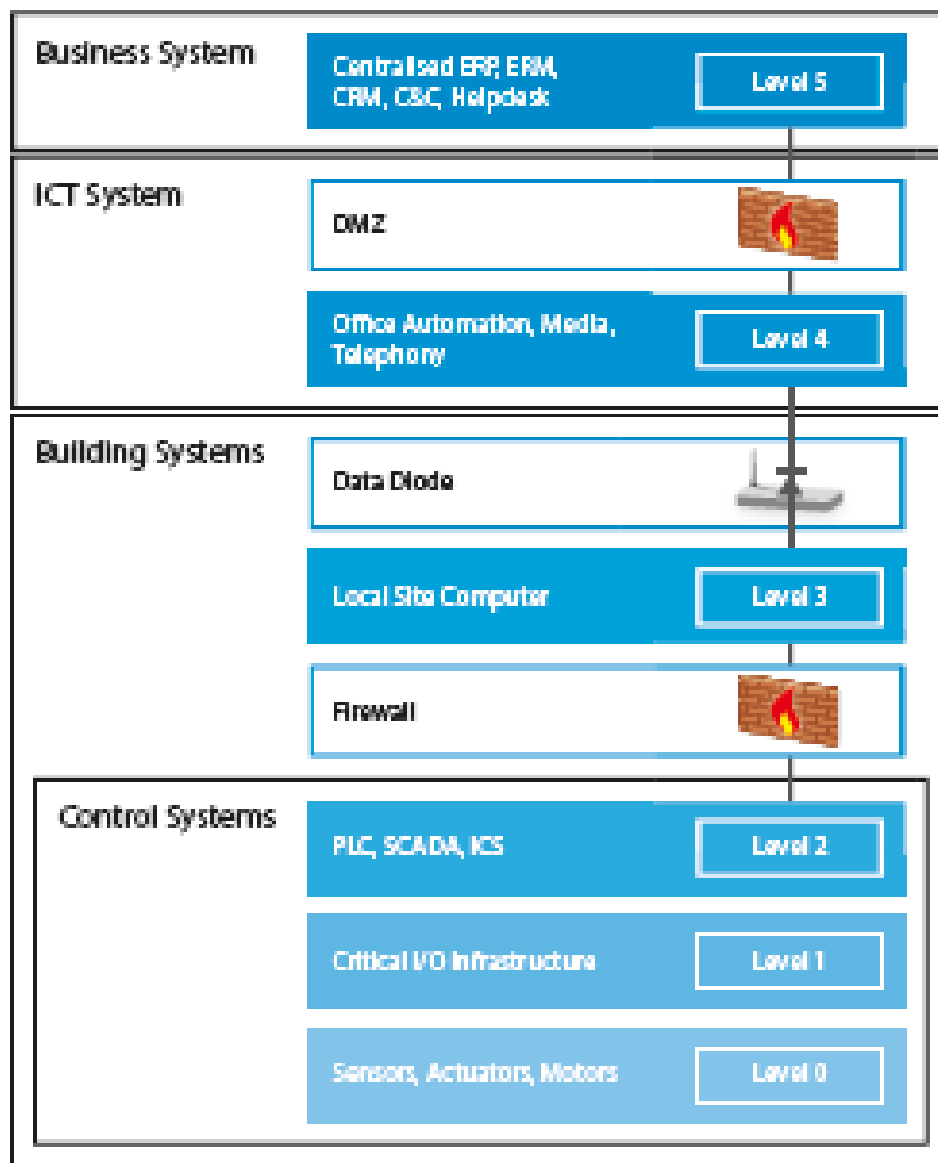
North America Threat Profile for Intelligent Building and Market (2015)



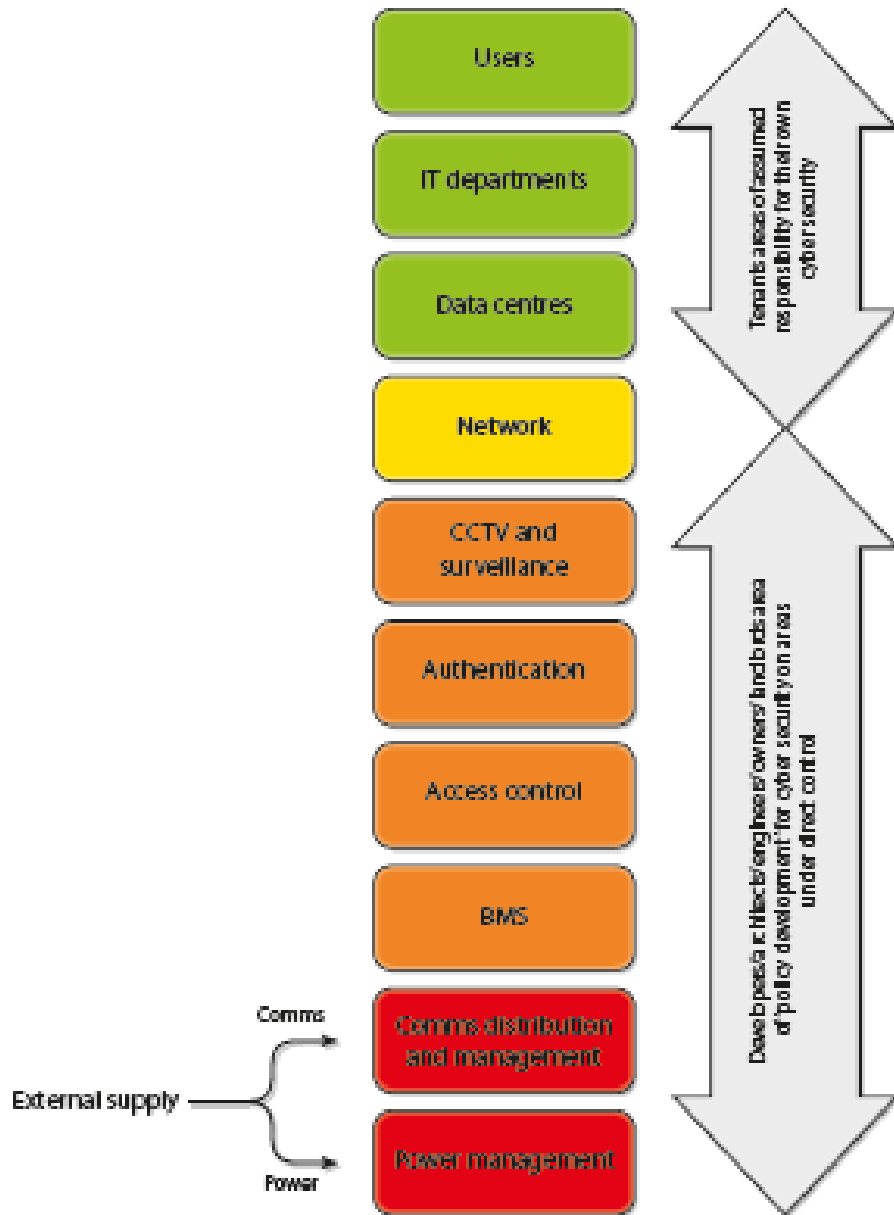


Four Options:

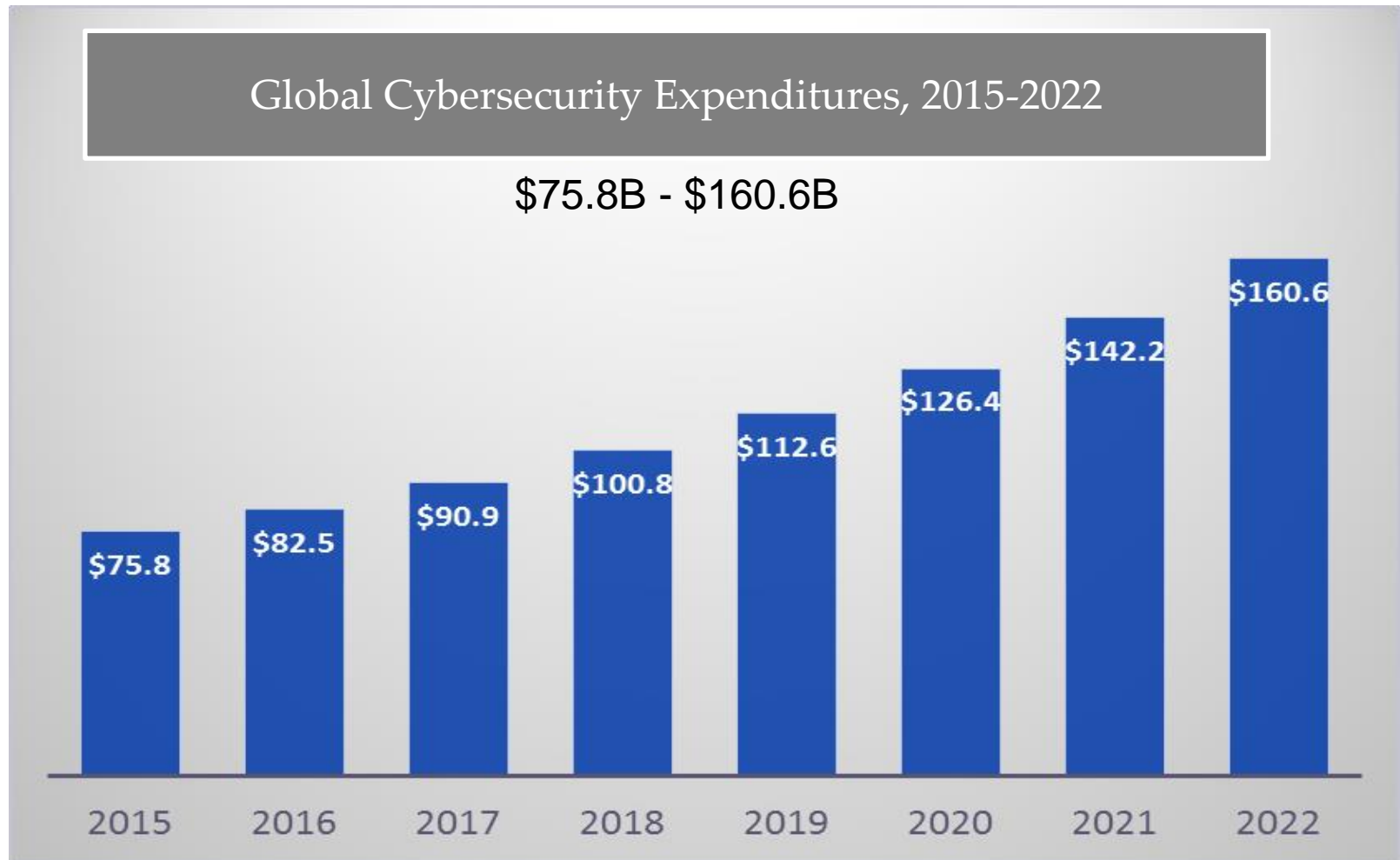
1. Avoidance
2. Reduction
3. Sharing the Risks
4. Retention and Manage Consequences



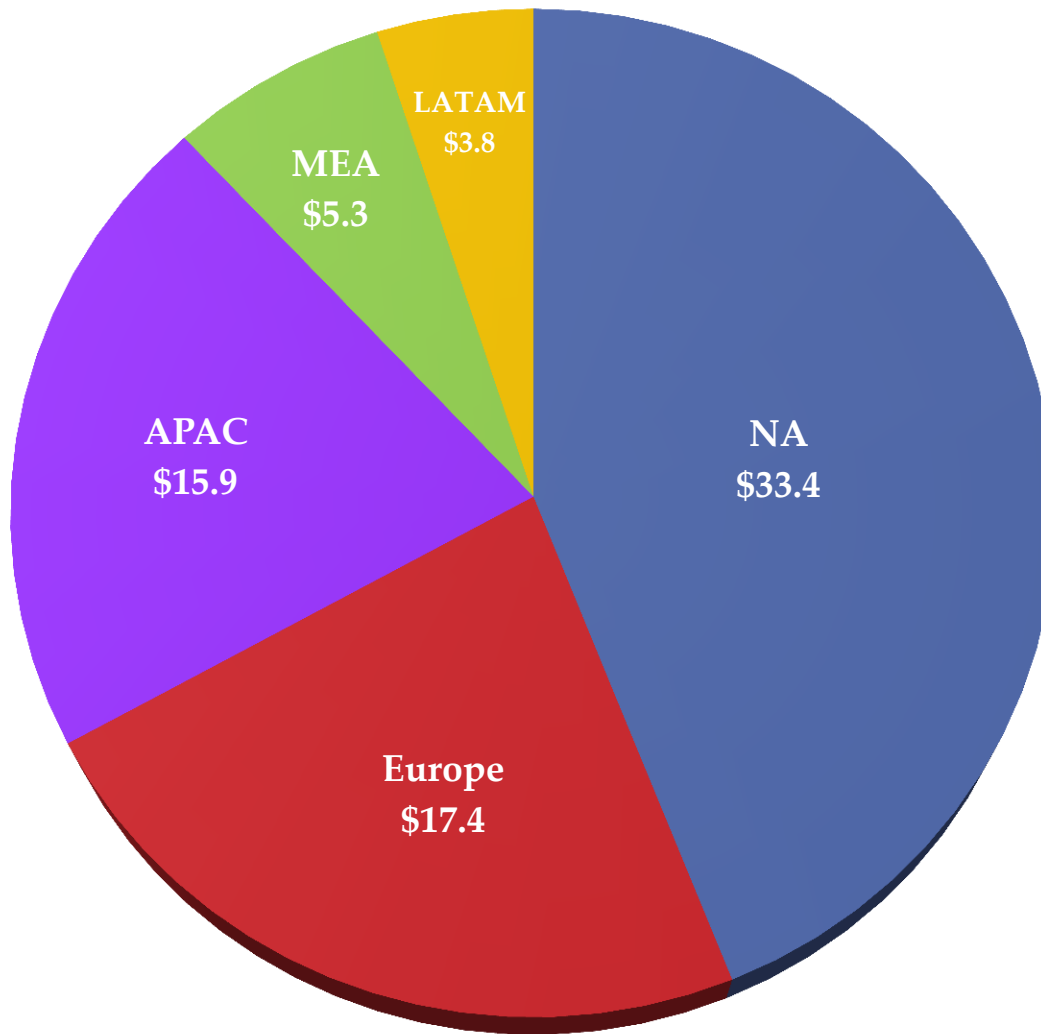
- **Solutions developed during the design phase.**
- **Proposed design should be assessed for new ideas.**
- **BMS application needs networked segregation (firewall).**
- **Secure gateway protection (data diode secures BMS).**



- **Manage interaction between infrastructure and business systems.**
- **Need clear operating procedures and agreed “best practices”.**
- **Need to be based on recognized standards (eg., ISO 27001).**
- **Legal issues – lease/tenancy agreements covering data protection, human rights, etc.**
- **Insurance policies need to be revised and possibly updated.**



Percent of Revenues by Region for the Global Cybersecurity Market, 2015



Region	Revenues (B)
NA	\$33.4
Europe	\$17.4
APAC	\$15.9
MEA	\$5.3
LATAM	\$3.8

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