Intelligent Video Systems (IVS)

• IVS – What are they?
• Future of Integrated Systems
• Keys to Success
innovative thinking

IVS – What are they?

• IVS – Key Definitions
• IVS - What they are not
• IVS - What they are
• VMD vs IVS
• Examples of IVS Rules
• IVS Strengths
• IVS Weaknesses
• IVS Key Considerations
IVS Key Definitions

- IVSS – Intelligent Video Surveillance Systems
- Intelligent – Having the capacity for thought and reason especially to a high degree
- Surveillance – The ongoing systematic collection, analysis, and interpretation of data
- Analytics – The process of explaining an entity or idea by examining it in terms of its various parts
IVS – What it is not!

• Not just CCTV
• Not Video Motion Detection
• Not intelligence blindly applied to a CCTV camera feed
• Not a Video Management Solution
IVS – What it is!

• It is intelligence strategically applied to CCTV video
• It is the real time analysis of live video
• It is applied computer vision technology
• It is the act of turning live video into intelligent data that can be used for security and business needs
• It is only a component of an overall video management and security solution
VMD vs IVS

- **VMD** – Pixel Based
  - Detects/Alarms on any change to a scene
  - Typical of DVR’s (Digital Video Recorders)

- **IVS** – Object Based
  - Detects and classifies objects in a scene
  - Alarms based on objects breaking rules setup in the scene or environment
Examples of IVS Rules

- Virtual Tripwire
- Unattended Objects
- Removed Objects
- Loitering
- Crowd Detection
- People Counting
- Slip & Fall

- Turnstile Violation
- Stopped Vehicle
- Exit Lane
- Perimeter Intrusion
- Unattended objects
- Human Tailgating
- Vehicle Tailgating
IVS - Strengths

• More accurate detection of events
  – 24 x 7 operation
  – Consistent detection & adherence to policies

• Enhanced forensics data available

• Frees up guard staff to respond to events

• Linear Sacleability
IVS – Weaknesses

- Complex system to deploy
- Limited use of existing cameras
- Long term maintenance and support
IVS - Key Considerations

• Product Application
  – Understanding customer requirements
  – Environment (outside/inside)
  – Water Side or Land Side
  – Proper Field of View
  – Lighting
  – Camera Stabilization
IVS – Key Considerations Cont.

• IVS Integrations
  – Video Management Solutions
    • See marked up video real time
    • Configuration Management
  – Alarm management & reporting
    • Do you want a separate alarm system for IVS?
Future of Integrated Systems

• Situational Awareness
  – Knowledge of all happenings within security environment

• Situation Management
  – What, when, how and who to respond

• Sensor Consolidation
  – All sensors integrated into single system
  – More intelligent decisions
  – Radar, Sonar, IVS, Access Control etc.
Keys to Success

• Solution Oriented
  – Based on your needs
  – How are the various systems to be integrated

• Proper Design
  – Detailed design approach to apply technology

• Configuration & Customization
  – Capable of complex integrations
Thank You!

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