Intelligent Environments

Deliver safe, efficient, and scalable environments using intelligent systems

Libraries and Museums are stewards of physical buildings and the valuable collections within. Keeping visitors safe, protecting and preserving collections, and limiting waste and impact on the natural environment is top of mind.

Smart building technology helps proactively regulate and optimize building environments, reduce energy consumption, and provide intelligence of visitor and staff behavior in the physical space. Cloud infrastructure helps scale these solutions with process automation and data-driven intelligence for operations staff.

For new construction projects, digital representation can help optimize building design and incorporate digital into all aspects of the building.

Intelligent Environments focuses on four main opportunities for Digital Transformation:

- **Safety and Cybersecurity:** Automate security of visitors, staff, and collections and proactively detect and mitigate risks without disrupting visitors.
- **Smart Buildings:** Proactively manage building facilities and achieve greater visibility of the physical space with data-driven intelligence.
- **Cloud Infrastructure:** Provide scalable storage, compute, security and compliance solutions where no organization can adequately cover.
- **New Construction:** Infuse future-ready technologies such as VR/AR, voice and motion detection, and fully immersive personalized displays.

Key Challenges

- Keeping visitors, staff, and collections safe
- Doing more with less resources
- Maintaining security and compliance standards
- Keeping the industry relevant in a changing world

- Are there opportunities to improve your current processes and technology related to physical and cybersecurity?
- How are you leveraging technology to maximize the experience of your facility for your guests?
- How are you thinking about incorporating digital in new building projects?

Achieve more with Intelligent Environments

Review the capabilities below to assess where your institution is currently and the path forward on the road to successful digital transformation.

	Entry	Emerging	Advanced	Transformative
Advanced Security	Focus is on physical security with manual processes and procedures.	Basic cybersecurity technology with identity and access management, device security, hybrid cloud environment using data pulled manually from various on-premises data sources.	Automation of physical security and compliance processes using data aggregated into one single source. Advanced protection against cybersecurity identifies threats and mitigates automatically. Data provides intelligence for real-time updating of policies and procedures.	Enterprise-level systems using AI and Machine Learning in the Cloud to proactively detect, prevent and mitigate physical and online threats leveraging advanced identity and access management, device security, information protection, advanced security and compliance, and application access protection.
Internet of Things (IoT)	Manual facilities and maintenance processes managed by staff.	On-premises facilities management software manages assets and equipment, streamlines work orders, and reduces space and maintenance costs.	An open, secure, and scalable platform collecting data from building sensors providing real-time and actionable data-driven insights that help advise how to significantly increase operational efficiency within buildings.	Dynamic IoT technology seamlessly connects electrical and mechanical sensors, security cameras, and motion sensors onto one cloud-based platform leveraging AI and Machine Learning to digitally model the physical space and predictively monitor systems and take proactive action.
Cloud Infrastructure	On-premises computing on traditional hardware with manual processes and workflows.	On-premises computing with consolidated and automated business processes with a single point of entry for staff.	A secure and scalable hybrid architecture that consolidates and automates processes and workflows on one system, providing a single view of data and metrics.	Cloud-based infrastructure consolidates processes onto one platform and scales with real-time automation and data-driven intelligence for predictive and proactive action with software, storage, and analytics accessible over the internet without latency.
Emerging Technologies	Visitors interact with objects and collections mainly in physical form.	Apps for mobile devices with maps, schedules, ticketing, lending, and other services.	Digital and touch-enabled experiences with personalized content and social media interactions for your visitors and constituents.	Future-ready technologies such as virtual reality, augmented reality, voice, motion detection, touchable interactives, holograms, and fully immersive personalized displays.