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Modernization of the City's Information Technology Infrastructure

Enhancing Efficiency, Security, and Public Services

Department of Information Technology
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Current IT Challenges

Outdated Systems





Limited IT Resources

Cybersecurity Risks



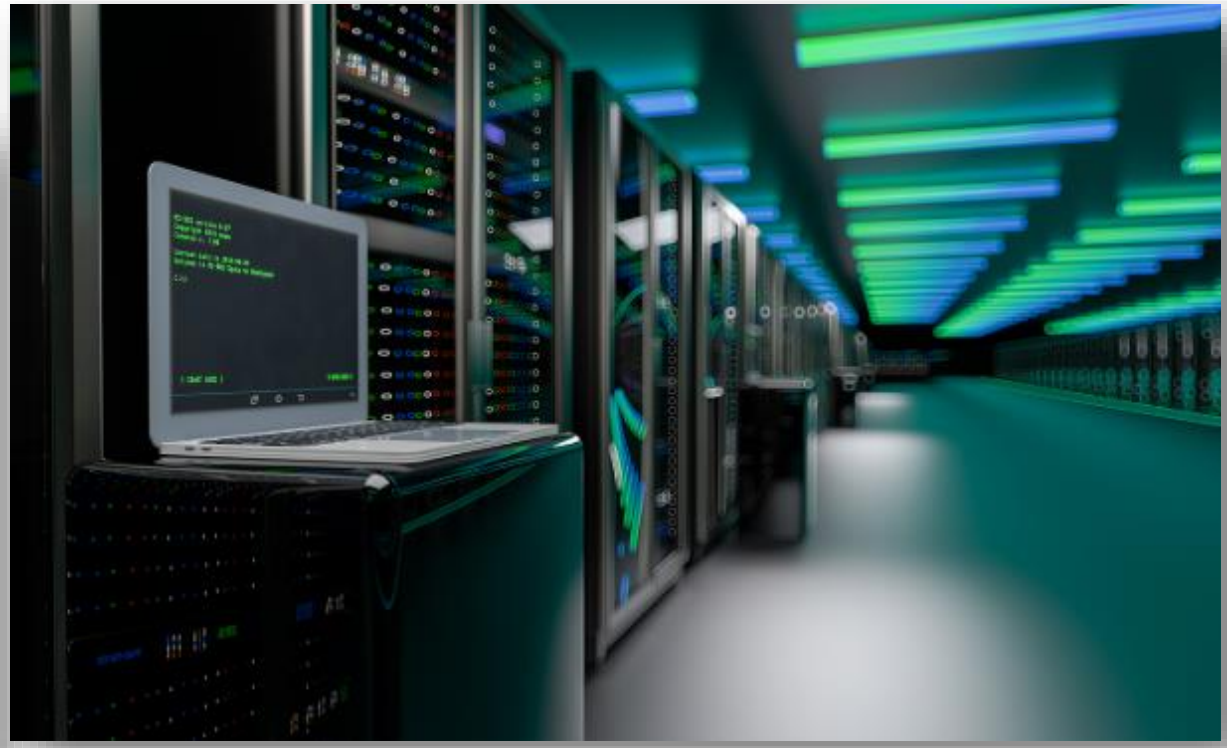
Current IT Challenges

- Outdated systems: Over 40-year-old mainframe platform, COBOL programs, IMS/CICS databases, and 3270 emulation.
- Mainframe Platform: High costs, complexity, and maintenance difficulties.
- Limited IT resources (e.g., retired COBOL programmers).
- Cybersecurity risks from old, unsupported software.

Modernization Strategies

Retire Legacy Systems





Prioritize Upgrades

Modernization Strategies

- Retiring legacy systems to reduce vulnerabilities.
- Adoption of the MAX system (Arizona’s solution) with code-sharing partnerships.
- States like Wyoming and Tennessee are already implementing MAX.
- Prioritizing upgrades based on budget, resources, and customer impact.

System Consolidation

- Addressing redundant or obsolete software across departments.
- Examples: Work Management, Asset Management, GIS systems.
- Consolidating competing tools (e.g., multiple work management systems).
- Benefits: Cost savings, streamlined processes, improved collaboration.





Telecom and Network Upgrades



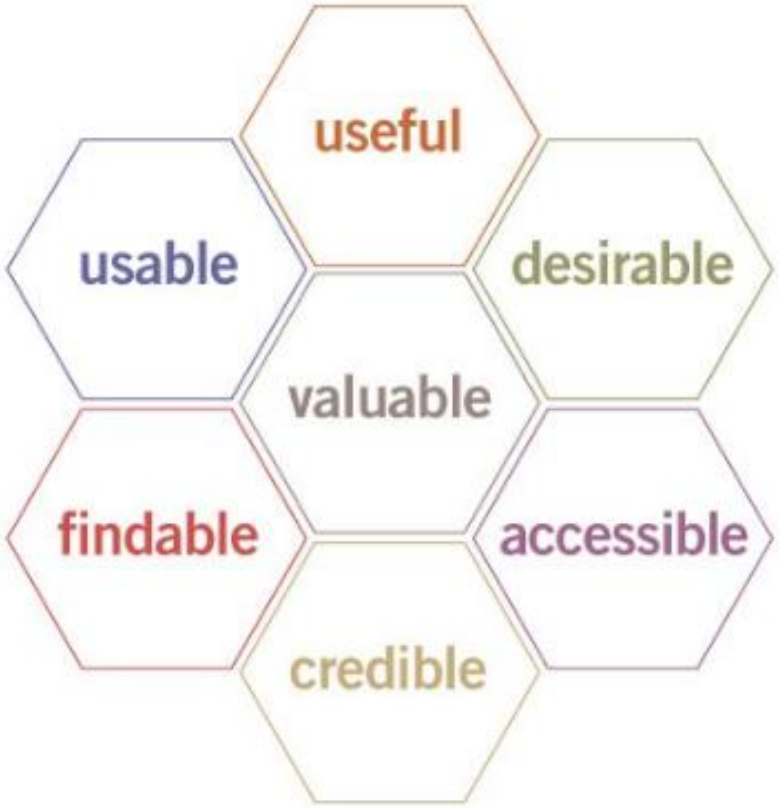
- Modernizing routing/switching equipment, PCs, laptops, and monitors.
- Building network redundancy to eliminate single points of failure.
- Transitioning to P25 radios with layered encryption.
- Enhancing security for applications, data, and communications.

Cloud Migration and ERP Modernization

- Moving the Advantage ERP suite to the cloud for better analytics and features.
- Process improvements in Purchasing, Accounts Payable, and Treasury.
- CGI Advantage as a key partner for cloud solutions.



Public Benefits of Modernization



- Improved user experience for residents and businesses.
- Enhanced cybersecurity and system reliability.
- Cost-effective, scalable solutions for long-term sustainability.
- Support for innovation and future service expansions.

Next Steps and Goals

- Prioritizing critical systems for replacement/upgrade.
- Collaborating with departments to adopt standardized tools.
- Expanding cloud capabilities and ensuring compliance with legal requirements.
- Continuous evaluation of new technologies for efficiency.





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