District IT Strategy

Madison Metropolitan
Sewerage District

Presented by Batina Culver
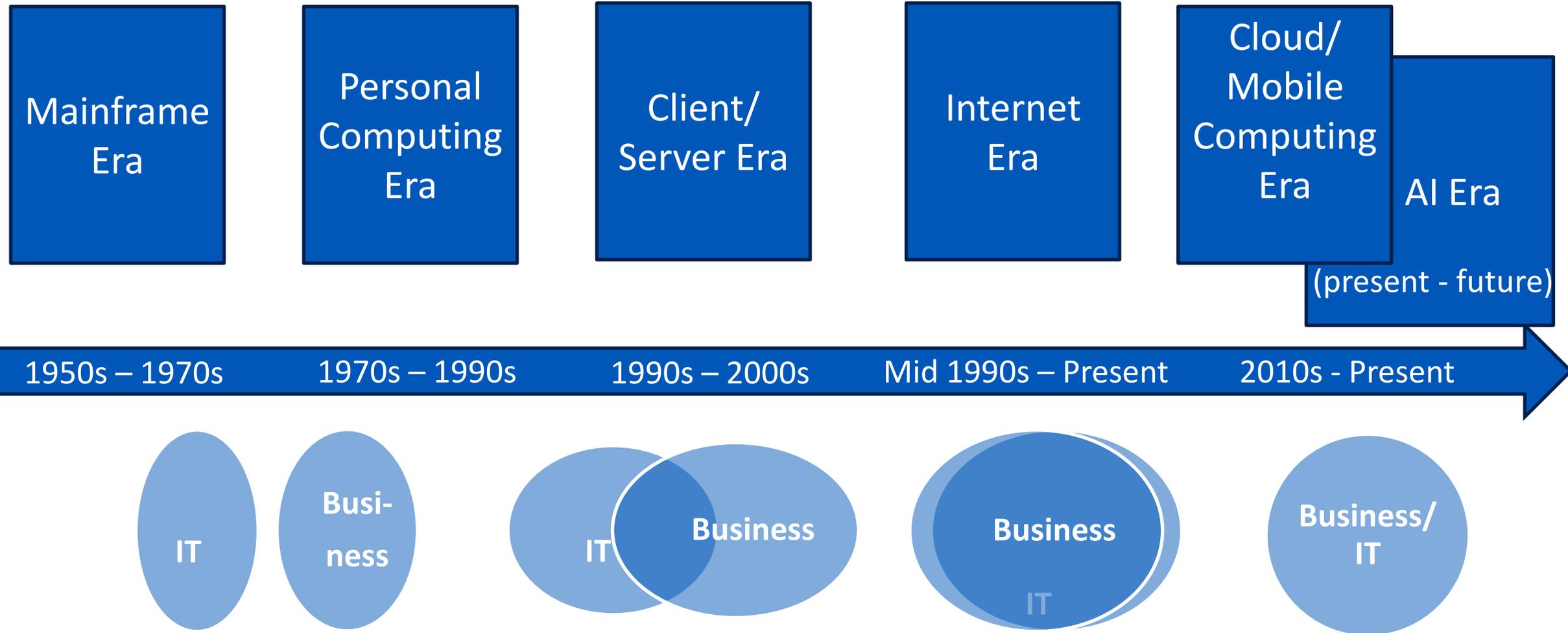
Today's presentation
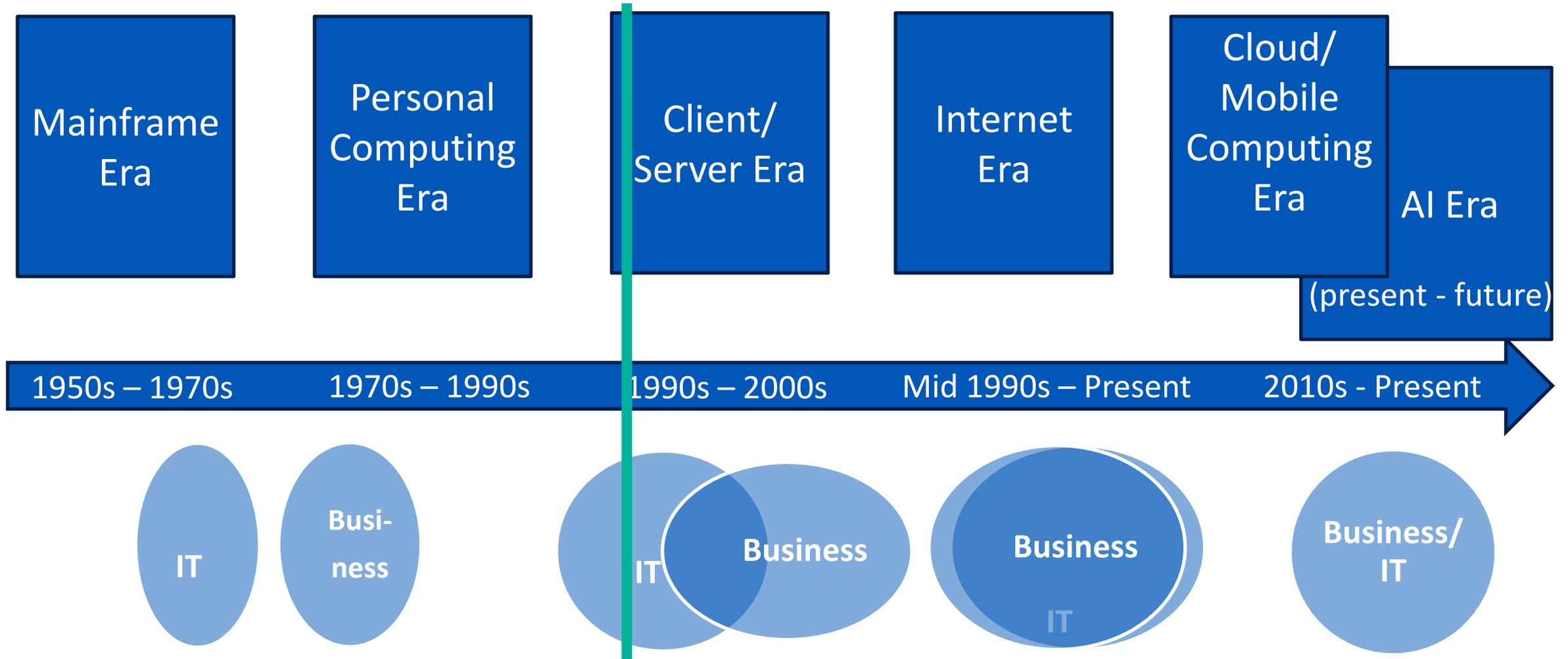
- History of IT

- District IT Strategy
  - People
  - Technology
  - Process

- Questions

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History of IT

Mainframe Era	Personal Computing Era	Client/ Server Era	Internet Era	Cloud/ Mobile Computing Era	AI Era

(present - future)

1950s – 1970s	1970s – 1990s	1990s – 2000s	Mid 1990s – Present	2010s - Present

IT   Busi-ness   IT   Business   Business   IT   Business/ IT

District adoption of technology

| Mainframe Era	Personal Computing Era	Client/ Server Era	Internet Era	Cloud/ Mobile Computing Era	AI Era (present - future)
1950s – 1970s	1970s – 1990s	1990s – 2000s	Mid 1990s – Present	2010s - Present	

IT   Busi-ness

IT Business

Business IT

Business/ IT

What is IT strategic direction – modernizing

- Software as a Service (SaaS) solutions (e.g., Workday)

- Modernized solutions hosted from the cloud

- Address legacy technology on priority basis

- Integrate to old technology via modern integration patterns
(i.e., building web services)

Cloud First

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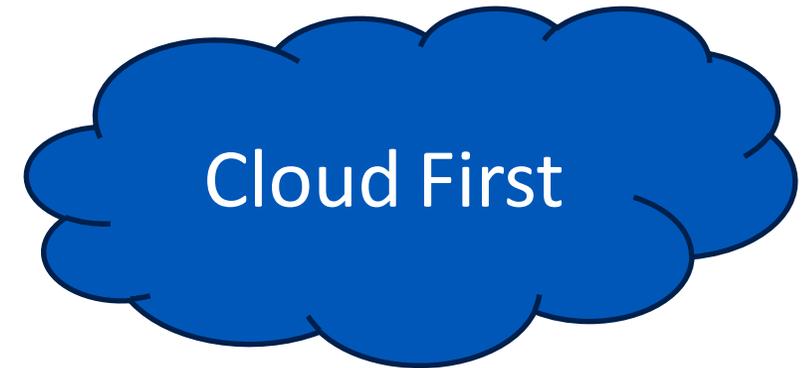
Journey to cloud – Current and near investments

People *Capacity and Skill*	Technology *Modernize, Secure, Inform*	Process *IT as Strategic Partner*
IT Staff Augmentation – L1/L2 Support	**IT System Modernization:** • **DMZ** (separate network segment for protection) • **Metrogro** • ERP	**Establish Support process and metrics**
IT Staff Augmentation – Backfill	**Cybersecurity remediation & roadmap**	Establish practices
Upskilling for IT team	Data Management roadmap	Agile Transformation

Current investments

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Metrics – Integral part to journey

People	Technology	Process
Capacity and Skill	*Modernize, Secure, Inform*	*IT as Strategic Partner*
Resource retention	**Project metrics: velocity, cost, quality**	**Measuring "good support"**
Skills matrix	**% of cybersecurity findings remediated**	Agile – velocity, quality, adoption
	System health score	

Current investments

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Funding journey to cloud

Expense Type

	Implementation (New)	Ongoing
Funding Sources	Capital	IT operational budget
	Department program budgets	

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Risks – to cloud first

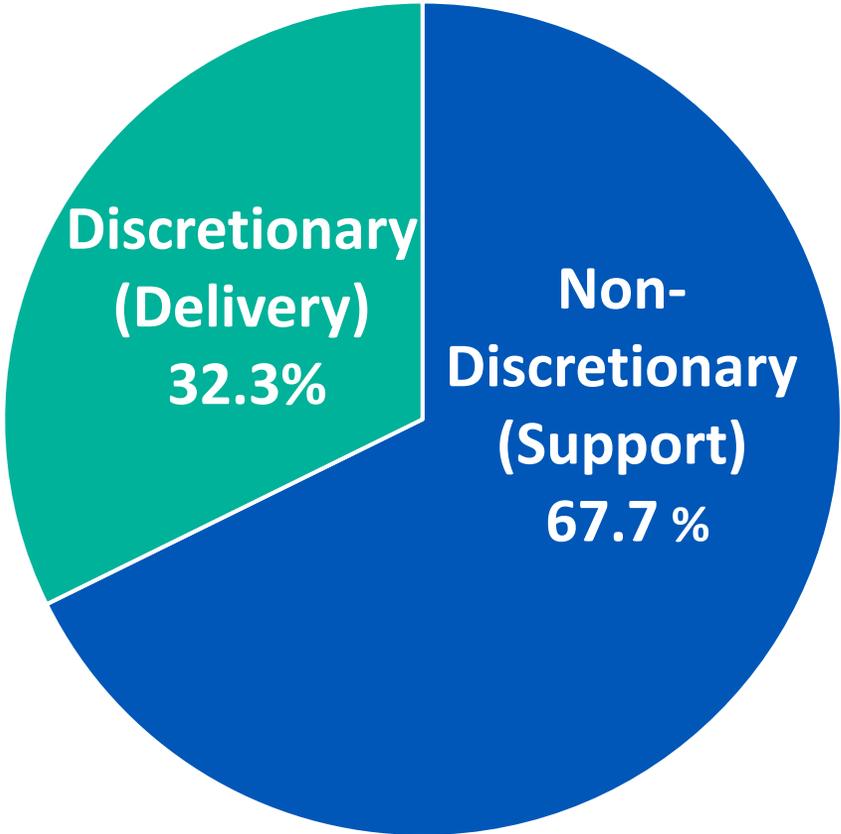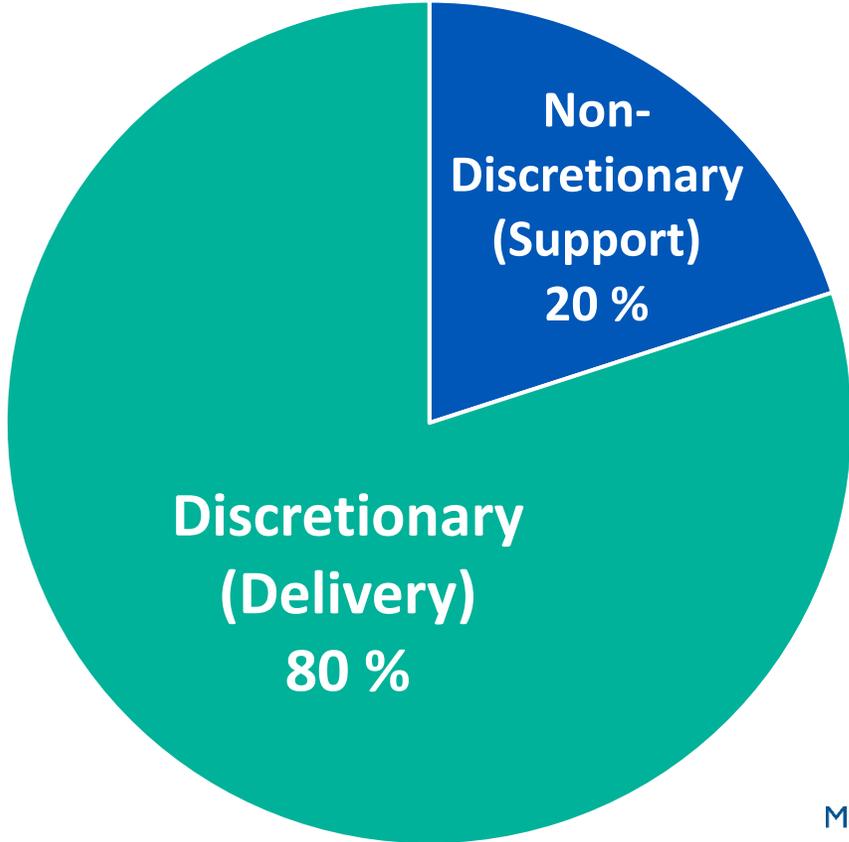| Risk	Handling
Significant change for IT	Investments in IT
Pent-up demand	Prioritization
Aged system breaks beyond repair	Accepted risk and adjust when impacted
Significant change for District	Change Management investments

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Questions?

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Appendix

IT Support Services

District

Industry

District pie chart:
- Discretionary (Delivery) 32.3%
- Non-Discretionary (Support) 67.7 %

Industry pie chart:
- Non-Discretionary (Support) 20 %
- Discretionary (Delivery) 80 %

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Future Positioning

Partnership

Master Services Agreement (MSA)
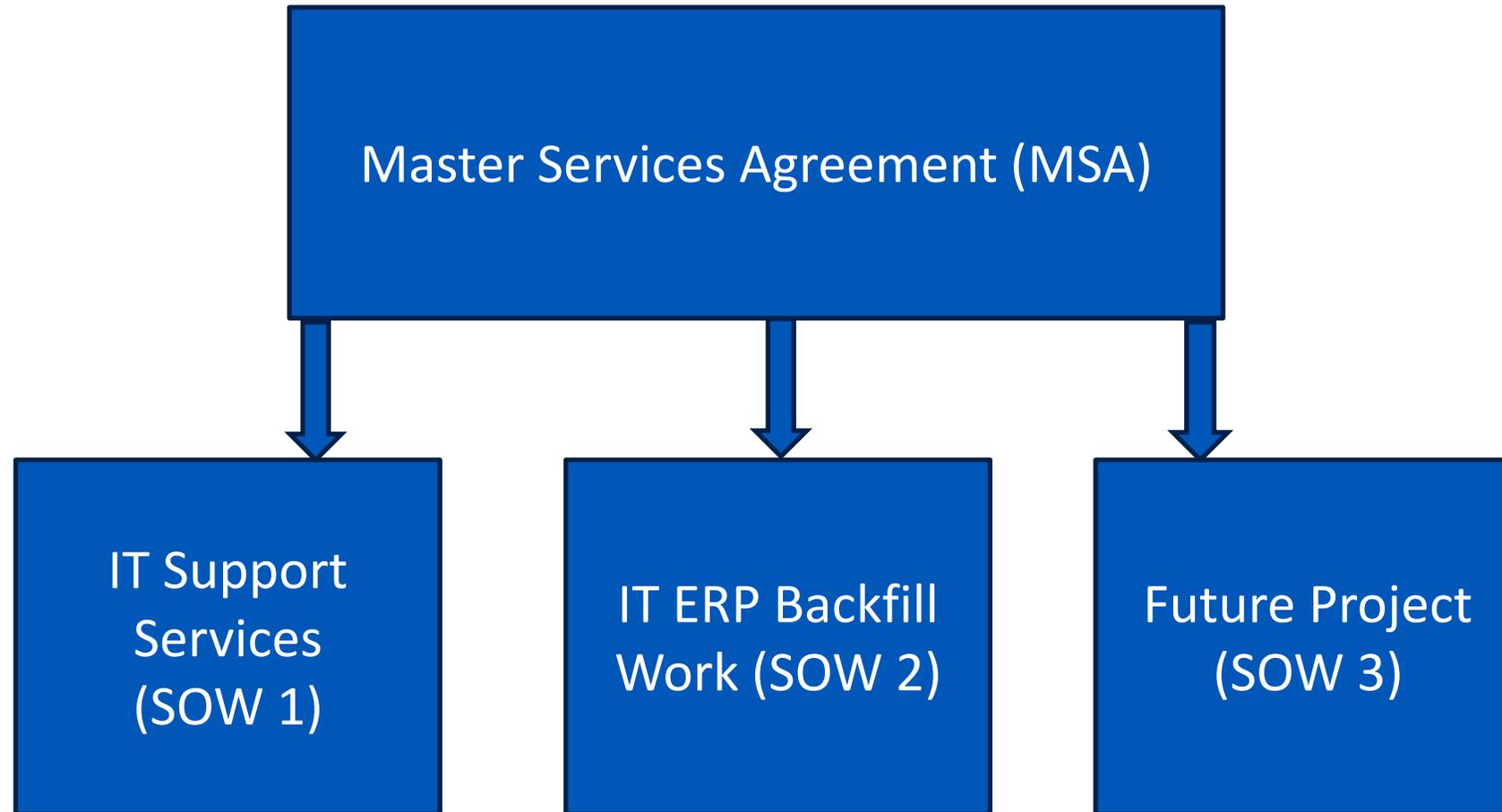
IT Support Services (SOW 1)

IT ERP Backfill Work (SOW 2)

Future Project (SOW 3)

Project(s)

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History of IT: Mainframe Era

- **Strategic Role**:
    - Focus on automating routine business processes

- **Organizational impact**:
    - Business had little direct interaction or understanding of technology

- **Competitive Advantage**:
    - Small edge through operational efficiency

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History of IT: Personal Computing Era

- **Strategic Role**:
  - IT is in support function role with growing operational importance

- **Organizational impact**:
  - Business could use technology to do jobs

- **Competitive Advantage**:
  - Productivity gains and faster business adaptation

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History of IT: Client Server Era

- **Strategic Role**:
  - Network computing and enterprise applications

- **Organizational impact**:
  - IT leadership tasked to align technology investments with business objectives

- **Competitive Advantage**:
  - Streamlined operations and data management

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History of IT: Internet Era

- **Strategic Role**:
    - Network computing and enterprise applications

- **Organizational impact**:
    - IT role shifted to managing external relationships, security and web-based infrastructure

- **Competitive Advantage**:
    - Allowed business to engage and reach new markets

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History of IT: Cloud/Mobile Era

- **Strategic Role**:
  - Cloud platforms enable rapid scalability, innovation and digital transformation

- **Organizational impact**:
  - IT role expanded to support hybrid environments, data-driven decision making, and cybersecurity

- **Competitive Advantage**:
  - Have become table stakes

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History of IT: AI Era

- **Strategic Role**:
  - IT strategy is inseparable from business strategy. AI used to automate, and help District anticipate problems

- **Organizational impact**:
  - Technology is not just a tool; engine of innovation

- **Competitive Advantage**:
  - Leverage AI to process larges amount of data and automate decision-making

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Thank you