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A PLANNING TEMPLATE FOR EMERGING TECHNOLOGY

ADAM RUJAN
Partner, Plante Moran

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Plante Moran fast facts

1924
year founded

2,200+
staff

23
offices worldwide

25+
industries served

49
states with clients

72
countries with clients

45+
services available

27
languages spoken firmwide

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A Few Relevant Emerging Technologies

- Smart City/IOT
- Blockchain
- RPA/Chatbots
- Cloud Services
- X-Agency Case Management
- Artificial Intelligence (AI)
- BI/BA/Predictive Analytics
- Digital Government Tech Platform

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30 years of Technology Changes

1990s

- Internet introduced commercially
- Mobile Phones (dumb) available
- Enterprise technology (e.g. ERP) debuts

2000s

- Internet gets faster and cell phones smarter (iPhones 2007)
- Social media is born (Facebook over 1 Billion users by 2012)
- Google launches Maps, experiments with self driving cars

2010s

- Internet of Things explodes
- Cloud services/Agile methodologies introduced
- Artificial Intelligence commercialized
- Mobile App's reign

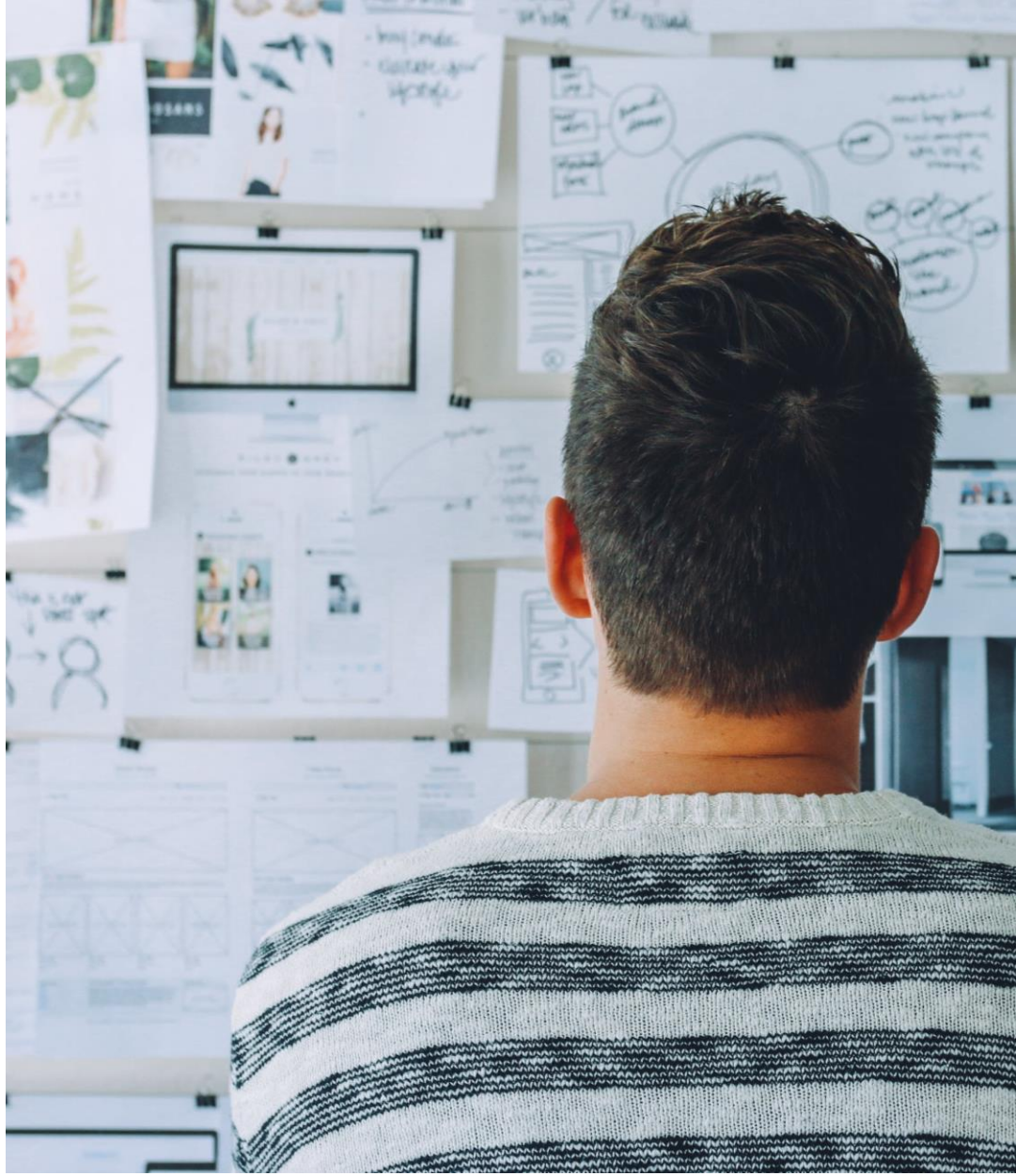
Plan – Prepare – Pursue (3 P's)

Plan	Aspire to transform an operation or create a new capability
Prepare	Rationalize the new technology by building the business case (ROI concept)
Pursue	Build the support structures to enable/facilitate the change and maintain the environment

PLAN – Prepare - Pursue

So, the mayor walks in Monday morning and says, “We need a new flux capacitor, I heard a city in Texas has one……”

What do you do??



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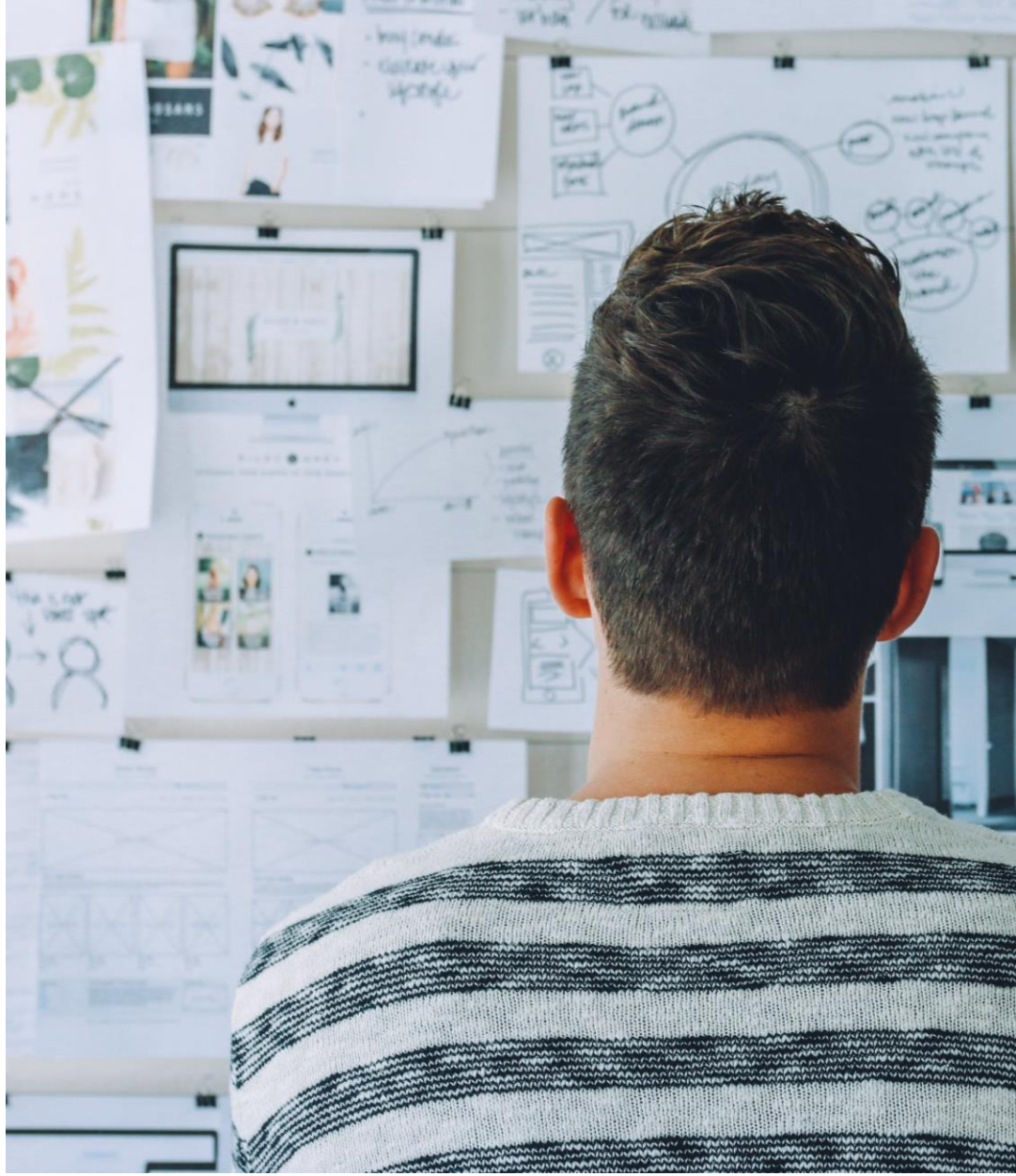
PLAN – Prepare - Pursue

Education/Research

- What is this new technology?
- What does it do, and what might it do for us?
- What is the value proposition?
- Benchmark, or look for analogous processes in other industries



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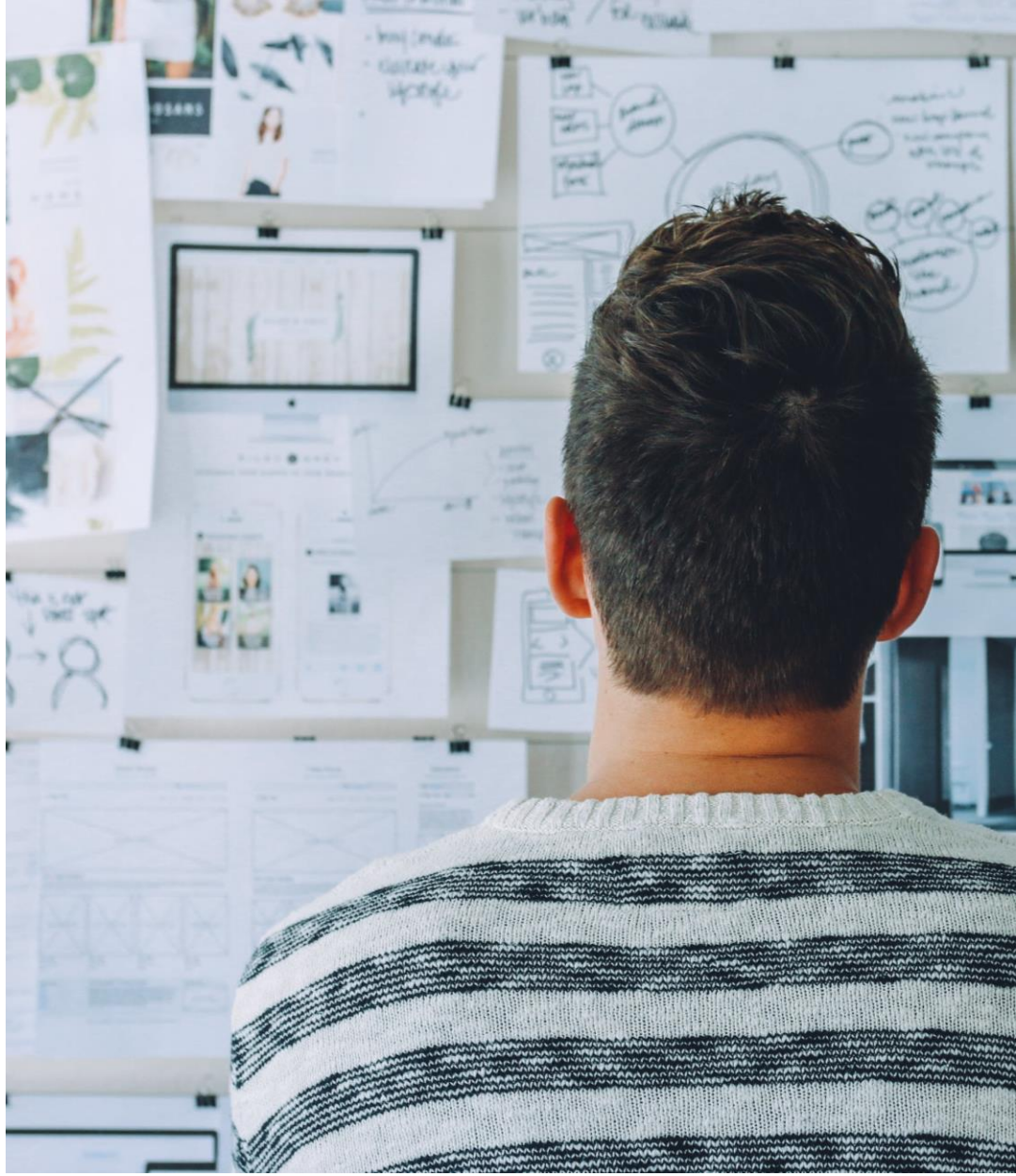
PLAN – Prepare - Pursue

Visioning

- Assemble the team (includes IT, but really a “management” function because at this point, its about resource allocation)
- “Paint the Picture” – create a compelling story
- Answer the WIIFM question, laying the groundwork for change



Plan – PREPARE - Pursue

So, now its Tuesday and the mayor says "Great, glad you're on board with my flux capacitor idea.

Now tell me why you need two gazillion dollars to do this?"

What do you do??

Plan – PREPARE - Pursue

- Rationalize the technology by building a use case(s).
- Develop the business case – describe the value (ROI) operationally.
- Research/think through the support requirements: skills, aptitudes, process changes, staffing, governance/policy, budget, cybersecurity, hardware, etc. Cost out as fully as possible.

Plan – PREPARE - Pursue

- Develop a specific (tactical) strategy for deploying this new technology.
- Assign timelines, responsibilities, funds, etc.
- Consider communication plans, as appropriate.

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Plan – Prepare - PURSUE

So now its Wednesday and at the council meeting, the mayor asks, “Now that we gave you an open checkbook, how are you going to proceed?”

What do you do??

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Plan – Prepare - PURSUE

Execution – Turn the strategy into a plan (SOW or workplan)

- Operations Component
- Tech Support Component

Create metrics to evaluate ROI?

- Did we get the value we hoped for?
- Or, should we close down the experiment?

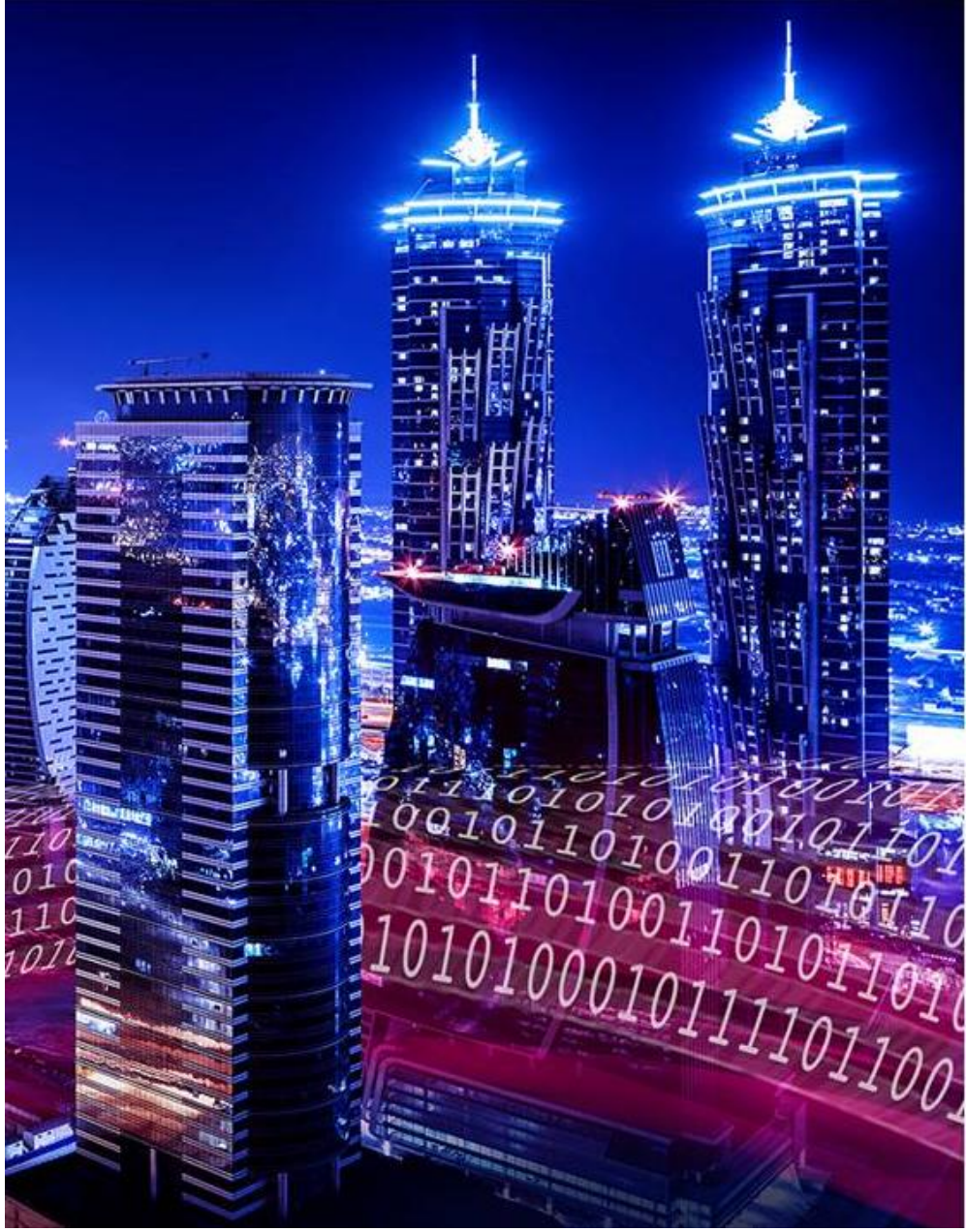
Plan – Prepare - PURSUE

- Lessons learned – Parade of new technologies isn’t likely to stop, so develop your process to vet new technologies
- Communicate your results

INTERESTING NEW TECHNOLOGIES

Interesting New Technologies
Smart Cities

- A broad concept that captures the digitalization of the physical world, based upon the Internet of Things (IoT) to monitor and deliver services, resources and information. Autonomous vehicles, smart workplaces.
- Potential to transform operations and citizen engagement.
- Obstacles/challenges: Cost (start with proof of concept), data privacy issues, private sector partnerships.



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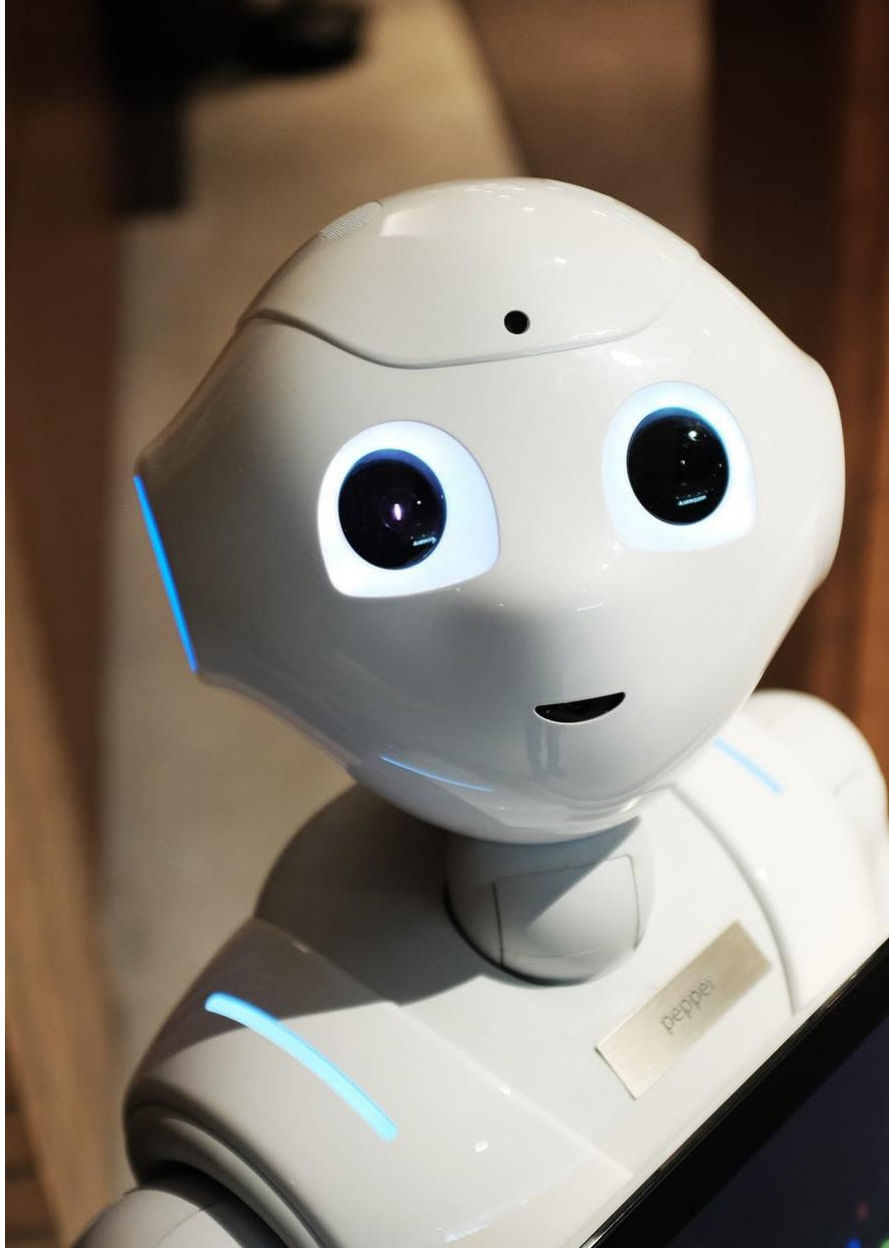
Interesting New Technologies
Machine learning/artificial intelligence

- The use of mathematical algorithms to identify patterns and extract knowledge from data. Applications to include Citizen engagement, productive maintenance, fraud detection, automation, resource optimization.
- Potential to transform operations. Already built into some applications, with more on the way.
- Obstacles/challenges: Clean, reliable data (to feed the system), “teaching” the application, skill sets of existing staff.



Interesting New Technologies
Blockchain

- An immutable digital record of any transaction, including an audit trail with date stamps and reference links. Applications to include real estate transactions, permits, registrations, procurement, social service transactions, etc.
- Potential to transform many operations. Already transforming banking and financial services.
- Obstacles/challenges: Trust based issues impacting policy/legislation, private sector partnerships, skill sets of existing staff

Interesting New Technologies
Cloud Services

- Cloud computing is a scalable and metered method for delivering IT capabilities via the internet. Cloud models include software (SaaS), Infrastructure (IaaS), Platform (PaaS), Data (DaaS), and Business processes (BPaaS). Examples: Workday ERP, Salesforce, NeoGov, Granicus, etc.
- Potential to transform operations, and allow municipalities to better keep pace with IT change.
- Obstacles/challenges: Will require very close alignment of IT with management, data protection regulations, cybersecurity considerations and IT skill sets.

Interesting New Technologies
BA/Predictive Analytics

- Using mathematical modeling techniques to examine data in order to determine the likelihood of events. Applications already include crime prevention, campaign management, preventive maintenance.
- Potential to enhance/improve a variety of decision processes, and gain new insights based on data collected via Smart/IoT networks.
- Obstacles/challenges: User skill set, clean reliable data.

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THANK YOU

Questions?

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