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#### **3-YEAR** STRATEGIC ROADMAP FOR **ARTIFICIAL INTELLIGENCE**

CHARLOTTE DEPARTMENT of innovation & technology

## YEAR

#### STRATEGIC ROADMAP FOR ARTIFICIAL INTELLIGENCE

Recent advancements in AI, especially in generative AI (GenAI), which gained significant attention with the release of OpenAI's ChatGPT, have made the transformative potential across industries more apparent than ever. The City of Charlotte is dedicated to harnessing this potential to enhance public services, boost operational efficiency, and drive innovation.

This roadmap outlines a clear, phased strategy for AI adoption

--starting with strong governance, capacity building, and pilot projects, and evolving toward wider deployment and integration. By fostering strategic partnerships, investing in workforce development, and validating AI use cases through targeted proofs of concept, the city aims to ensure that its AI initiatives are ethical, unbiased, and aligned with its broader strategic objectives.

#### Scope

The scope of this strategic roadmap spans all city departments, guiding the development of AI-focused technology investment portfolios for each business area, as well as the internal operations of I&T.

This roadmap covers the necessary governance, planning, and execution of AI initiatives, with specific focus on ensuring that each department is aligned with citywide goals. The development of these investment portfolios will begin later in the "crawl" phase, once foundational governance structures are in place, and continue through the "walk" phase as the city builds its AI capabilities.

While data is essential to fully leveraging AI, this roadmap does not delve into a comprehensive data strategy or detailed data architecture design. Instead, it identifies the high-level initiatives required to establish an AI-ready environment. These foundational initiatives will support future efforts to create a robust, complementary data strategy that aligns with AI objectives.

### Approach

Al is rapidly evolving, driving a wave of innovation and transformation across industries. While the technology continues to mature, the City of Charlotte recognizes both the opportunities and challenges that come with Al's rapid advancement.

This roadmap is designed to balance bold ambition with careful planning, ensuring that we stay cognizant of emerging trends while grounding our approach in what is feasible today and in the near future.

To account for AI's fast-paced evolution, the strategic initiatives outlined in this roadmap are more detailed for years one and two, allowing for adjustments in year three as the technology progresses. The city will adopt a measured yet progressive approach, leveraging AI to its full potential while safeguarding citizens and mitigating risks. We will phase the integration of AI into our business environment using a crawl-walk-run methodology, which ensures deliberate and continuous progress.

The City of Charlotte is committed to investing in the necessary resources to fully capitalize on Al's potential. This roadmap aligns Al initiatives with broader business goals, ensuring that our efforts not only advance technology adoption but also enhance city services and outcomes for all stakeholders.

## Foundation & Exploration

The 'Crawl' Phase lays the groundwork for the City of Charlotte's AI adoption, focusing on building the essential foundations for success in the subsequent years.



This phase emphasizes establishing governance structures, educating staff, and identifying pilot projects to begin exploring Al's potential. By focusing on these foundational elements in the first year, the city will be well-positioned to accelerate Al adoption and achieve transformative outcomes in subsequent phases.

#### Governance

- Al Readiness Assessments
- Usage Guidelines
- Risk Tolerance Levels
- Governance Structure and Processes
- Policy & Guiding Principles

#### Education & Skill Building

- Al Basic Training & Usage Case Guides
- GenAl Training/Education for all interested city staff
- Testing & Evaluation of AI Platforms and Models
- Assessment & Reskill/ Upskill of I&T Staff

#### Data

- Infrastructure
- Data Governance Reaffirmation
- Inventory, Assessment, & Prep Data Environment(s)
- Metadata Generation
- Assessment of Data Architecture/ Infrastructure

 Assessment of Infrastructure for AI-supportive Enhancements

#### Solution Delivery

- Launch of Al Center of Excellence
- Exploration for Public & Private Partnerships
- Build & Deploy GenAl Pilots

#### YEAR 2 | WALK PHASE

## Measured Builds & Increasing Momentum

The 'Walk' Phase builds upon the governance foundation as well as the learning experiences gained in year one through piloting initiatives.



The walk phase is anchored by efforts to build portfolios of Al opportunities around customer departments and internal operations, as well as bolstering the infrastructure and data architecture needed to support more robust offerings. Some initiatives that were introduced in year one will continue here in year two and beyond, such as testing and evaluation of new models and platforms, exploring public & private partnerships, generating metadata, and continuing infrastructure and architecture assessments.

# FOCUS AREAS

#### Education & Skill Building

 Extend AI Development Capabilities/New Functionality

#### Data

- Generate Templates & Documentation for Improved Data Ingestion
- Implement Funded Data Architecture/ Infrastructure Priorities

In Year 2 of the AI roadmap, the City of Charlotte moves from initial pilots and foundational governance to scaling AI efforts across departments and operations.

The 'Walk' phase focuses on creating Al opportunity portfolios tailored to both customer-facing departments and internal IT operations, expanding data-readiness work, and enhancing infrastructure to support Al initiatives. Continued stakeholder engagement, Al readiness assessments, and partnership explorations will drive the momentum, while infrastructure and data architecture improvements will lay the groundwork for more complex Al solutions in Year 3.

#### Solution Delivery

 Enhance Infrastructure in Funded Areas to Support AI

Infrastructure

- Build AI Opportunities Portfolio for each Department
- Establish Master Services Agreement with Trusted Al Vendors

#### YEAR 3 | RUN PHASE

## Scaling & Embedding Al Across the City

As emphasized earlier in this roadmap, the Al landscape is changing so rapidly that we will focus on the general objectives that need to be accomplished in year three.



FOCUS AREA

The city will continue efforts of generating metadata, evaluating new platforms/models, and enhancing infrastructure. Top priority, though, will be to scale and implement more AI solutions across the organization now that the foundation has been established.

#### Continued Integration

- Continue buildout of funded AI opportunities
- Extend AI Development capabilities/New Functionalities
- Identify next round of Al opportunities and update portfolios for funding

With these steps, the city aims to maximize the impact of AI now and into the foreseeable future, driving efficiency and innovation across all levels of its services.

> Building on the foundations established in the previous two years, this phase emphasizes scaling AI initiatives, refining infrastructure, and ensuring that the city's data and technology landscape continues to evolve to support AI.

 $\underline{\text{MD}}$  CITY of CHARLOTTE

THEME/CATEGORY	STRATEGIC INITIATIVES					
GOVERNANCE	Develop & Publish GenAl Guidelines					
GOVERNANCE	Innovation and AI Readiness Assessment(s)					
GOVERNANCE	Define AI Risk Tolerance Levels					
GOVERNANCE	Establish AI Governance Structure & Processes					
GOVERNANCE	Define AI Guiding Principles					
GOVERNANCE	Draft and Approve City Al Policy					
EDUCATION & SKILL BUILDING	Develop AI Usage Case Guides and Basic AI Training Curriculum					
DATA	Data Governance Reaffirmation					
SOLUTION DELIVERY	Introduce/Launch Center of Excellence					
EDUCATION & SKILL BUILDING	Instruct I&T Staff on AI Usage Guides					
EDUCATION & SKILL BUILDING	Educate City Staff on GenAl Opportunities					
SOLUTION DELIVERY	Explore Potential Public & Private Partnerships					
DATA	Inventory, Assess, & Prep Data Environment					
DATA	Generate Templates & Documentation for Improved Data Ingestion					
DATA	Generate Metadata for Data Sources					
SOLUTION DELIVERY	Build & Deploy Initial GenAl Pilot(s)					
EDUCATION & SKILL BUILDING	Test & Evaluate Platforms and Models					
INFRA	Assess Infrastructure for Improvements Needed to Support AI					
DATA	Assess Data Architecture/Infrastructure to Support Al					
EDUCATION & SKILL BUILDING	Assess and Reskill/Upskill I&T Workforce					
SOLUTION DELIVERY	Build AI Opportunities Portfolio for each Department					
SOLUTION DELIVERY	Build AI Opportunities Portfolio within I&T Operations					
INFRA	Enhance Infrastructure in Funded Areas to Support Al					
DATA	Implement Funded Data Infrastructure Priorities					
SOLUTION DELIVERY	Prioritize Departmental Opportunities & Obtain Funding					
SOLUTION DELIVERY	Prioritize Internal Operations Opportunities & Obtain Funding					
EDUCATION & SKILL BUILDING	Extend AI Development Capabilities/New Functionalities					
SOLUTION DELIVERY	Establish Master Services Level Agreements with Trusted Vendors					
SOLUTION DELIVERY	Implement Funded Departmental Al Opportunities					
SOLUTION DELIVERY	Implement Funded I&T Operations AI Opportunities					
SOLUTION DELIVERY	Identify Next Round of AI Opportunities within Departments					
SOLUTION DELIVERY	Identify Next Round of AI Opportunities within I&T Operations					

TIMELINE													
CRAWL PHASE					WALK PHASE				RUN PHASE				
Q4FY24	Q1FY25	Q2FY25	Q3FY25	Q4FY25	Q1FY26	Q2FY26	Q3FY26	Q4FY26	Q1FY27	Q2FY27	Q3FY27	Q4FY27	
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