

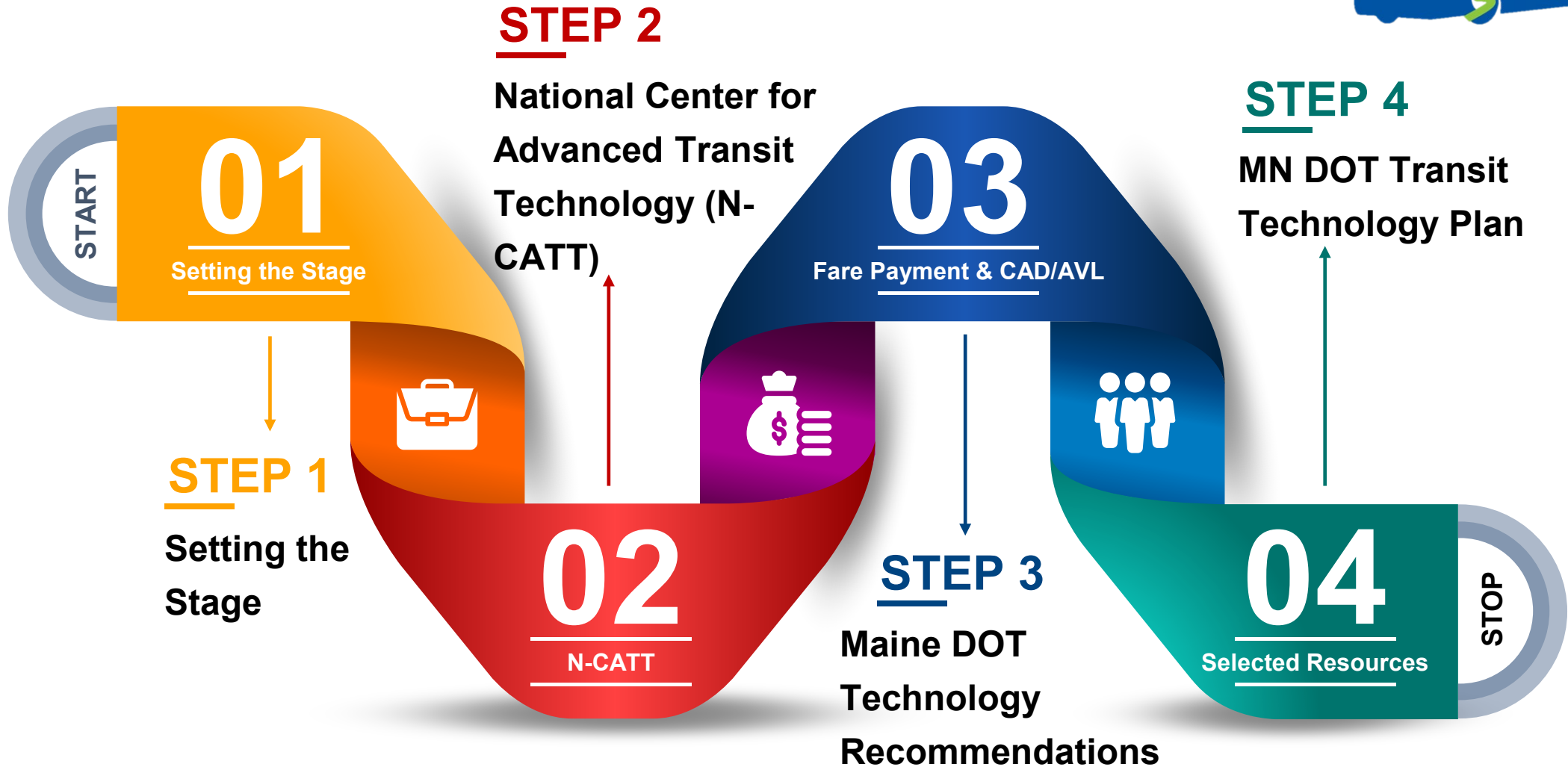


Transit Technology Resources for Small and Rural Agencies

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Tri-State Transit Conference
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Presentation Outline



Rural Transit Technology Context

- Low population density
- Limited mobility services
- Limited infrastructure, such as broadband internet
- Digital literacy and reluctance
- Cultural and behavioral resistance
- Limited organizational capacity for technology
- Technology improvements not yet “mainstreamed”
- Onboard technology poorly supported
- Procurement and funding challenges
- Data challenges

National Center for Advanced Transit Technology (N-CATT) Resources



A Framework for Making Successful Technology Decisions

Technology Readiness and Resilience Assessment Tool

Cybersecurity Assessment Tool for Transit: Self Assessment Package (available on FTA website)



Technology Decision-making



Challenges in Technology Decision-Making

Core Concepts: Capacity Building and Systems Thinking

Decision-Making Framework

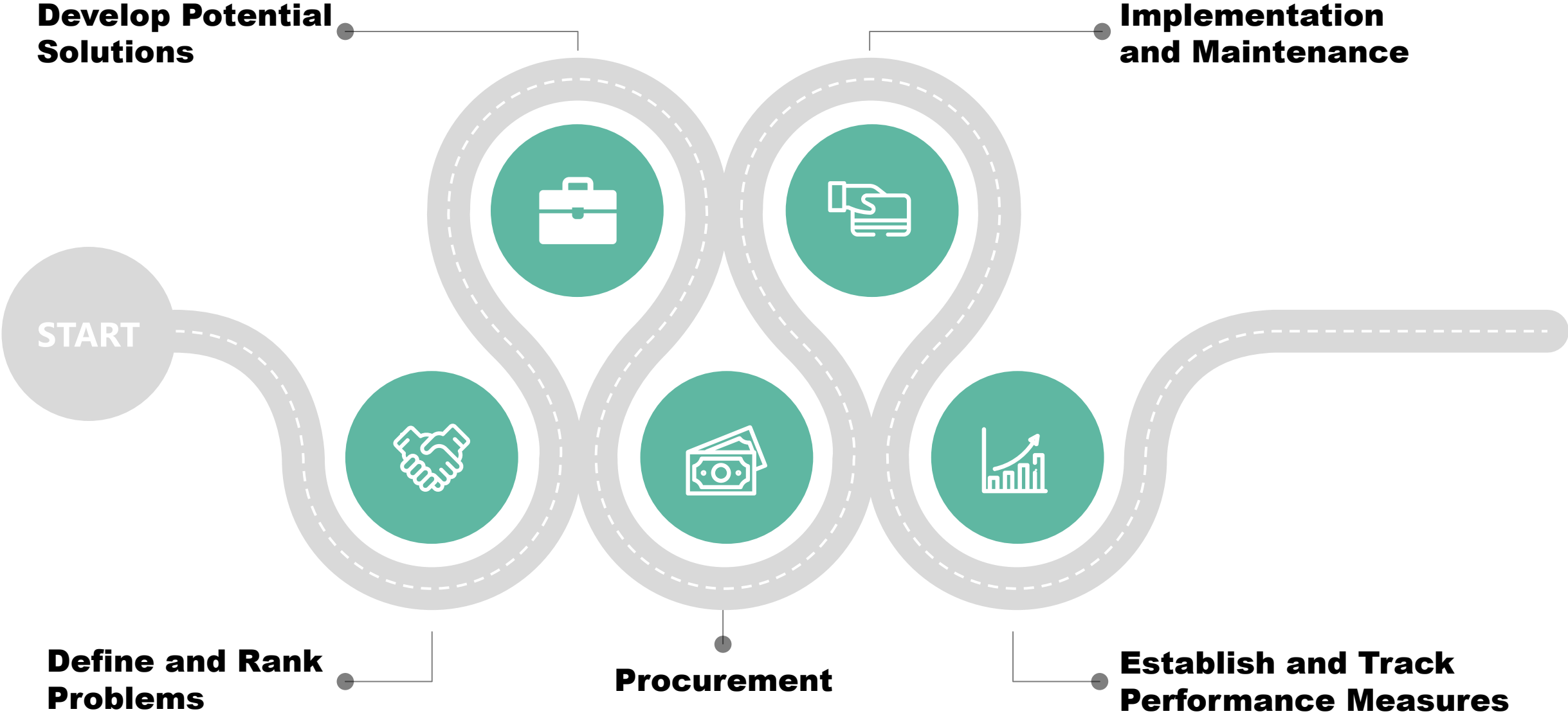
Importance of Performance Measures

Standards and Interoperability

Leadership and Trade-Offs



Technology Decision-making Framework Steps



Technology Readiness Assessment Categories



Contract Management & Organization

Systems & Culture

Performance Measurement

Organizational Resilience

Cybersecurity





Cybersecurity Assessment Tool for Transit: Self Assessment Package



- Asset Management
- Controls Management
- Configuration and Change Management
- Vulnerability Management
- Incident Management
- Service Continuity Management
- Risk Management
- External Dependencies Management
- Training and Awareness
- Situational Awareness

Maine DOT Technology Recommendations Report



Automated Fare Payment (AFP) Assessment

- Implementation and Expansion Recommendations
- Best Practices and Technology Identification ←

Computer-aided Dispatch (CAD)/Automatic Vehicle Location (AVL) Assessment

- Implementation and Expansion Recommendations
- Best Practices and Technology Identification ←

Technology Questionnaire ←

Technology Flowcharts for Small and Medium Size Transit Agencies ←

Excerpt of Baseline Technology Reference Chart



KEY:

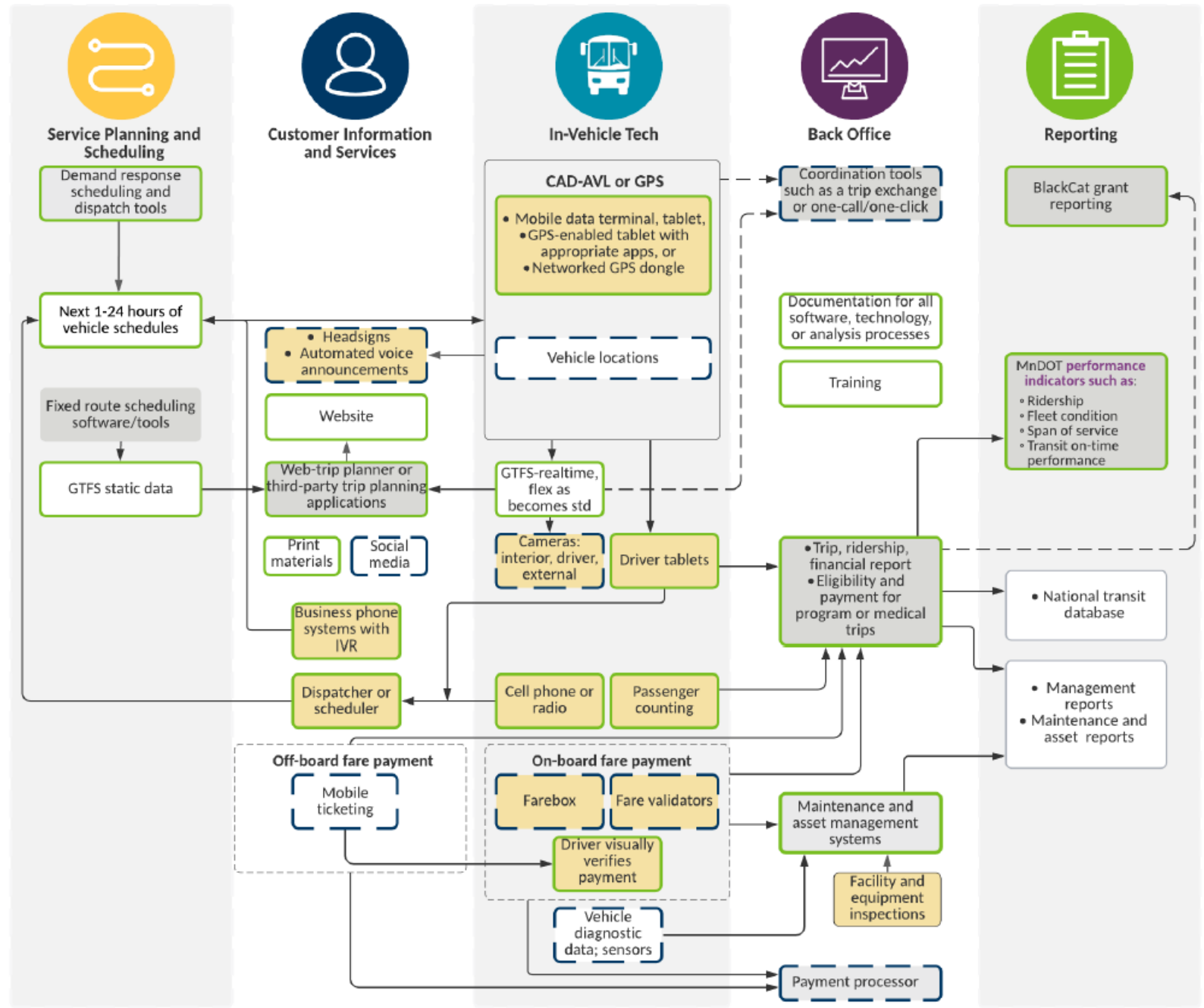
- = NO
- = YES
- ◐ = MAYBE
- NA = Not applicable

FLEET SIZE					
1 to 9 vehicles		10 to 29 vehicles		30+ vehicles	
DR	FR	DR	FR	DR	FR

Customer-Facing Trip Planning						
Trip planning for riders	◐	◐	◐	●	◐	●
GTFS	NA	●	NA	●	NA	●
GTFS-Realtime	NA	◐	NA	◐	NA	●
GTFS-Flex	◐	NA	●	NA	●	NA

In-Vehicle Technology						
Automated voice announcements	NA	◐	NA	◐	NA	●
Cameras	◐	◐	●	●	●	●
Automatic vehicle location or GPS	◐	◐	●	●	●	●
Automated passenger counters	NA	○	NA	◐	NA	◐
Collision avoidance systems	◐	◐	◐	◐	◐	◐
Mobile data terminal/computer	◐	◐	●	◐	●	●

Small Agency Technology Flowchart



THANK YOU!

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