

## Tree Asset Manager (TreeAM)

Enhancing the Value and Use of Digital Data Platforms  
for  
Utility Vegetation Management (UVM)

## Digital Data Platforms

### Current Data Handoff: GIS Shapefiles

#### Benefits

- Reduced manual field work
- Accurate identification of danger trees (in uncluttered environments, e.g., transmission)

#### Limitations

- Utilities presented with large amounts of data identifying “danger” trees
  - Posing new challenges in managing large scale, e.g., inventorying, maintenance, monitoring
  - Increasing liability exposure since the “danger” trees have been identified
- Adds another data and process “silo” to an already fragmented business process
  - Cannot integrate data from multiple sources, e.g., other sensors, field, GIS and AM systems, historical inventory and maintenance data
  - Cannot integrate other vegetation management programs, including WO management
- Difficult to transition UVM programs as remote sensing technologies evolve

In general, GIS shapefiles prevent the optimal use of digital data platforms

# Integrating Digital Data Platforms with TreeAM

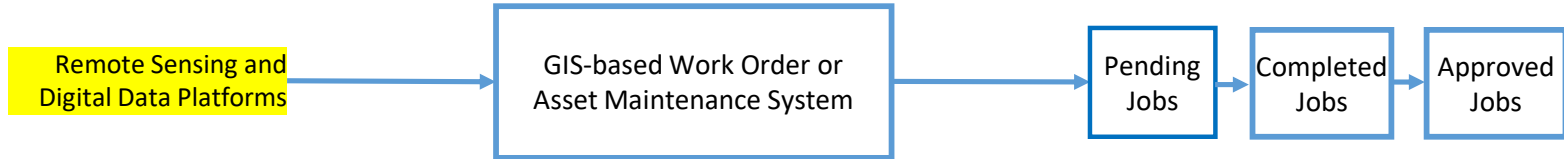
## Benefits

- Integrate different types of data from different data sources and sensors
- Improve accuracy and precision in identifying “danger” trees
- Apply improved analytics and modeling to prioritize maintenance activities
- Make remote sensing/digital data platforms an integral part of the UVM program
- Reduce people touch-points and manual data handling
- Improve asset monitoring by targeting the right places at the right time
- Enable graceful transition from manual to digital and autonomous inventorying and condition assessment
- Create the virtuous cycle of continuous improvement that adapts to changing needs over time

# Comparing the Use and Value of Digital Data Platforms GIS Shapefiles Vs Integration with TreeAM

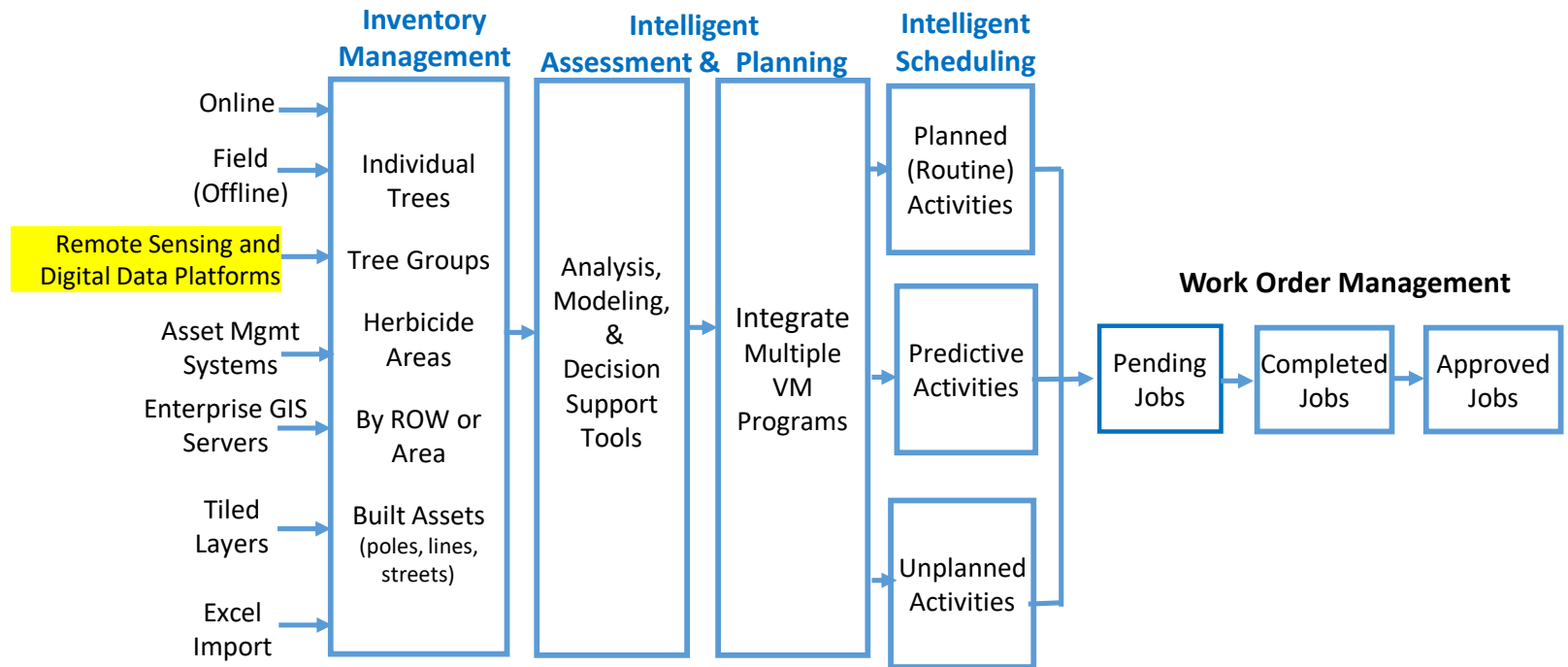


## Current Approach: GIS Shapefile Handoff



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## Optimize value of UAV/Remote Sensing Data: Integrated with TreeAM



# Pilot Project Considerations

- Use remote sensing data already collected by utility (lower costs)
- Availability of remote sensing data over multiple years desirable
- Availability of additional remote sensing data besides LiDAR desirable
- Transmission and/or distribution networks
- Access to other current and historical UVM data sets, e.g., field inventory, work history
- Utility pursuing a mix of vegetation management programs, e.g., inventorying, mechanical maintenance, herbicide
- Utility is seeking long-term continuous improvement in UVM costs and effectiveness