

# Case Studies in Industry 4.0

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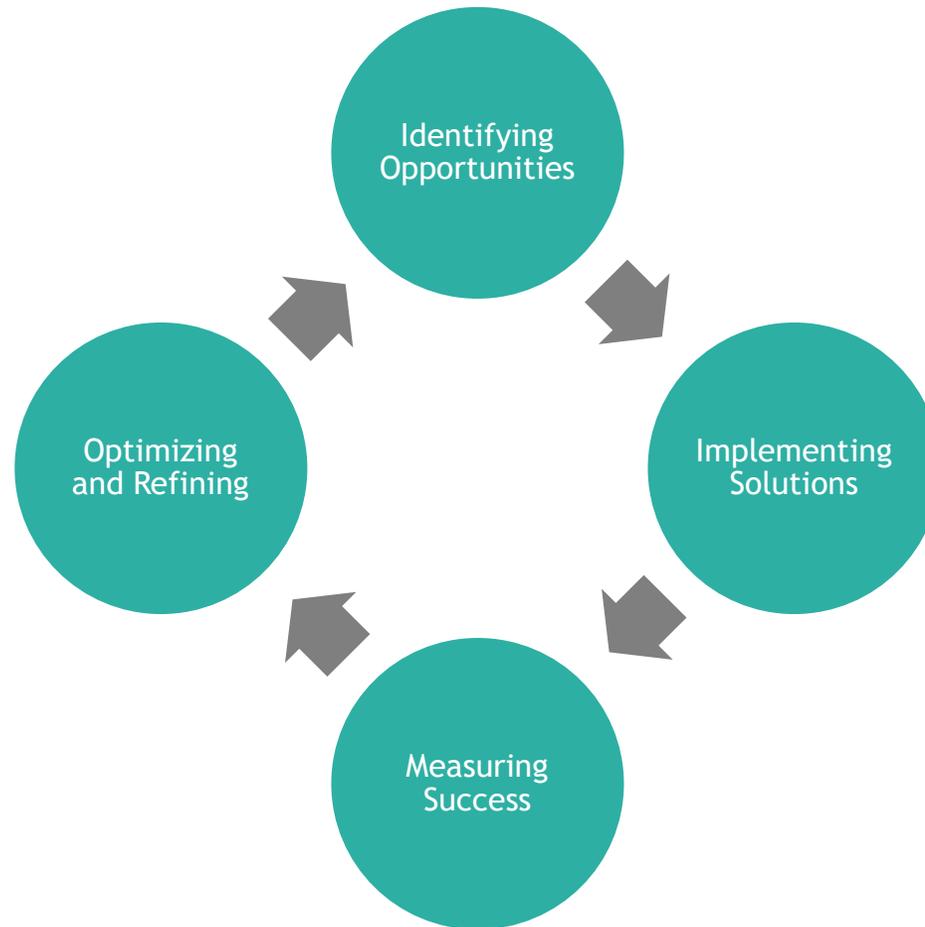
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# Industry 4.0 Improvement

Industry 4.0 improvement is similar to other digital transformation efforts—but differs in scale and speed.



# Enhanced inventory management through automation

## Accelerate inventory updates and reporting

Van and truck manufacturer wanted to fully automate their inventory process for more accurate real-time reports



Inventory Management



# Case Study: Manufacturing

Manufacturer had semi-manual inventory process and inadequate reporting

## Issues

- Inventory management required several steps—some manual
- Management wanted to reduce manual effort
- Reporting did not always fully capture current-state inventory
- Reporting did not provide adequate visibility or interactivity

## Goals

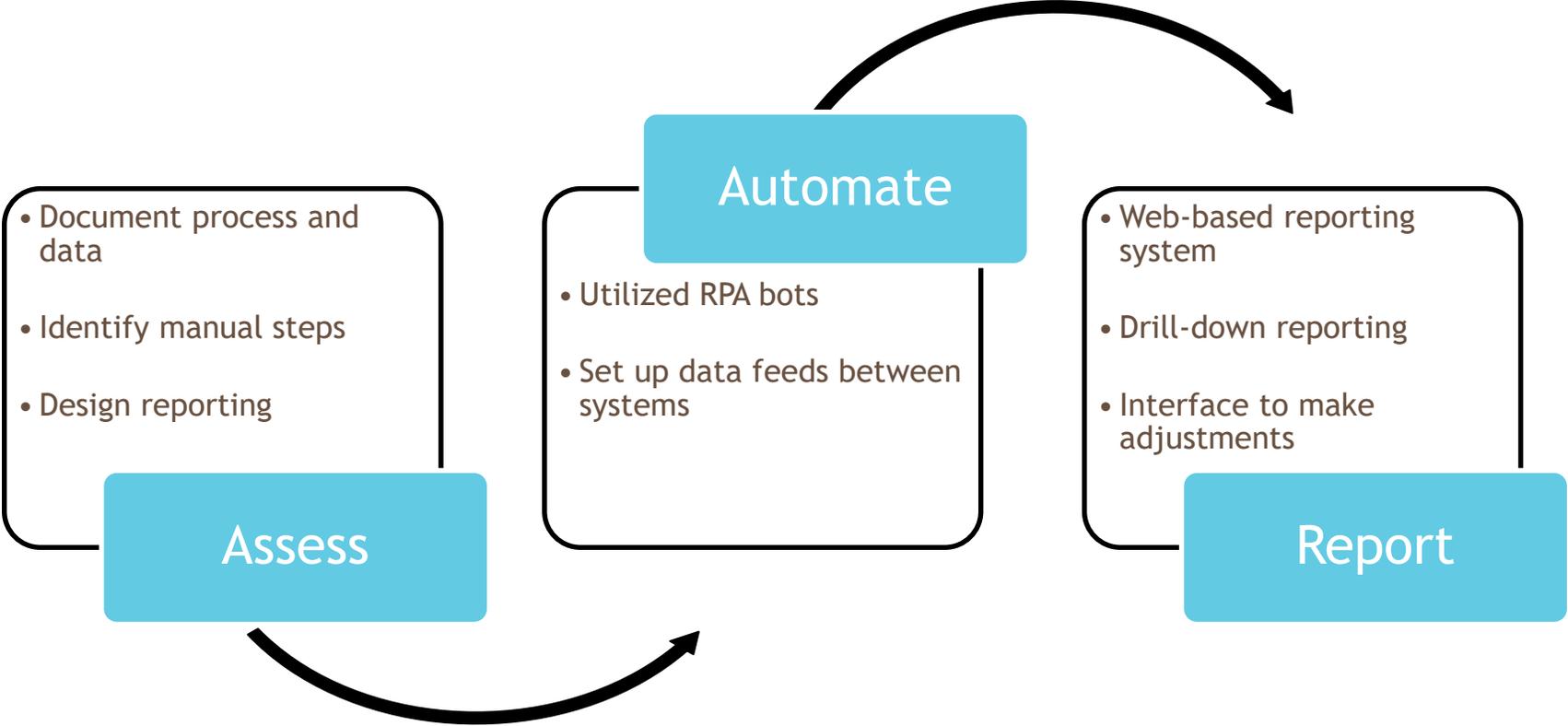
Automate inventory process  
Real-time inventory reporting  
Enhanced reporting



## Challenges

Several systems  
Existing process  
Complex procurement orders

# Inventory solution



# Results

## Error Rate Reduction

### Automated Data Transfer

- Reduce slow/manual data transfer
- Reduced manual data entry



## Real-time Visibility

### Results made available to the business

- Real-time results for inventory system
- Updates to management reporting dashboard within two minutes

## Meaningful Reporting

### Data Visualizations, not spreadsheet

- Management reporting dashboard with visualizations
- Interactive, category-based reporting

# Shipping company optimization using IoT sensors

## Shipment fuel consumption issue: Where and why?

Major shipping company facing millions of dollars of losses for fuel consumption increases across the United States.



# Case Study: Shipping

Major shipping company concerned about fuel consumption increases across the United States.

## Issues

- Part of the fleet experienced an increase in fuel consumption across same routes and with same shipments
- No standardized data collection and analysis processes and capabilities
- Variability of fuel consumption resulted in millions of dollars in excess fuel costs
- Large volume of fleet sensor data

## Goals

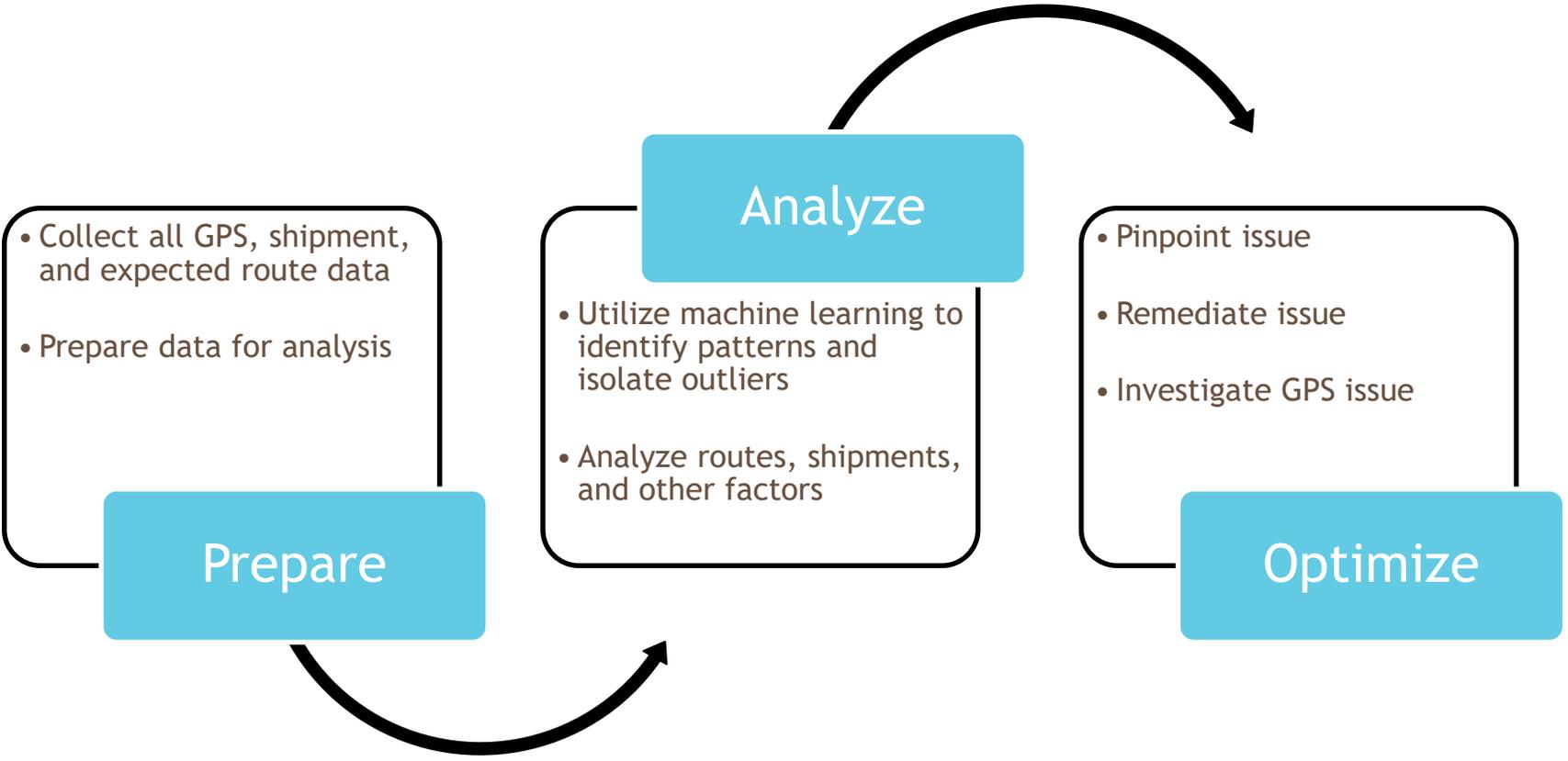
Create analysis capability  
Identify root cause  
Prescribe corrective measures



## Challenges

Disparate data  
Voluminous data sets  
Ongoing financial losses

# Shipment solution

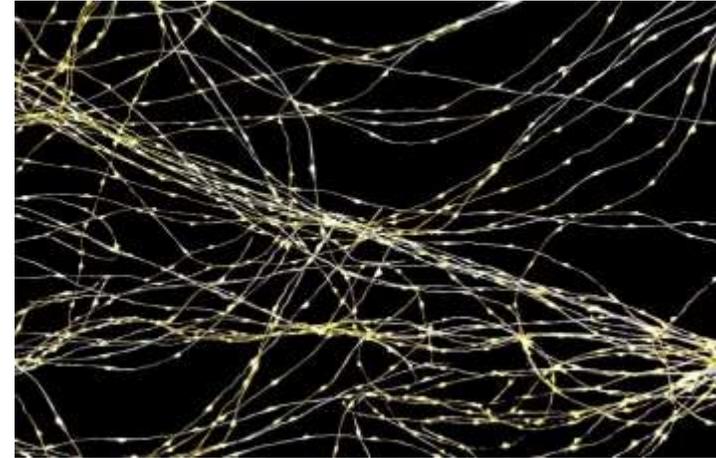


# Results

## Financial Savings

### Immediate impact

- Projected \$2M in savings over 18 months
- Resumed predictable fuel budgeting



## Better Risk Management

### Improved risk awareness and controls

- Identified additional risks
- Remediation and risk control

# Conclusion

Three concepts can bring together Industry 4.0 investments and enhance ROI.



## AUTOMATION

### Reduce Manual Efforts

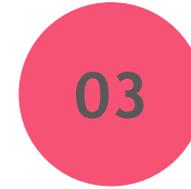
Maximize employee time and digital assets through the appropriate use of automation.



## ANALYTICS

### Targeted Insights

Utilize machine learning and relevant reporting for time and cost savings.



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