

SOLVE FOR X.

What's the big deal about Cycle Counting?

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SOLVE FOR X.





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SOLVE FOR X.

Multipoint Inspection

CUSTOMER AND VEHICLE INFORMATION

Date: 7/17/16 Time In: _____
Customer Name: _____
Address: _____
Today's Contact Phone #: _____
Email: _____
Year/Make/Model: _____
Mileage: 27116 License: 7090
VIN: 1G1ZC5E1625010253
1/4 Time: _____ Promise Time: _____ Hat / Tag: _____

VEHICLE CONDITION

SERVICE INFORMATION
Description of service to be performed: _____
Initial Estimate: _____
I hereby authorize the repair work and inspection described to be performed along with the necessary materials and agree that dealer is not responsible for loss or damage to vehicle or articles left in vehicle in event of fire, theft or other outside forces.

Head lights / tail lights / turn signals / brake lights / hazard warning lights / exterior lamps

Fluids

Under Vehicle

Brakes

Tires

Comments 11
100% Survey
Have a good day

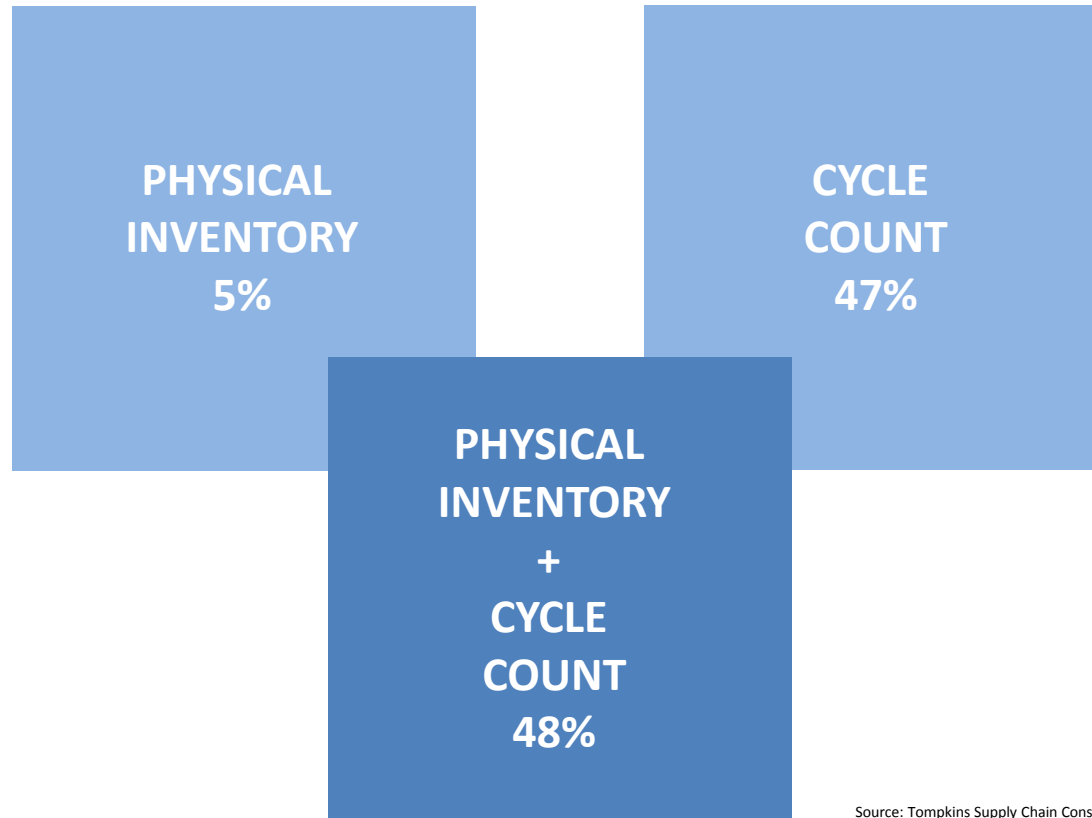
Technician Team: _____

Comments 11
100% Survey
Have a good day

Technician Team: _____

Checked and OK at this time May require future attention requires immediate attention

Inventory counting methods



Source: Tompkins Supply Chain Consortium Report: Inventory Accuracy Through Cycle Counting.

SOLVE FOR X.

What does your process look like today?



Current challenges

- **Accuracy of inventory**
 - Varies greatly depending upon methodology used
 - When is more inventory really needed?
 - Will late shipments occur because of lack of inventory?
- **Inventory confidence**
 - Increase frequency of visiting each rack cell, including empty racks
- **Inventory in wrong spots**
 - How much money is being tied up with inventory in the warehouse whose location is unknown?
- **Resource and equipment required**
 - Cost vs. Benefit
- **Safety risk to personnel**
 - Manual counting while in fork lift high above ground



INVENTORY ACCURACY 89% to 99.5%



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What are the potential solutions to this problem?

- **Managed:** How does my warehouse management system (WMS) prioritize and manage my process of dealing with inventory?
- **Assisted:** How does the use of barcode/RFID scanners, wearables and other technology enable warehouse operators do their job more consistently?
- **Automated:** What autonomous robots exist for the purpose of checking inventory at the frequency I prefer?
- **Optimized:** What technology exists to give me greater insight into inventory levels, position, movement, etc. with the real-time data received from autonomous robots?

SOLVE FOR X.



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What's the big deal about Cycle Counting?



AUTOMATED CYCLE COUNTING

AUTONOMOUS or SEMI- AUTOMATED FLIGHT SYSTEM

- Automatic take-off and landing
- Automatic collision avoidance
- Flight plan optimization
- Geofence controls perimeter, ceiling, and floor



AUTOMATED CYCLE COUNTING

Video capture of inventory being located:

- **Extract data labels from video feed**
- **Analyze Rack Content**
 - Rack is Empty
 - Rack is Occupied
 - With correct Pallet
 - With incorrect Pallet
- **Color Coded Display**
 - Dark Gray – Not scanned
 - Light Gray – Empty
 - Green – Correct Pallet
 - Red – Wrong Pallet



Key Benefits

1. Improved Inventory Accuracy Rates
 - Frequent automatic inventory checks
 - Reduced losses due to inventory shrinkage
 - More reliable financial reporting and conversion-cycle key performance indicators (KPIs)
 - Better decision making about reorder points, out-of-stock inventory and excess inventory
2. Greater operational efficiency
 - Savings in personnel costs or operations downtime
 - Elimination of resources and equipment
 - Staff retrained to handle more
3. Employee safety

What's next?

- Drones - an autonomous worker – in environments today !
- Robotics and Automation will continue to augment human activities in industrial and warehouse environments.
- Autonomous navigation, deep learning technologies, and sensors will provide safe and reliable environments for humans and equipment to interact with Aerial Robots.

How do I start?

- Evaluate the opportunity and key drivers in your environment
 - Inventory accuracy, people, safety, KPIs etc
- Establish subject matter expert(s) in your organization
- Get educated on regulations and the technology
 - FAA
- Engage a reputable solution partner for your use case(s)
- Initiate a Proof-Of-Concept in a safe and simple environment
- Define the business case

Final thought

If you don't have an initiative to evaluate the applicability of drone technology in your supply chain, you are already behind your competitors

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For More Information:

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Or visit PINC Booth #S4478