Voice-Directed Order Picking – What You Need to Know

Presented by:

Joe Beydoun, VP - Technology, Lipari Foods
Gary Glessner, VP - Sales & Marketing, Speech Interface Design
Presenters

• Gary Glessner, VP - Sales & Marketing, Speech Interface Design
  • 6+ years at SID
  • Previously 10 years at Vocollect, now owned by Honeywell

• Joe Beydoun, VP - Technology, Lipari Foods
  • Almost 20 years at Lipari
  • Expertise in warehousing, transportation and analytics systems
  • Member of the leadership team at Lipari Foods participating in operational management and strategic planning
Agenda

• Lipari Foods - Company and Operations Overview
• The “Mis-pick” metric and what drove Lipari to Voice
• Lipari’s need to scan with Voice
• The surprise ROI
• ROI – Voice-Directed Picking with Labels
• Analytics - how voice increases operational intelligence
• Open Q&A - Your Questions for Joe and Gary
Lipari Foods – What we do

• Multi Channel Specialty Distributor (FMCG)
• Utilize Technology as Competitive Advantage
• Change & Adapt & Grow: “It’s in our Blood”
Current Corporate HQ Built 2006
Where we Started:
Customer Points of Contact (Retail)
Data Collection

Honeywell VM3 – Forklifts

Honeywell CT-50 – Customers / Retail

Honeywell A730 / SRX2 Headset Voice Picking

Honeywell – 1602G-2D – Direct Reps / Order Scan

Zebra MC92x – Warehouse

Honeywell EDA 70 – Warehouse Supervisors
Supply Chain Changes

Pre – Y2K

Now
Dealing with food trends

• Kosher / Halal / All Natural / Organic / Ethnic / Low Carb / Gluten Free / Peanut Free
• Over 100 New SKUs weekly
Potato Chips are no longer made from potatoes
Distribution Center Operation

It’s more complicated than that now

I lift things up and I put them down.
Distribution Center Operation

- Almost 25K Slotted SKUs
- Thousands of holiday and temporary SKUs
- 500K Square Feet of space
- 170 Selectors in a single shift with power jacks
- 50 Forklifts
- Ambient / Refrigerated / Frozen
- Using Vocollect Voice since 2007
Mis-picks are more than just a cost

BEFORE VOICE PICK

1 IN 700 CASES PICKED

APEX WITH VOICE

1 IN 5000 CASES PICKED

CURRENT WITH VOICE

1 IN 2500 CASES PICKED

2008 – TODAY INCREASED SKU COUNT PICK SLOT CO-MINGLING

1 IN 350 ? CASES PICKED WITHOUT VOICE
MisPick | Damage | Short

Detroit to Omaha    746 Miles
Detroit to Miami    1,419 Miles
IDEAL FOR VOICE CHECK DIGITS

VOICE CHECK DIGITS NOT AS EFFECTIVE
Check Digit Labeling - Evolution

LEGACY → CURRENT → NEW

- 3 Check digits per location
- 25 Check digits per location
- 0 Check digits per location

301658

10531

N/A
Scanning with Voice

- Capture work assignments (Can be done with Vocollct A730)
- Capture weight UCC (Can be done with Vocollct A730)
- Scan Product or Location for verification - must use an ergonomic and efficient device
• No more check digits (Must Scan)
• Scan product (100% accurate pick)
• Scan Location (Less Accurate but requires selector to be at the correct location)
• Reduce Shorts by memorized check digits
PRODUCTIVITY
Where Lipari uses Voice Picking

- PICK TO TOTE/CART
- CASE PICKING
- MAN-UP PICKING
VISUAL vs VOICE Instructions

LOOK FOR

1. AIRPLANE
2. LUGGAGE
3. HAND
4. CLOUD
5. WINE GLASSES
Productivity – Actual numbers from the archives

Freezer Pick Rate
2007 - 2008

100.00 110.00 120.00 130.00 140.00 150.00 160.00 170.00
### Freezer Stats

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocollect Voice installed</td>
<td>November 2007 (Period 12)</td>
</tr>
<tr>
<td>Cases Selected Per Shift</td>
<td>18,000</td>
</tr>
<tr>
<td>Average Cases Per hour before voice</td>
<td>125 Cs/hr</td>
</tr>
<tr>
<td>Average Cases Per hour after voice pick</td>
<td>153 Cs/hr</td>
</tr>
<tr>
<td>Percent Productivity Gain after Voice</td>
<td>22%</td>
</tr>
<tr>
<td>2019 Average Cases Per hour</td>
<td>175 Cs/hr</td>
</tr>
<tr>
<td>Mispick Ratio before Voice</td>
<td>1 in 2000 Cases Selected</td>
</tr>
<tr>
<td>Mispick Ratio after Voice</td>
<td>1 in 7000 Cases Selected</td>
</tr>
<tr>
<td>Other Factors after 2008 Period 10 that boosted productivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Triple Pallet Jacks</td>
</tr>
<tr>
<td></td>
<td>New warehouse 2017</td>
</tr>
<tr>
<td></td>
<td>New Performance Pay Scale</td>
</tr>
</tbody>
</table>
ROI – Voice-Directed Picking with Labels

• #1 Order Feedback is real time, not in batch
  • Used to have 9 people doing feedback
  • Not enough staff to pick without voice during a system issue today
ROI – Voice-Directed Picking with Labels

- #2 Inventory is in real time
ROI – Voice-Directed Picking with Labels

- #3 Trucks dispatch much faster
Future use - just for thought

• Artificial Intelligence – Voice opens up the possibilities for your WMS
  
  • With Voice, you can send instructions to the selectors in real time
    • You can assign pick slots in real time
    • Change doors in real time
    • Modify pick path in real time
    • Re-direct selector before getting to a location if there is an issue
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