WABASH HEARTLAND INNOVATION NETWORK
Smart technology. Smart region. Smart future.

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10 Counties
Make the WHIN Region

Benton
Warren
Fountain
Tippecanoe
Montgomery
Pulaski
White
Cass
Carroll
Clinton
WHIN REGION by the Numbers

- **400K** residents
- **4,300** sq-mile area (2.75M acres)
- **2M** acres of corn and bean
- **1 of 10** employed in manufacturing
The Opportunity

Two major clusters:
Agriculture & Manufacturing

Two major research and education institutions:
Purdue University and Ivy Tech

One emerging opportunity:
Internet of Things (IoT) technology to transform the Wabash Heartland region into a global epicenter for digital agriculture and next-generation manufacturing.
WHIN Initiatives

$38,900,000 from Lilly Endowment

Digital Agriculture
Next-Generation Manufacturing
Regional Cultivation Fund
• Soil sensors (nutrients, moisture, temperature) for real-time crop monitoring
• Vibration and sound sensors for predictive maintenance of machines
DIGITAL AG TESTBEDS
1,400 acres @ Purdue & 65 acres @ Ivy Tech
IoT Testbeds
@Local Businesses
WHIN
Regional Testbeds

- LEVEL I Purdue & Ivy Tech testbeds
- LEVEL II 12-15 mini-ecosystems
- LEVEL III Entire Wabash Heartland region
**WHIN Ag Alliance – Fee Structure**

**Annual Membership Fee:** $500

**Product Costs:**

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<th></th>
<th>Y1</th>
<th>Y2</th>
<th>Y3 and beyond</th>
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<tbody>
<tr>
<td><strong>Member</strong></td>
<td>0%</td>
<td>40%</td>
<td>80%</td>
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<tr>
<td><strong>WHIN + Industry Partner</strong></td>
<td>100%</td>
<td>60%</td>
<td>20%</td>
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WHIN Ag Alliance
Member Benefits & Responsibilities

- Use of vetted & subsidized technology solutions
- Invitation to WHIN Ag Alliance Summits (twice a year). Share and learn best practices of the technology solutions and key insights at the individual farm level and at the regional level
- Grant WHIN access to data, which can be shared with research and academic institutions in an anonymized form for research and education purposes
WHIN Ag Alliance Founding Members

- 20 progressive, influential growers as founding members
- Roughly 100K acres of corn and soybean
Product Offerings in 2019
ONE SIZE FITS ALL
Only one type of onboard computer for all machines, regardless of model or brand.
CONNECTIVITY + REAL TIME MONITORING
WHIN Ag Alliance — IoT Sensor Deployments

- Access to 160+ weather stations in the 10-country region
- Equipment monitoring devices:
  - 60 tractors
  - 30 sprayers
  - 10 trucks
  - Combines later this season
Example Insights from 2019 Planting Season

- **Planting Speed Average:**
  - 24.7 acres/hr @ 5.91 mph

- **% Operation Times Spent During Planting:**
  - Idling: 17%
  - Maneuvering: 10%
  - Moving: 29%
  - Planting: 44%

- **Planting Speed Distribution:**
  - 2.0-4.5 mph: 11%
  - 4.5-6.5 mph: 69%
  - 6.5-8.5 mph: 17%
  - 8.5-10.5 mph: 2%
  - 10.5-13 mph: 1%

Placing Speed Average: 24.7 acres/hr @ 5.91 mph
WABASH HEARTLAND ECOSYSTEM

Wabash Heartland as the global epicenter of digital ag and next-gen manufacturing

Accelerate IoT adoption

Support world-class research and education

Industry Partners

Make investments in the region

Access to a network of progressive customers & to research findings

Share key research findings

Train workforce

Alliance Members

Use of vetted, subsidized IoT products

Unbiased vetting of IoT technologies

Subsidize initial costs

Share data for research and education

Access to rich, real-world data for research and education
We are looking for Industry Partners