Industry Playbook

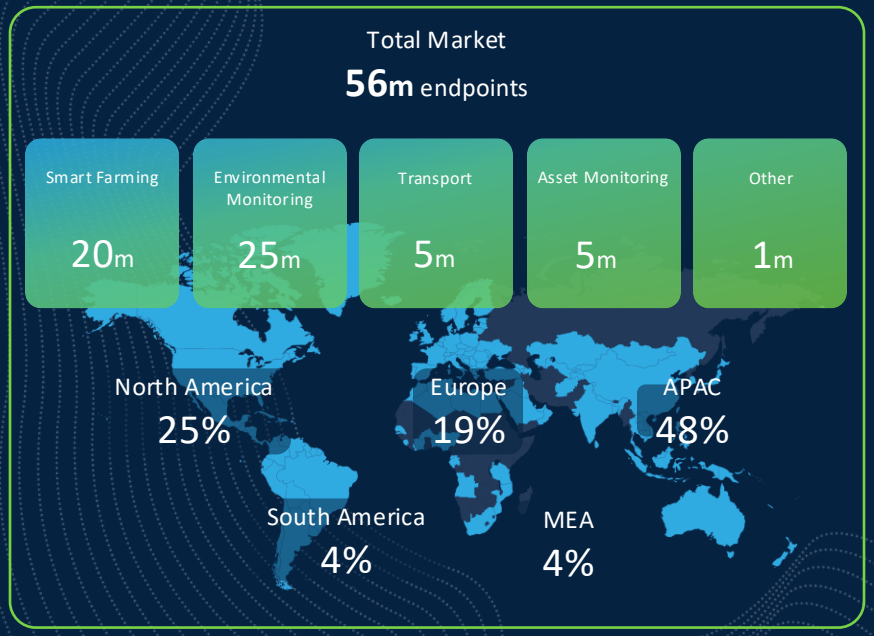
Smart Agriculture Edition

Market Insights, Best Practices, Player Overview Along the Value Chain

March 2025

Smart Agriculture is a growing IoT industry requiring global coverage

Relevance of agriculture use cases for the IoT market:



1NCE's footprint in the Smart Agriculture sector:

Agriculture customers represent:
7%
of 1NCE customers

Agriculture customers located in
21
countries worldwide

Top 10 countries for 1NCE
1) Germany
2) Denmark
3) Malaysia
4) Switzerland
5) Slovenia
6) Greece
7) Austria
8) Netherlands
9) Italy
10) Spain

Agriculture use cases represent:
1%
of managed endpoints

Agriculture customers use 1NCE in
89
countries worldwide

Number of large deployments
137

Typical deployment size
10-50k
endpoints

Sources: Market data courtesy of Transforma Insights, 1NCE Customer Insights
As of Jan 2025, 1NCE served 23,000 customers of which 7% are active in the smart agriculture sector.
Common use cases supported are crop monitoring, precision agriculture, smart irrigation, pest control, and heavy machinery equipment monitoring.

7% of our customers are building solutions in Smart Agriculture, including pest and crop control

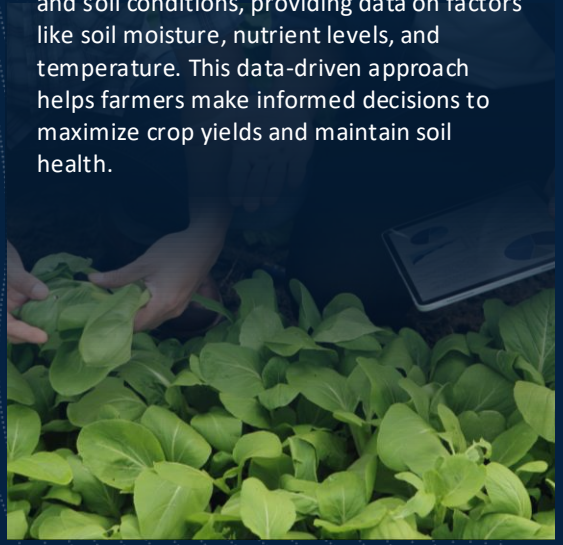
	Customers %	Typical applications			Selected customers
Utilities	20%	• Electricity meters • Gas meters	• Water meters • Leak prevention	• Network monitoring • Smart grid	asl, cast4all
Infrastructure	8%	• Remote Maintenance for elevators	• Solar Energy Monitoring • Charging stations	• Water and heating metering	OCEA, zonneplan, LOXAM
Logitics	7%	• Asset tracking • Temperature monitoring	• Telemetry for vehicles • Geo-fencing	• Cold-chain monitoring	blulog, Trackting
Automotive	17%	• Usage based insurance • Road-charging	• Fleet management • Car sharing	• Stolen vehicle recovery • Fuel level monitoring	VIMCAR, TARGA
Industry	9%	• Oil monitoring • Industrial automation	• Tank monitoring • Equipment monitoring	• Industrial sensors	metasphere, autoscan
Agriculture	7%	• Remote analysis of bee colonies	• Pest control • Yield monitoring	• Geofencing and alerting	BAYER, FARM, eMitter
Smart Cities	6%	• Cost and energy reduction	• Water leakage monitoring	• Elevator management solutions	FLASHNET, convadis
Healthcare	2%	• Health monitoring • Refrigeration monitoring	• Cleaning monitoring (hotels)	• Digital signage	Zenicor, MICRODEFENDER
Consumer	7%	• Indoor Wellbeing Monitoring	• Professional Coffee Machines' Monitoring	• Energy consumption monitoring	Sentinum FORGING FUTURE, switchee
Retail	1%	• Vending Machines Monitoring	• Payment Processing		CASYOPE

% of Customers in the other verticals – 16%

Key IoT use cases in Smart Agriculture

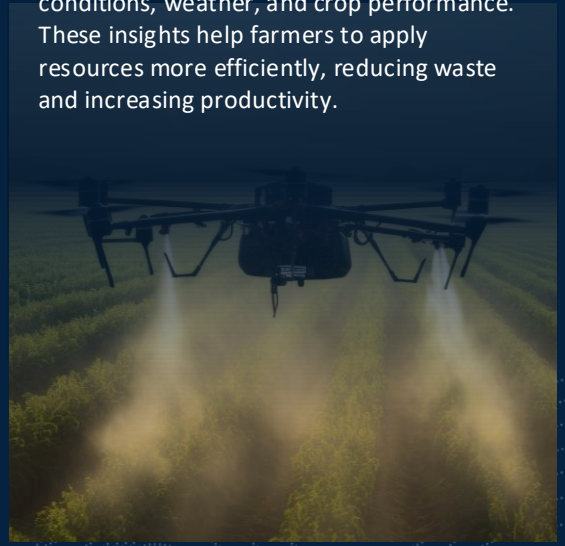
Crop Monitoring

IoT connectivity & software support real-time monitoring and management of crops and soil conditions, providing data on factors like soil moisture, nutrient levels, and temperature. This data-driven approach helps farmers make informed decisions to maximize crop yields and maintain soil health.



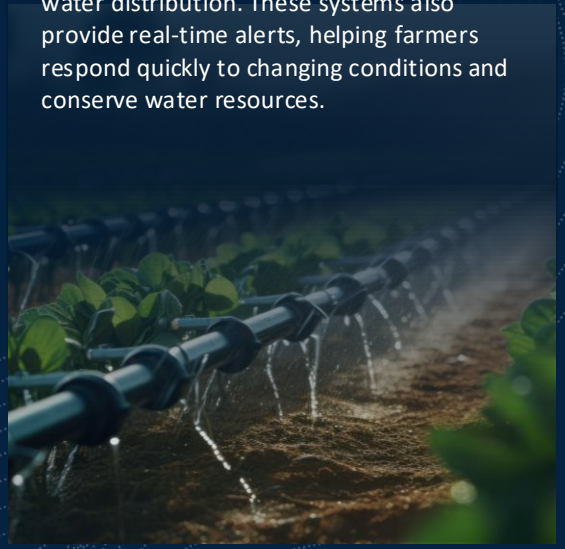
Precision Agriculture

IoT in precision agriculture or precision farming helps to collect data on field conditions, weather, and crop performance. These insights help farmers to apply resources more efficiently, reducing waste and increasing productivity.



Smart Irrigation

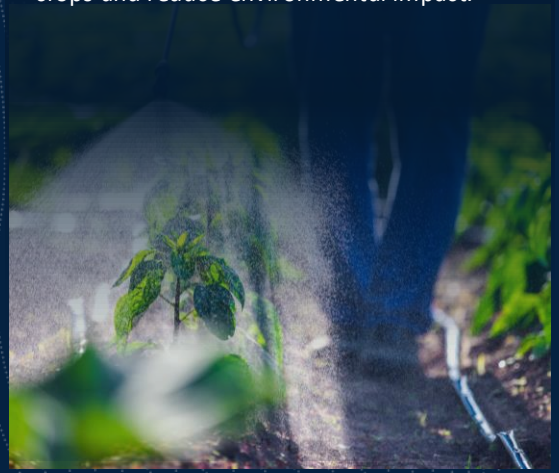
IoT-enabled irrigation systems use sensors and weather data to automate and optimize water distribution. These systems also provide real-time alerts, helping farmers respond quickly to changing conditions and conserve water resources.



Key IoT use cases in Smart Agriculture

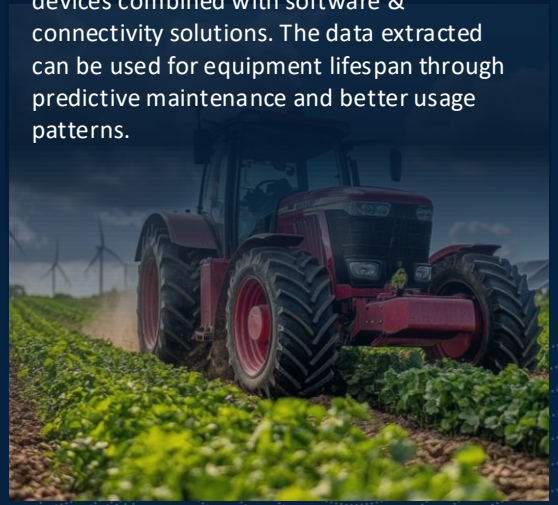
Pest Control

Pest Control systems use IoT solutions to detect and control pest infestations. With the data delivered from the pest tracking device to the cloud, it's easier to protect crops and reduce environmental impact.



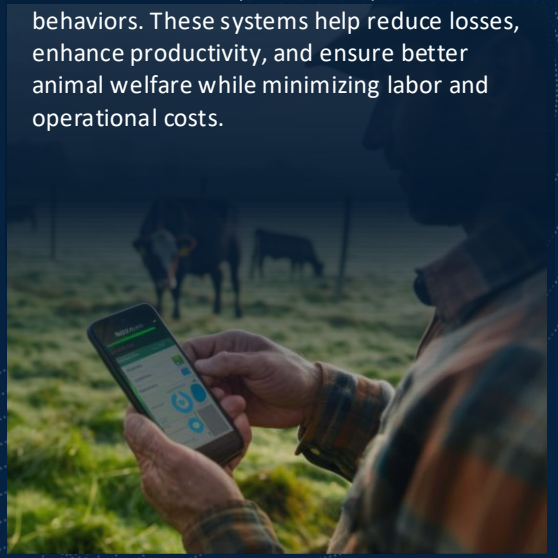
Equipment Monitoring

Performance and usage of agricultural machinery like tractors, harvesters, and combines, can be tracked with specific devices combined with software & connectivity solutions. The data extracted can be used for equipment lifespan through predictive maintenance and better usage patterns.



Livestock Monitoring

Livestock monitoring uses IoT solutions to track animal health, movement, and behaviors. These systems help reduce losses, enhance productivity, and ensure better animal welfare while minimizing labor and operational costs.



Overview of players with traction in the market

Key players in Precision Farming

Player	Logo	Location	Description	Website
365FarmNet (CLAAS)	365FarmNet	Germany	Inventory management & data management	Link
AG Leader	Ag Leader	USA	Field computers, guidance & steering systems	Link
BASF	BASF	Germany	Decision-support tools & crop protection solutions	Link
The Climate Corp.	The Climate Corporation	USA	Data-driven agriculture technology	Link
DICKEY-john	DICKEY-john	USA	Agricultural monitoring equipment	Link
DKE-Data	DKE Data	Germany	Cross-manufacturer data exchange platform	Link
Hexagon	Hexagon	Sweden/Brazil	Geospatial and agricultural technology	Link
Trimble	Trimble	USA	Precision agriculture and GPS solution	Link

Find more at the **1NCE Knowledge Base**

Overview of players with traction in the market

Specialized players in **Water Management**

Player	Logo	Location	Description	Website
AquaSpy	AquaSpy	USA	Soil moisture monitoring solutions	Link
Arable	ARABLE	USA	Weather and crop monitoring systems	Link
CropX	cropx	Israel	Specializes in soil sensing technology for agriculture	Link
EarthScout	earthscout	USA	Environmental sensors for precision agriculture	Link
Hortau	HORTAU	Canada	Delivers irrigation management technology for farms	Link
Libelium	libelium	Spain	Develops IoT solutions for environmental monitoring	Link
Lindsay Corp.	LINDSAY	USA	Provides irrigation and water management solutions	Link
Netafim	NETAFIM An Orbia business	Israel	Offers irrigation systems and solutions for agriculture	Link
Pycno	pycno	UK	Offers irrigation systems and solutions for agriculture	Link

Find more at the **1NCE Knowledge Base**

Overview of players with traction in the market

Specialized players in Environmental and Pest Monitoring

Player	Logo	Location	Description	Website
Agrivi	AGRIVI	Croatia	Platform for monitoring & improving farm productivity	Link
Almanac	ALMANAC	USA	Weather-based analytics for precision agriculture	Link
Campbell Scientific	Campbell Scientific	USA	Data acquisition systems & environmental monitoring	Link
Davis Instruments	DAVIS	USA	Weather monitoring instruments	Link
Fieldin	fieldin	USA	Precision farming, field data & pest monitoring	Link
Isagri	ISAGRI	France	Agricultural technology for pest & disease monitoring	Link
Meteobot	meteobot	Switzerland	Weather stations & environmental monitoring systems	Link
METER Group	METER	USA	Environmental monitoring solutions, sensors	Link
Sencrop	Sencrop	France	Weather monitoring solutions, pest monitoring	Link

Find more at the **1NCE Knowledge Base**

Players 1NCE is supporting in the field

Player		Use Case	More info
Alertbee		IoT-based hive monitoring, tracking hive health & activity remotely	Link
BeeAndme		Bee monitoring & data collection to support colony management & sustainability	Link
Cowbell Engineering		Livestock monitoring & management technology	Link
Druid		Wildlife & livestock tracking: Data-driven monitoring of animal movements, migration patterns, & behavioral insights	Link
Ecomesure		Real-time tracking of pollution levels across urban and rural areas	Link
eMitter		Digital pest control solutions, using IoT sensors to detect & prevent infestations	Link
Nanolike		IoT-enabled silo & tank monitoring, providing precise inventory management	Link
Next Farming		Provides data on weather conditions, soil moisture, & more to optimize resource use and improve agricultural planning	Link
xFarm		Sensors and weather stations transmit data to a management platform for efficient farm management	Link

Find more at the **1NCE Knowledge Base**

Understanding the roles of players along the value chain

Creating connected products in the Smart Agriculture industry means to maneuver through the IoT ecosystem

Sensor Manufacturer

Building components measuring environ-mental data such as

- Soil moisture
- Temperature
- Humidity
- Light intensity
- pH levels
- Etc.

IoT Device Manufacturer

Putting together required technical components such as

- Chipset
- Modem
- Sensors
- Battery / Power
- Etc.

OEM manufacturer

Line production and integration of IoT devices into assets:

- Irrigation systems
- Greenhouses
- Drones
- Farming machinery
- Etc.

System Integrator

Specialized in bringing software and hardware components together

- Hardware design
- Connectivity design
- Cloud integration
- Software enablement
- Etc.

Solution Provider

End-to-end owner of the solution, focus on selling and servicing

- Agritech companies
- Government & Nonprofit organizations
- Agriculture equipment providers
- Etc.

1NCE has a dedicated offering for Smart Agriculture

	Typical customer requirements	Standard offerings	1NCE Offering
Pricing	• Single SKU • Cost transparency • Often only low data use cases	• Multiple suppliers for each region • Monthly fees, overage charges • Data selling focus, high data preferred	✓ All-in-1: $10/10 years of service ✓ Transparent: no monthly fees ✓ Lifetime Flat: 500 MB, 250 SMS
Coverage	• Global coverage • Support of LPWA technology • Multiple network and operator switch	• Country group pricing, zoning • No or limited NB-IoT and LTE-M support • Different SIMs for different regions	✓ 173 countries coverage; no zoning ✓ +50 LPWA networks supported ✓ Global SIM with eUICC support
Service	• Device Management • API support • Interoperability	• Device Mgmt not included • API use not available or at high cots • No compatibility with 3rd party software	✓ Included in 1NCE OS ✓ All functions exposable through API ✓ Can be natively used with 1NCE Plugins

We bring your data from the sensor to the cloud

1NCE Platform

Connect

- 500 MB
- 250 SMS
- 173 countries
- VPN / APN
- Data Streamer

OS

- Cloud Integration
- Location Services
- Energy Saver
- APIs
- Device SDKs

$10 for 10 years

Business	Industrial	Chip
$1.00	$2.00	$2.50

Sensor Data

Our 1NCE Lifetime Flat is the new standard in IoT

1NCE IoT Lifetime Flat

10 years of service including:

1NCE Connect

- 500 MB
- 250 SMS
- 173 countries coverage
- Open VPN
- API Usage & APN
- Data Streamer
- Monthly data limits
- IMEI Lock
- Freedom to Switch
- 3 months grace period

1NCE OS

- Cloud Integrator
- Device Locator
- Energy Saver
- Device Authenticator
- Device Inspector
- Device SDKs and Blueprints
- LwM2M Service
- Device Controller
- Admin Logs
- Access to Developer Hub (Documentation)

One time fee: $10.00

SIM Options

Business

$1.00

Industrial

$2.00

Chip

$2.50

- ✓ Already covers all requirements for most IoT uses cases
- ✓ Already sold to 23,000+ customers in 100 countries
- ✓ Widely used across all industries and verticals
- ✓ No minimum order quantities*

Optional Add-Ons and Extensions

Data Top-Up Additional 500 MB and 250 SMS	+$10.00	Advanced Device Locator High-res network location service	
Lifetime Extension Additional 10 years, 500 MB and 250 SMS	+$10.00	Plugins Integrated 3rd Party Software	Free Trial
High Data Option High throughput 25Mbit/s	$5.00 / GB	High Security Data Routing IPSec / VPC Peering services	$1,800+ / yr

- ✓ Add-Ons trusted by 4,000+ advanced users
- ✓ Co-developed with and for customers

All prices and information as of February 2025

* For IoT SIM Card Business only. Industrial-grade SIMs are MOQ 100.

About 1NCE

Fast

23,000+ customers won in 7 years

400+ team across Europe, Asia and US

30 million managed endpoints

+100% year on year average growth

"1NCE launched its flat rate life-time connectivity offering for connected devices in 2018 and has achieved unparalleled growth in the past two years."

Johan Fagerberg, CEO, Berg Insight

Strong

- Global access under a strong a family of local network operators
  - EU — Deutsche Telekom AG
  - USA — T-Mobile US
  - Asia — SoftBank
  - China — 中国电信 CHINA TELECOM
  - Claro — Claro
  - Bell — Bell

Everywhere

Can be used for multiple IoT applications

1NCE is a company offering a software platform for connected products that delivers future-proof, hassle-free IoT in 173 countries and regions. The software platform enables customers to easily, securely and reliably collect device data and turn it into actionable intelligence. This accelerates time-to-market for data collection projects by months, increases device lifetime by years, and allows efficient management of sensors from initial deployment to the end of the product lifecycle. More than 23,000 users and 60 Fortune 500 companies trust 1NCE with 30 million connected products worldwide.

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