

MAKING DIGITAL HAPPEN...

THE AGRI-FOOD ASPECT

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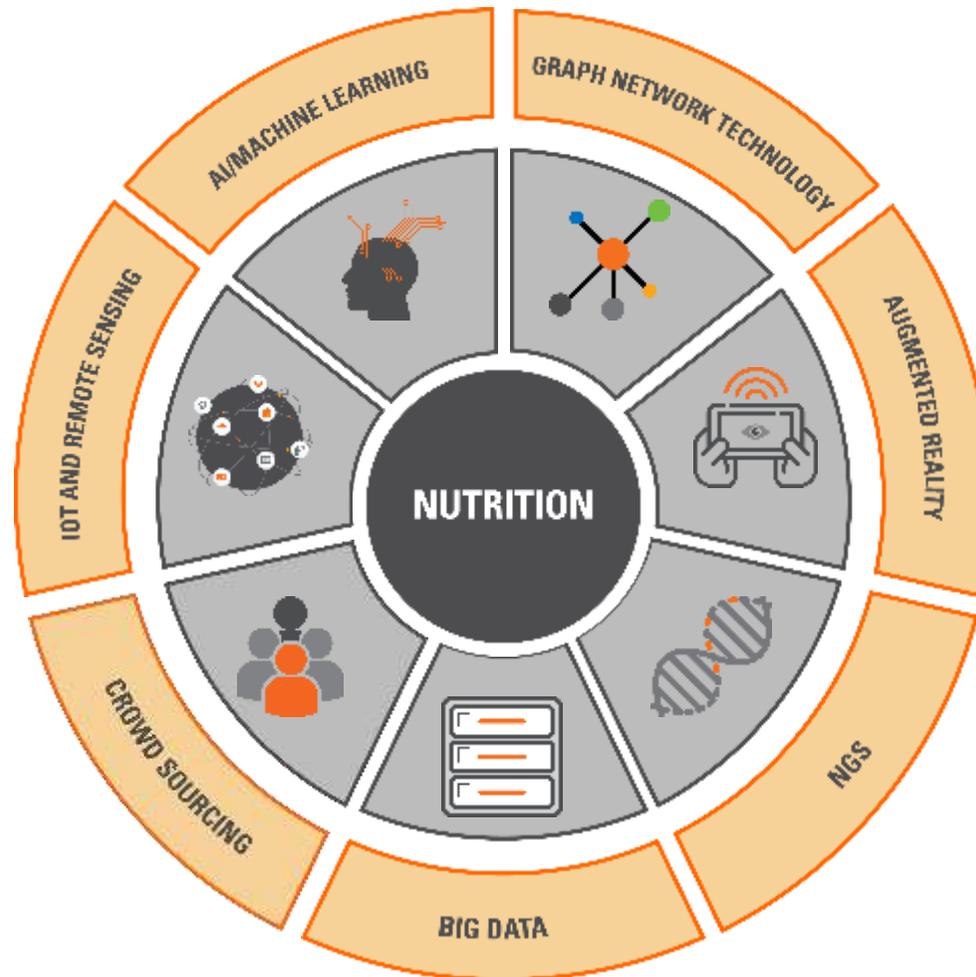
Investor Days, 26-27 October 2017

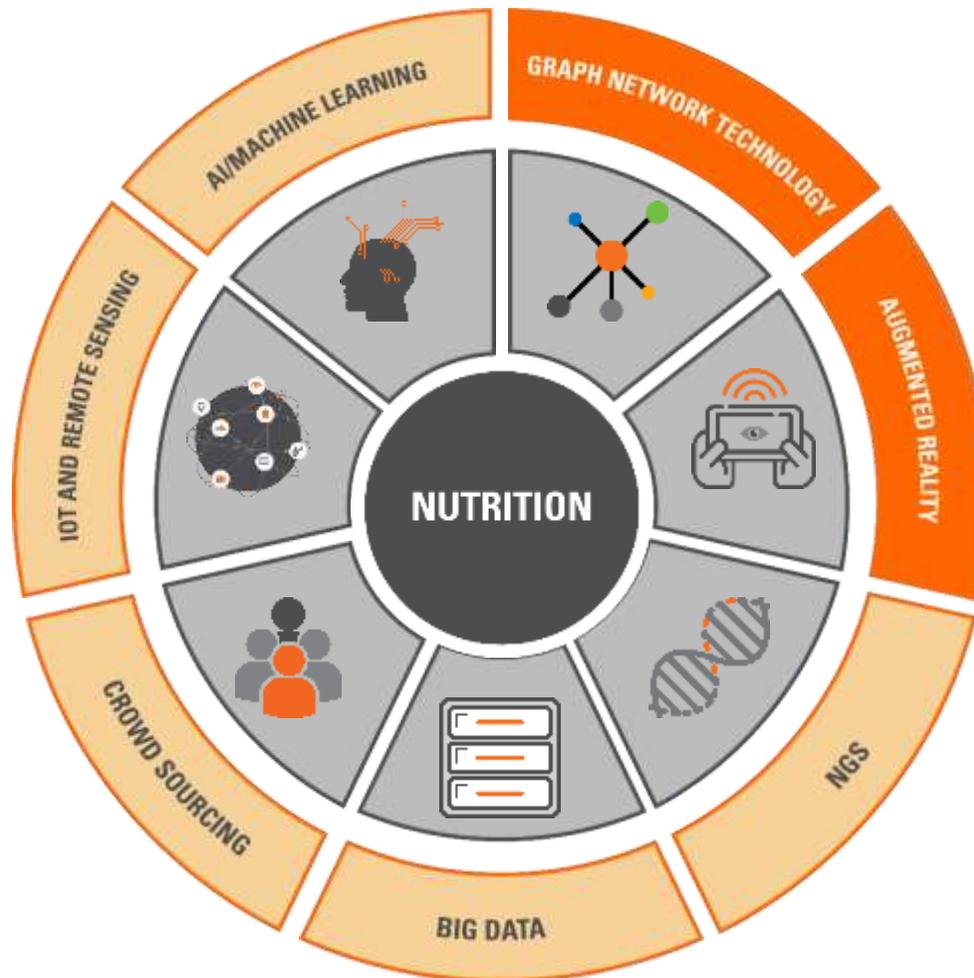
WHEN YOU NEED TO BE SURE



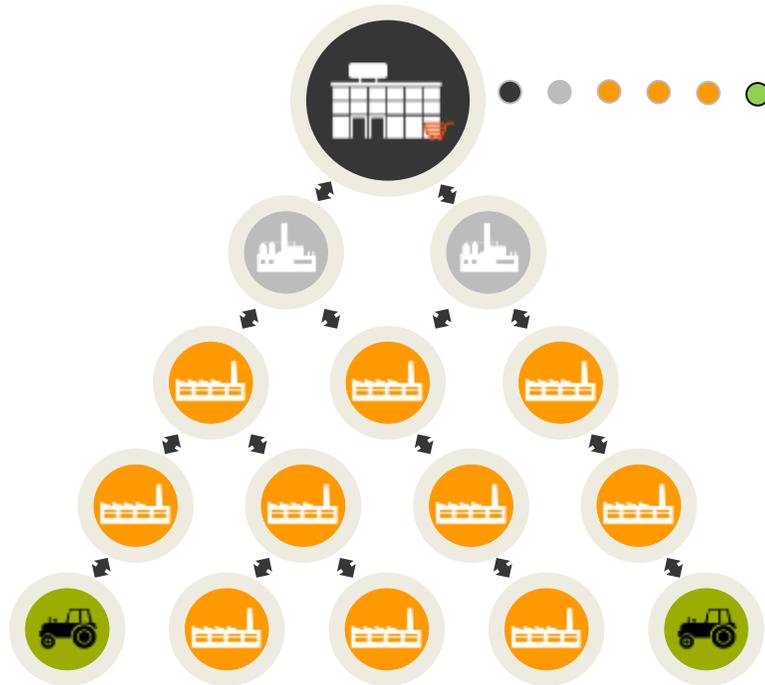
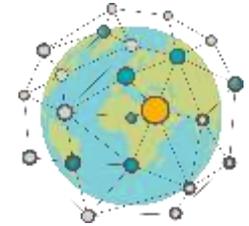


Looking for new value through digital means...



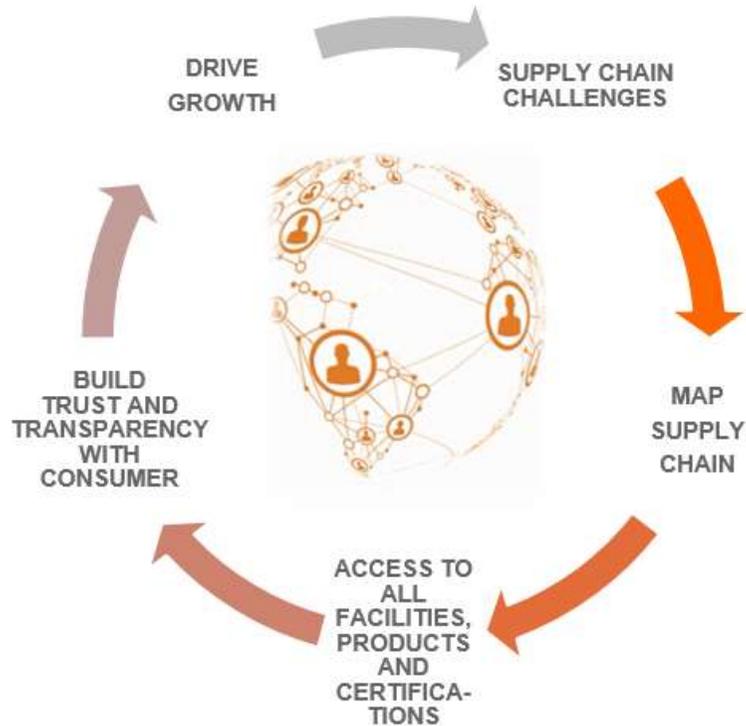


Graph network technology-based platform to manage the transparency of the supply chain → opportunity to become the industry standard platform to store supply chain compliance management data and evolve into the trusted market network for the consumer packaged goods industry



- Map the supply chain from farm to fork
- Verify all suppliers, ingredients & facilities
- Track facility certifications & qualifications, ingredient country of origin
- Search on any attribute
- Identify & mitigate risks

MARS Food testimonial



VISUAL TRUST - DIGITAL SUPPLY CHAIN INFORMATION

1 COLLECT PRODUCT AND SUPPLIER DATA, FROM FARM TO FORK



VISUAL TRUST

Credible Digital Supply Chain information, from farmers to customers

2 VERIFY SUPPLIER AND PRODUCT INFORMATION WORLDWIDE



VISUAL TRUST

Credible Digital Supply Chain information, from farmers to customers

3 IMPROVE SUPPLY CHAIN, COMPLIANCE, REDUCE RISK AND INCREASE BUSINESS



VISUAL TRUST

Credible Digital Supply Chain information, from farmers to customers

4 COMMUNICATE KEY PRODUCT & ORIGIN INFORMATION VIA SMART MOBILE APPS



VISUAL TRUST

Credible Digital Supply Chain information, from farmers to customers

AUGMENTED REALITY WITH CONSUMER ENGAGEMENT APPS



DOWNLOAD
BLIPPAR

Technology
Partner



SCAN
PRODUCT

Image
Recognition

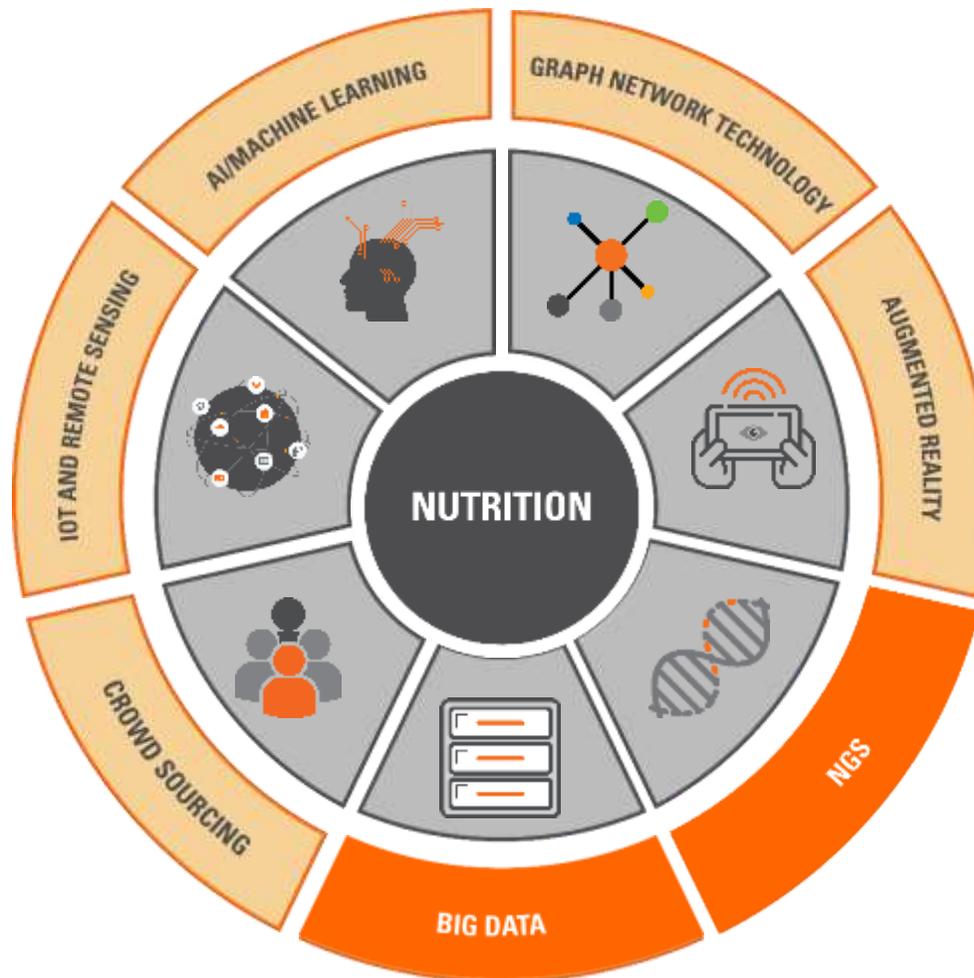


DISCOVER
PRODUCT

Consumer
Engagement



Carrefour and SGS launched Visual Trust in China during the National Food Safety Week in Beijing on July 1, 2017, in the presence of Chinese authorities, business associations, large retailers and the media

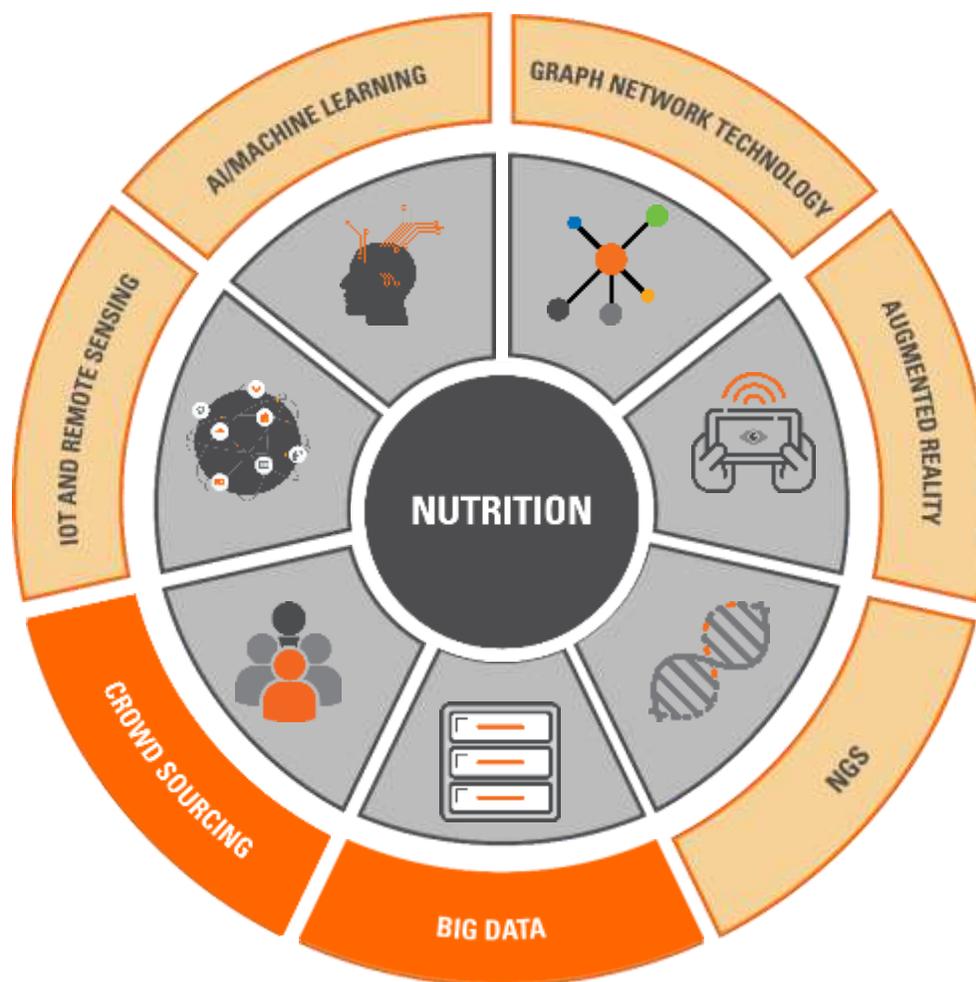




- **Next Generation Sequencing (NGS)** is a high-throughput sequencing technology.
- Coupled with **big data**, NGS technology offers multiple innovative applications in AFL
- **Food → Authenticity Testing**
 - Various techniques exist to detect fraud
 - Shift from targeted to untargeted testing using molecular biology
 - Center of competence (SGS Molecular in Lisbon) + replication/transfer of technology
 - Already adopted by several global food brands/retailers



Supporting the aims of food authenticity, traceability and safety, our all species identification is applicable to almost all types of food or feed and delivers reliable results.



Market intelligence platform for agricultural trade data based on **Crowd Sourcing**. AgFlow partners with over 100 contributors to secure data on a daily basis.

Core competence: collect, analyze, aggregate and distribute physical commodity data to market players with state-of-the-art data analytics.



Physical prices

Thousands of reliable price indications sourced from brokers and institutions



Historical data

Spot price trends early on with historical data going back to 2013



Tradeflows

World's largest vessel line ups database frequently updated



Freight

Freight indications for global main routes



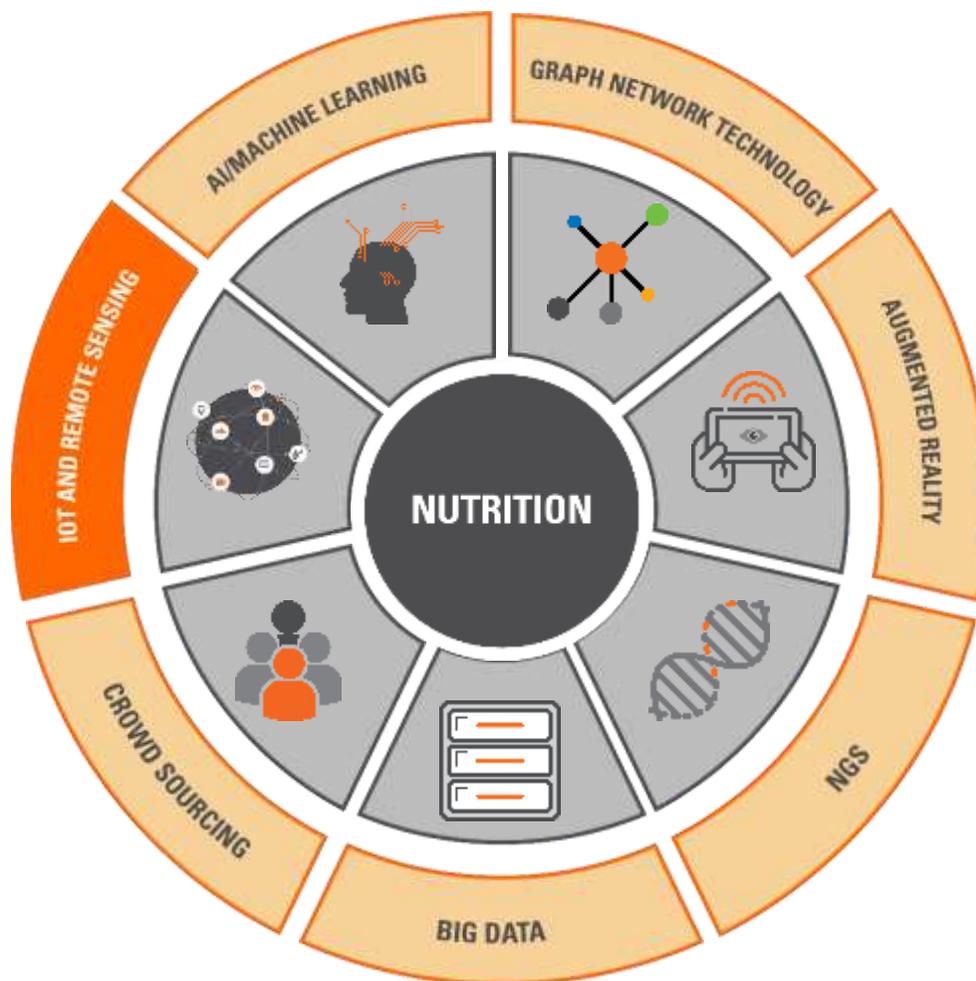
Tenders

Real time and historical tender updates

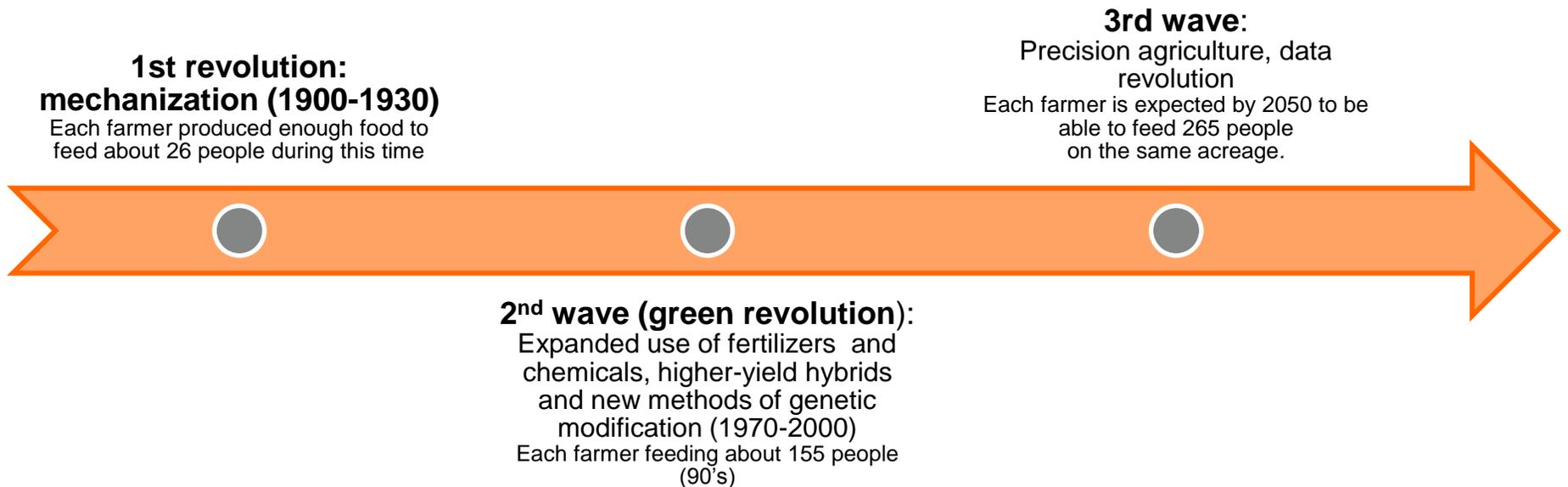


Market reports

Market comments and news from experts and specialists



- Precision Farming is a key component of the 3rd wave of modern agriculture:



- SGS launched precision farming services in 2008
- Services being provided via digital platforms since 2016 incorporating data from **sensors/IoT**, **remote sensing** field/lab operations, third-parties and customers.





SGS precision farming platforms:

- Integrated solutions to improve productivity, efficiency and sustainability
- Real-time access to geo-referenced cloud-based data
- Remote inspection, virtual SGS agronomists via the platform
- Can be used to service small farmers
- Used for > 1 million hectares
- Franchising



■ Biological risks are an important and critical hazard in food:

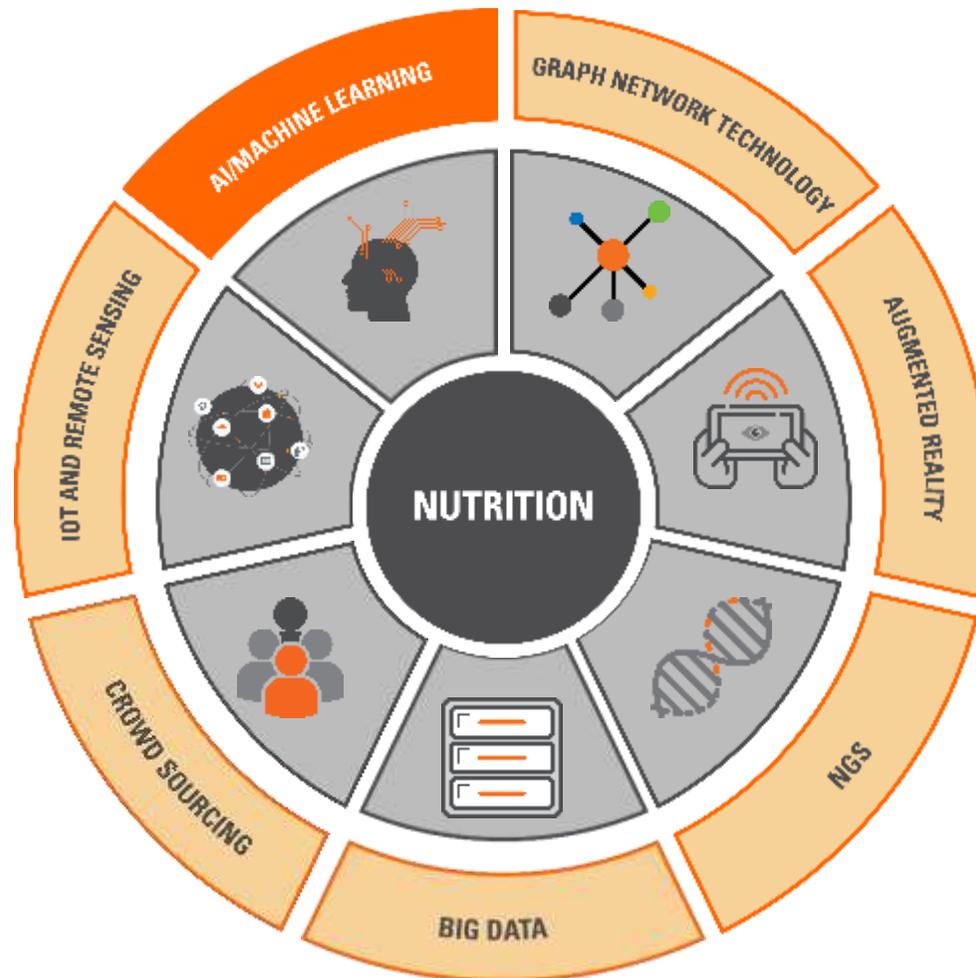
- **Prevention:** proofing of building, good practices
- **Monitoring:** follow up and assessment of the risks
- **Control:** elimination, treatment of critical points



■ SGS provides monitoring solutions with E-traps - **IOT** :

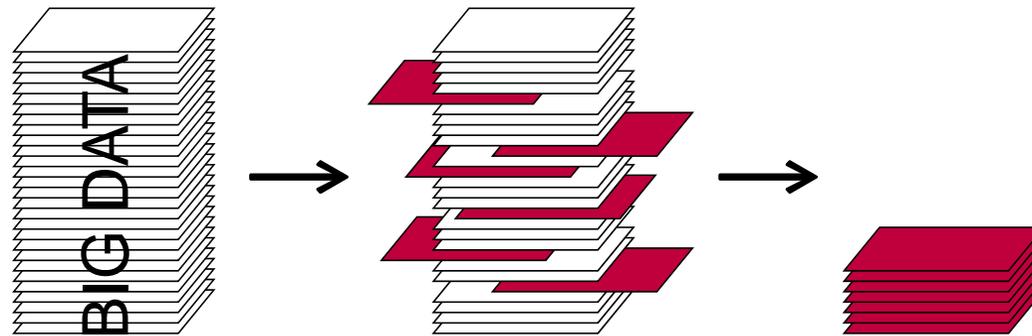
- Real-time information
- Reduce low added-value work (routine checks on-site)
- Timely treatments



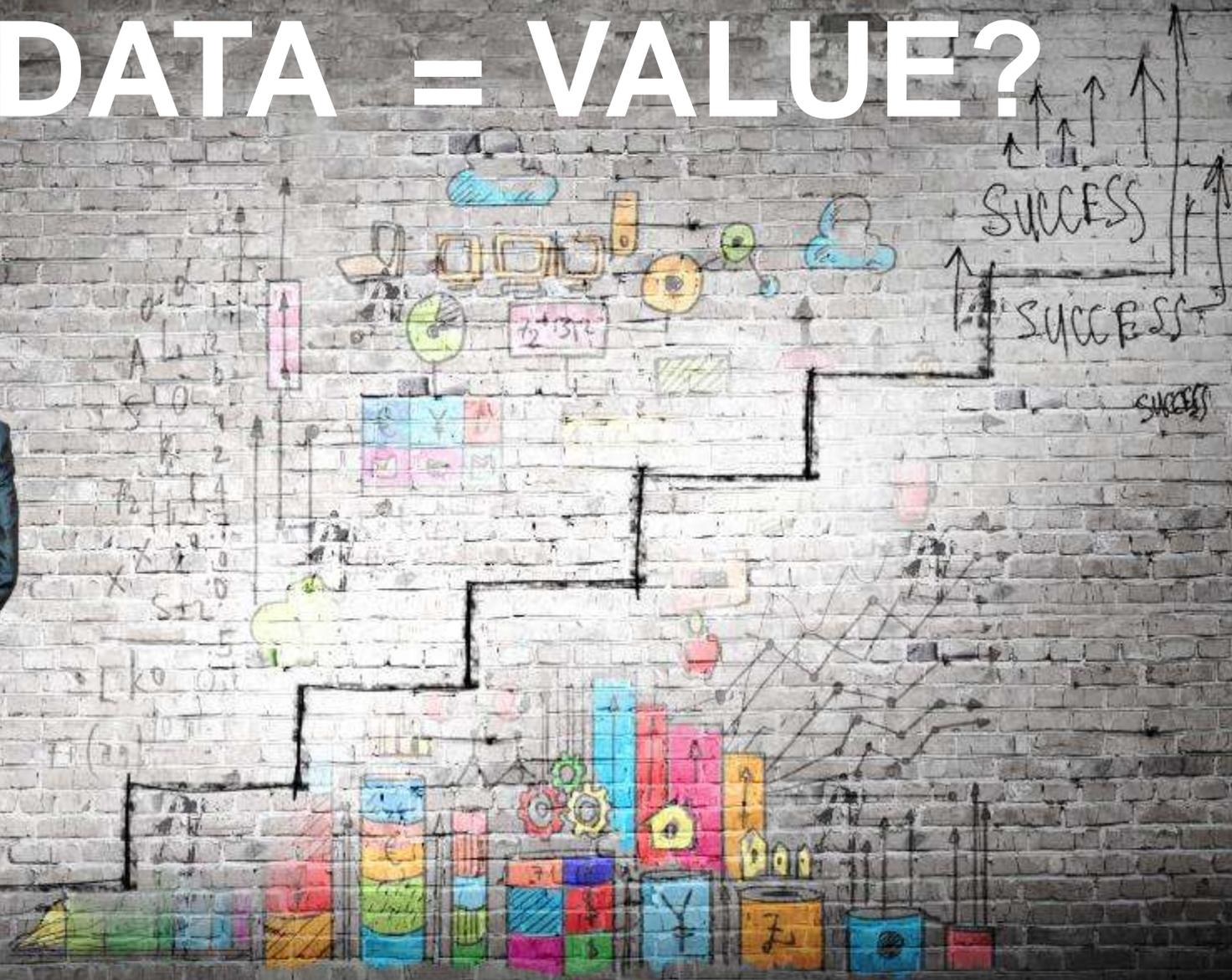


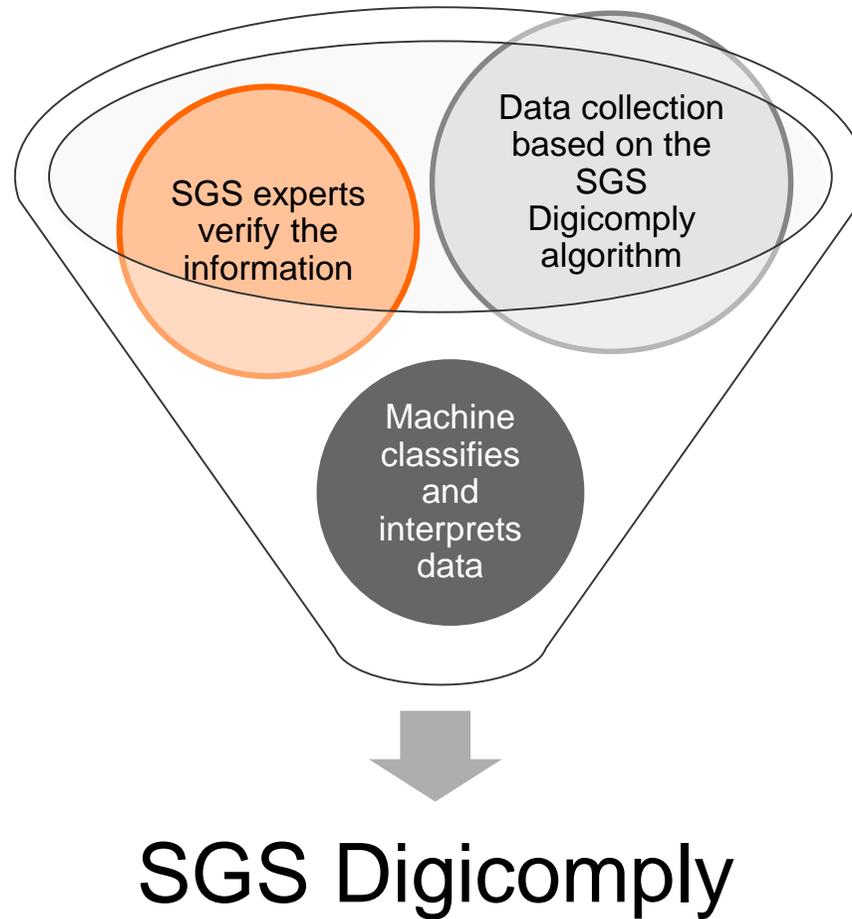
Our Mission:

Establish the leading digital platform for risk, standards, regulatory information, early warnings and questions & answers



BIG DATA = VALUE?







Today we are pleased to introduce SGS DIGICOMPLY



LABELWISE

Automation in Compliance Validation of Consumers' products labels

WHEN YOU NEED TO BE SURE



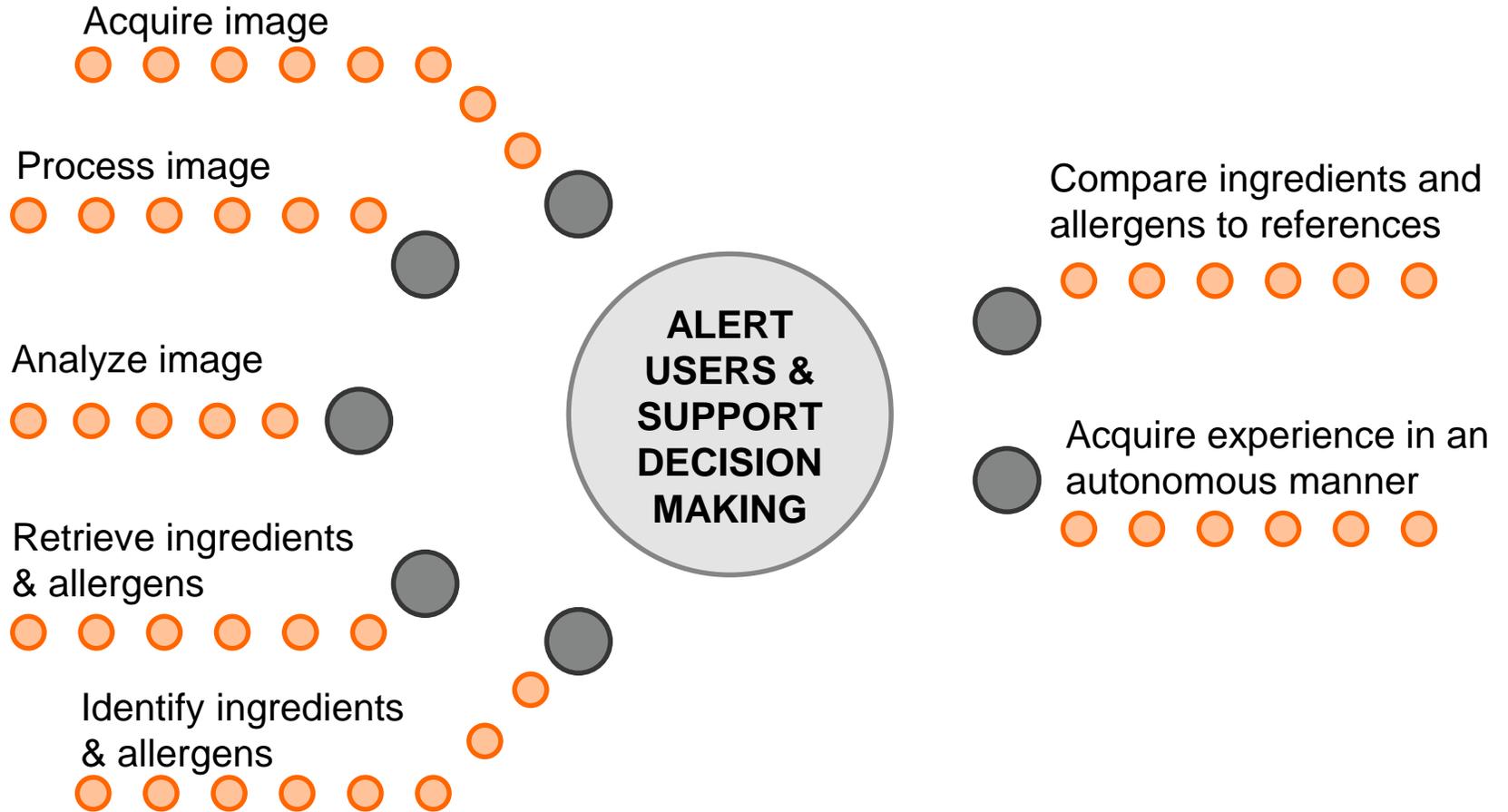


- 1 Among Top 4 sources for reportable incidents
- 2 Contributes 13% incidents per year
- 3 >95% Label related incidents due to human error



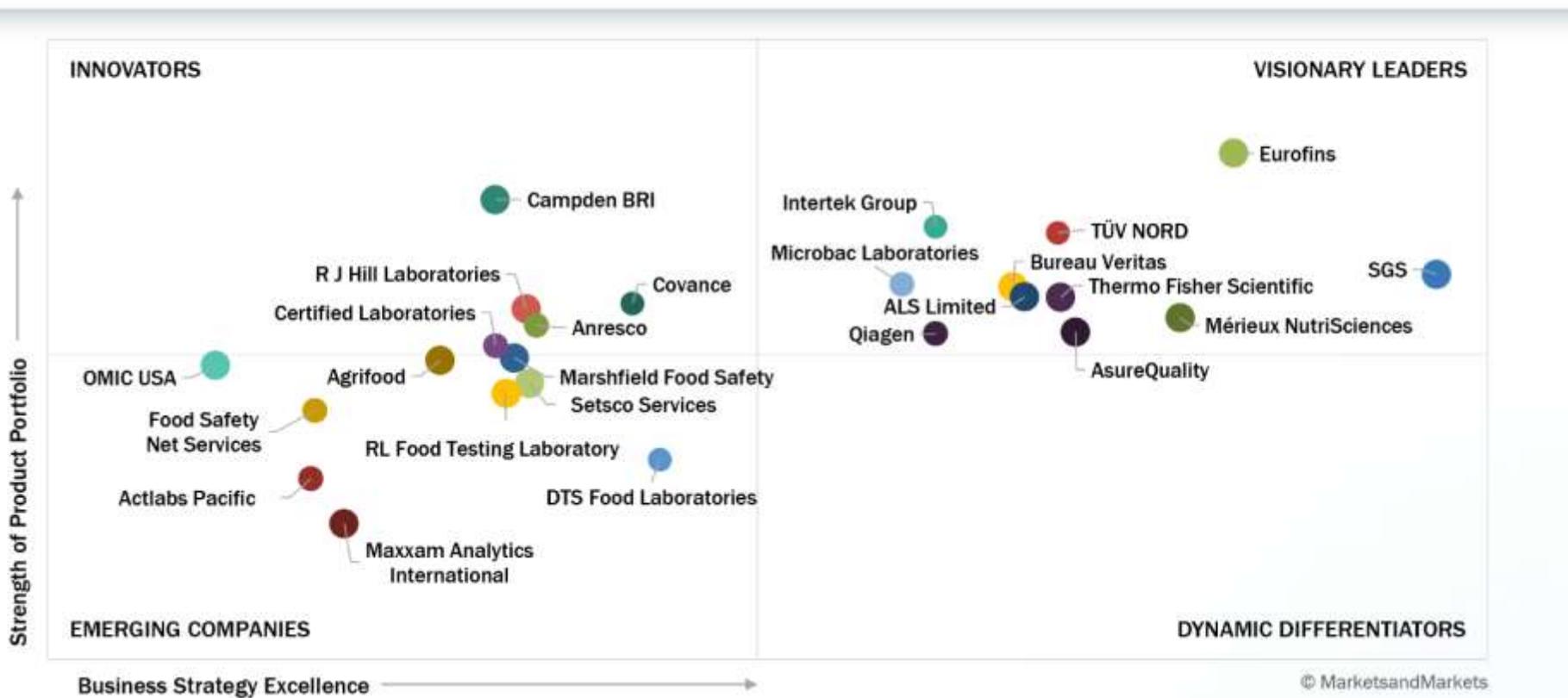


- Support elimination of human mistakes
- Increase speed of manual reviews
- Be autonomous in executing tasks
- Be autonomous in learning
- No user training
- No database maintenance



RECOGNITION FOR BUSINESS STRATEGY EXCELLENCE

NUTRITIONAL ANALYSIS MARKET (GLOBAL) COMPETITIVE LEADERSHIP MAPPING, 2017



Seed & Crop

Trade & Logistics

Food



Pre-farm Gate



Primary
Production



Commodity
Supply Chain



Primary transformation
& food manufacturing



Retail
E-Commerce



Consumption

- These new SGS solutions will
 - Create value (cost, experience and platform) for customers
 - Create of new streams of revenue
 - Increase productivity and sustainability in delivering services
 - Offer a unique position for advanced data analytics across the agri-food value chain

