

Think beyond the farm: Investment Opportunities in Precision Agriculture

InfoAg 2016



Building a better
working world

Three questions for today's presentation

1. Are you thinking beyond the farm?

- While the focus of most investment and media attention is on the producer and the farm, precision agriculture and its data has the power to transform agribusiness

2. What are all of the uses for geo-spatial data?

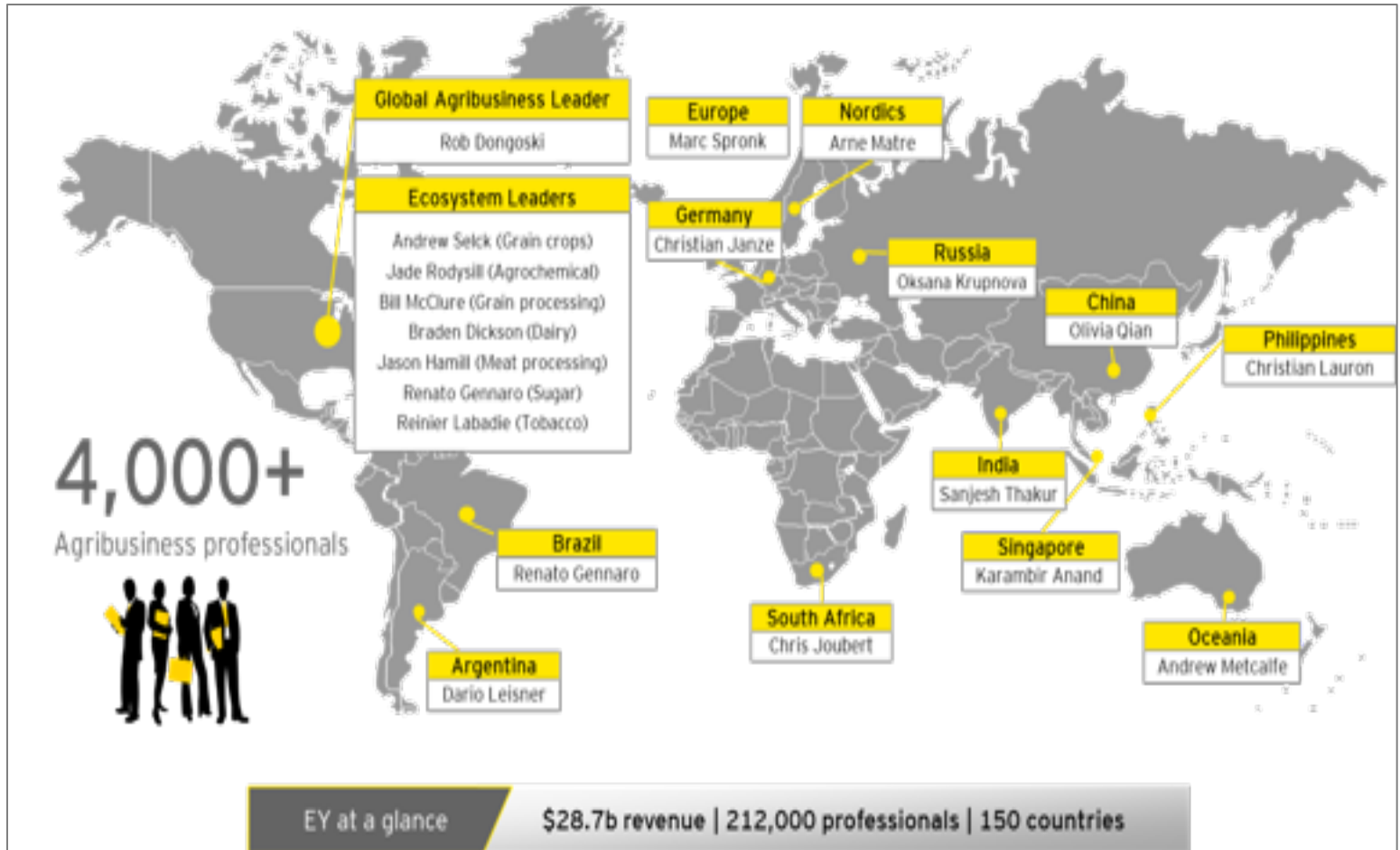
- Precision agriculture data, combined with business data, has massive opportunity for increased revenue, decreased costs, and disruption

3. Where do you create value?

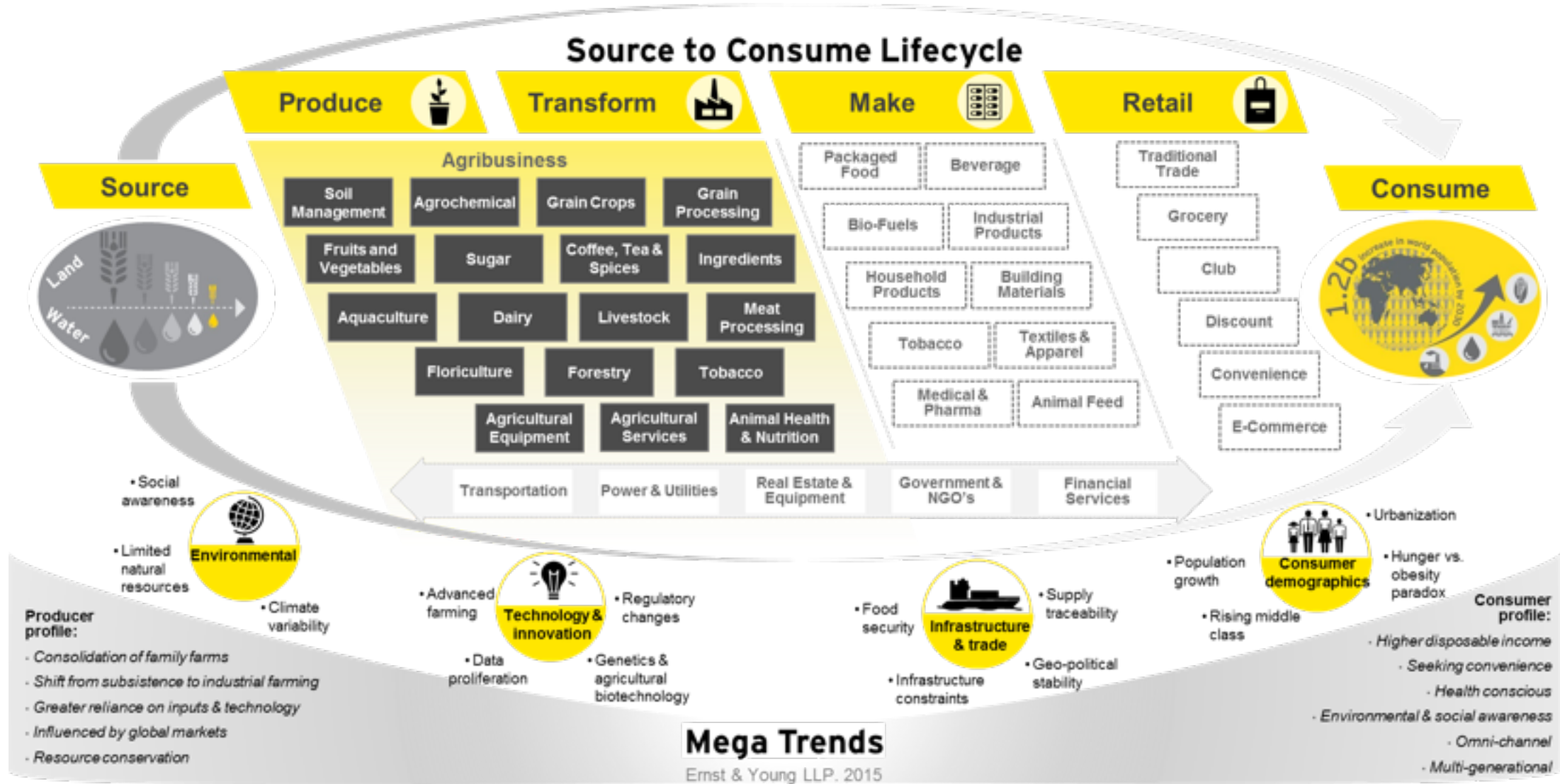
- Understand where your technology creates the most value (ROI) in the agribusiness value chain and focus there

Who is EY?

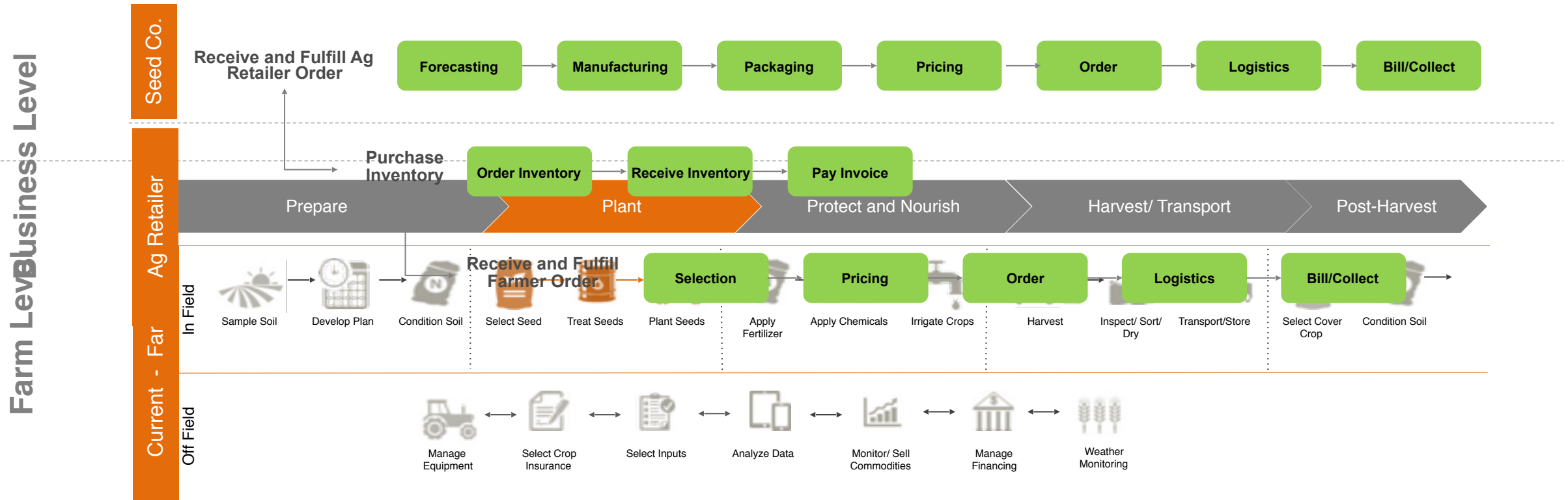
- EY is a professional services firm that provides assurance, tax, transaction, and advisory services to the largest businesses in the world
- EY's Global Agribusiness Center, based in Chicago, support all of our agribusiness accounts globally
- EY works with a large majority of the top global agribusiness companies



Precision Agriculture will drive disruption and opportunity across the entire Source to Consume Lifecycle



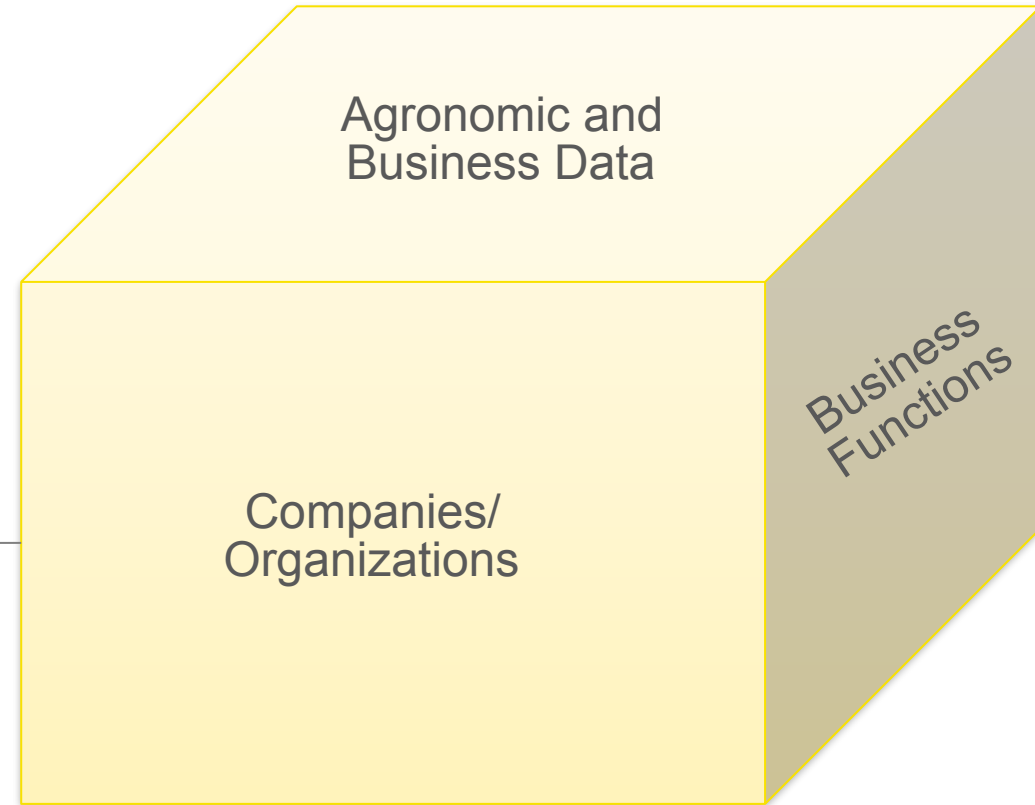
Question #1: Are you thinking beyond the farm?



Question #2: What are all of the uses for geo-spatial data?

Companies/Organizations

- Farm Organizations
- Nutrients
- Seed/Ag Chemical
- Equipment
- Ag Retailers
- Grain Processors
- Agronomic Software
- Farm Management Software
- Government / Academia
- Food Companies
- Financial Institutions
- Consumers












Business Functions

- Sales & Marketing
- Pricing
- R&D
- Capital Investment
- Manufacturing
- Logistics
- HR
- Credit/Financing
- Billing/Collections

Question #3: Where do you create value?

$$\text{NPV}(i, N) = \sum_{t=0}^N \frac{R_t}{(1+i)^t}$$

1. CASH INFLOWS (Revenues)
2. CASH OUTFLOWS (Expenditures)
3. DISCOUNT RATE (Risk Adjusted)

	PRODUCER	AG RETAILER	INPUT MANUFACTURER
NITROGEN MODELING ALGORITHM	 PROFIT	 PROFIT	 PROFIT
VARIABLE RATE SEEDING SOFTWARE	 PROFIT	 PROFIT	 PROFIT
INVENTORY/ PURCHASE SUBSTITUTION	 PROFIT	 PROFIT	 PROFIT

Summary of Today's Presentation

1. While most focus of investment and media attention is on the producer and the field, precision agriculture and its data will significantly change every company in the agribusiness value chain
2. Precision agriculture data, combined with business data, has massive opportunity for increased revenue, decreased costs, and disruption
3. Understand where your technology creates the most value in the agribusiness value chain and focus there