Innovación en Agricultura

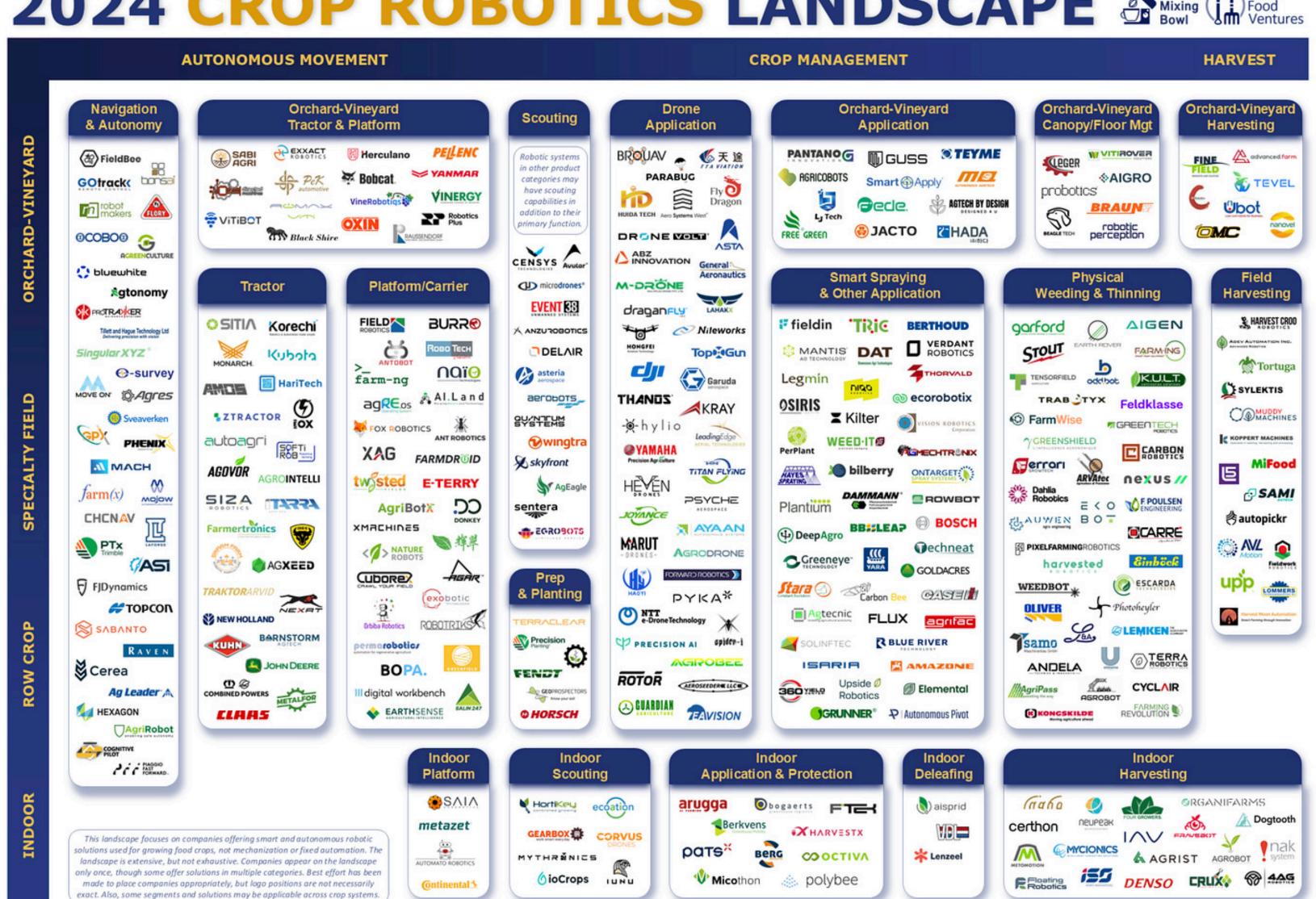
Sebastian Langbehn

La innovación es difícil de categorizar pero este es un intento

- Agricultura de Precision
- Software y Big Data
- Biotecnología y Edición Genica
- Inteligencia Artificial
- Biológicos
- Vertical Farming
- Proteinas Alternativas

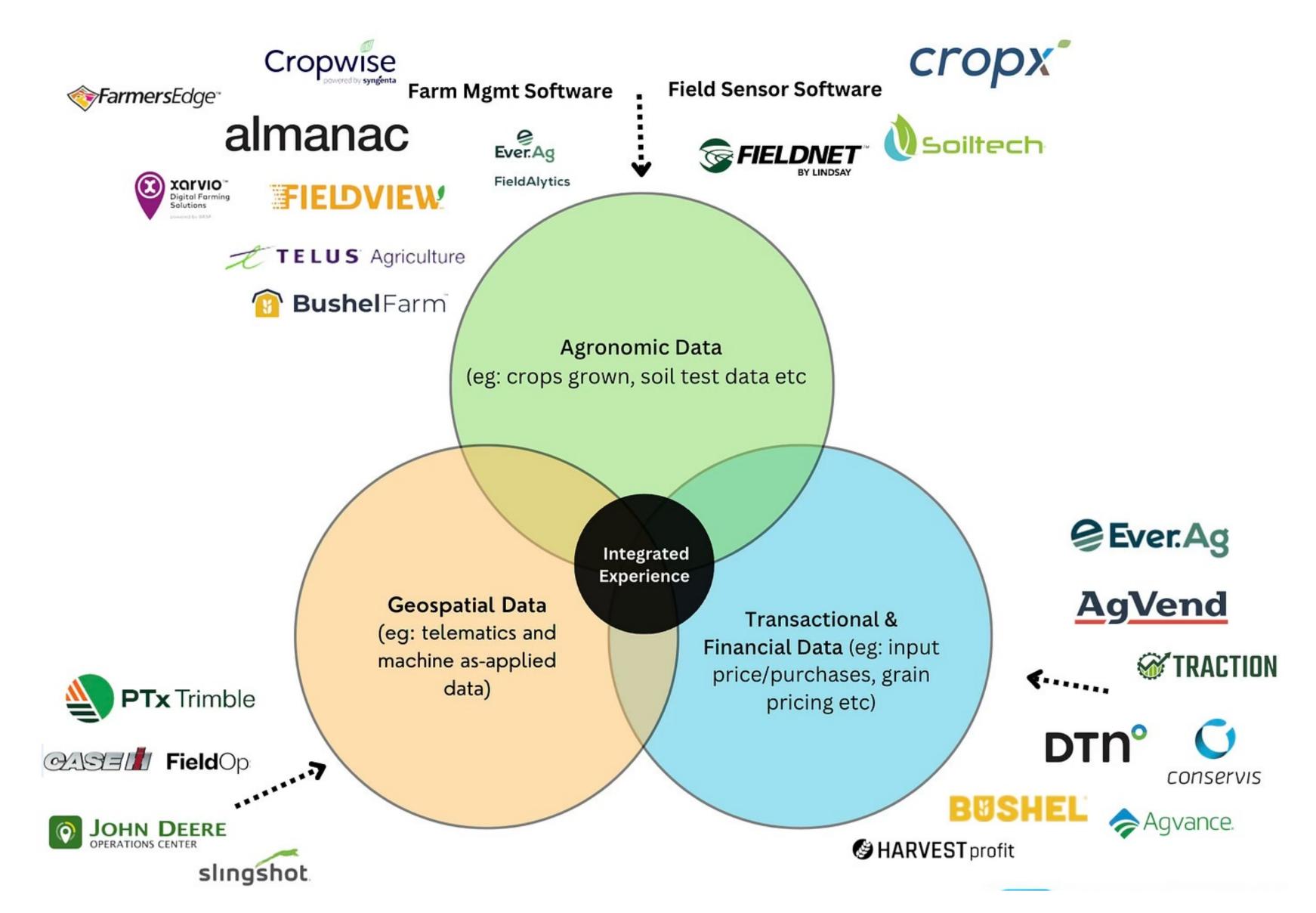
Agricultura de Precision (GPS, IoT, Robots, Drones)

2024 CROP ROBOTICS LANDSCAPE Street Book Wentures





Software y Big Data



Biotecnologia y Edición Genica

2024 BIOTECH TRAIT COMPARISON: THE BIG FOUR

COMPANY	TOTAL NUMBER OF TRAITS LICENSED	TRAIT LICENSE BY EVENT ID WITH MOST LICENSEES	APPROVALS	REGULATORY APPROVAL BY REGULATORY TYPE (PERCENTAGE)	GRANTED	COUNTRIES WITH MOST PERMITS	R&D % OF REVENUE (WHOLE COMPANY REVENUE)	R&D EXPENDITURE (ENTIRE AG DIVISION SPEND, NOT ONLY SEED)
BAYER	15	Powercore® Enlist® (TC1507 x MON89034 x NK603 x DAS40278) (corn)	76	22% Cultivation 37% Feed 41% Food	474	 Canada United States Brazil 	8.1%	\$1.995 billion**
syngenta	12	Duracade® (5122) (5307 x MIR604 x Bt11 x TC1507 x GA21) (corn)		40% Cultivation 30% Feed 30% Food	161	 USA Brazil South Africa 	6.2%	\$1.4 billion
CORTEVA	27	Powercore® Enlist® (TC1507 x MON89034 x NK603 x DAS40278)(corn)	36	8% Cultivation 45% Feed 47% Food	209	 USA Canada Brazil 	7.8%	\$1.34 billion
□ - BASF We create chemistry	2	XtendFlex® soybean (MON87708 x MON89788 x A5547-127)	28	28% Cultivation 36% Feed 36% Food	191	 Canada Brazil United States 	9.2%	\$1.05 billion

Inteligencia Artificial, LLM

Synergystic Intelligence

- Augmented Decision Making
- Improved outcomes

Human Intelligence

(.....

- judgment
- sensory
- emotion
- reasoning
- imagination
- experience

Artificial Intelligence

- computation
- pattern recognition
- consistency
- specificity
- speed and scale

AgTech × AGI: The Convergence That Changes Everything

AgTech

Maturing from efficiency to intelligence >

AgTech 1.0 Caloricene (1880s-2020s)

AgTech 2.0 Holoagricine (2020-2040s)

AgTech 3.0 Biointicene (2040s-beyond)

- Delivering calories at scale
- Optimized in post-WWII
- Driven by mechanization, chemicals
- Traditional VC infrastructure

- Delivering nutrition and planetary health outcomes
- Driven by biotech, Al
- Innovation spans the value chain
- Patient capital

- Bio-intelligent ag that proactively enhances ecosystems
 - Driven by living systems
- Evergreen capital, systemic funding

Artificial General Intelligence (AGI)

← Maturing from tools to co-architects

AGI x AgTech

will converge

operating

Venture

Rewriting the

system of life

creation will

shape the

next era

AGI Tier 3 Question Architects

Reframes

problem

domains and

Engines

- strategic intent
- Uncovers blind spots and surfaces new possibilities
- Proposes new categories of action, not just answers

- **AGI Tier 2** Predictive
- Anticipates next moves, questions, and outcomes
- Learns patterns, but lacks depth of judgement
- Can suggest next steps, but not purpose

AGI Tier 1

Answering Machines

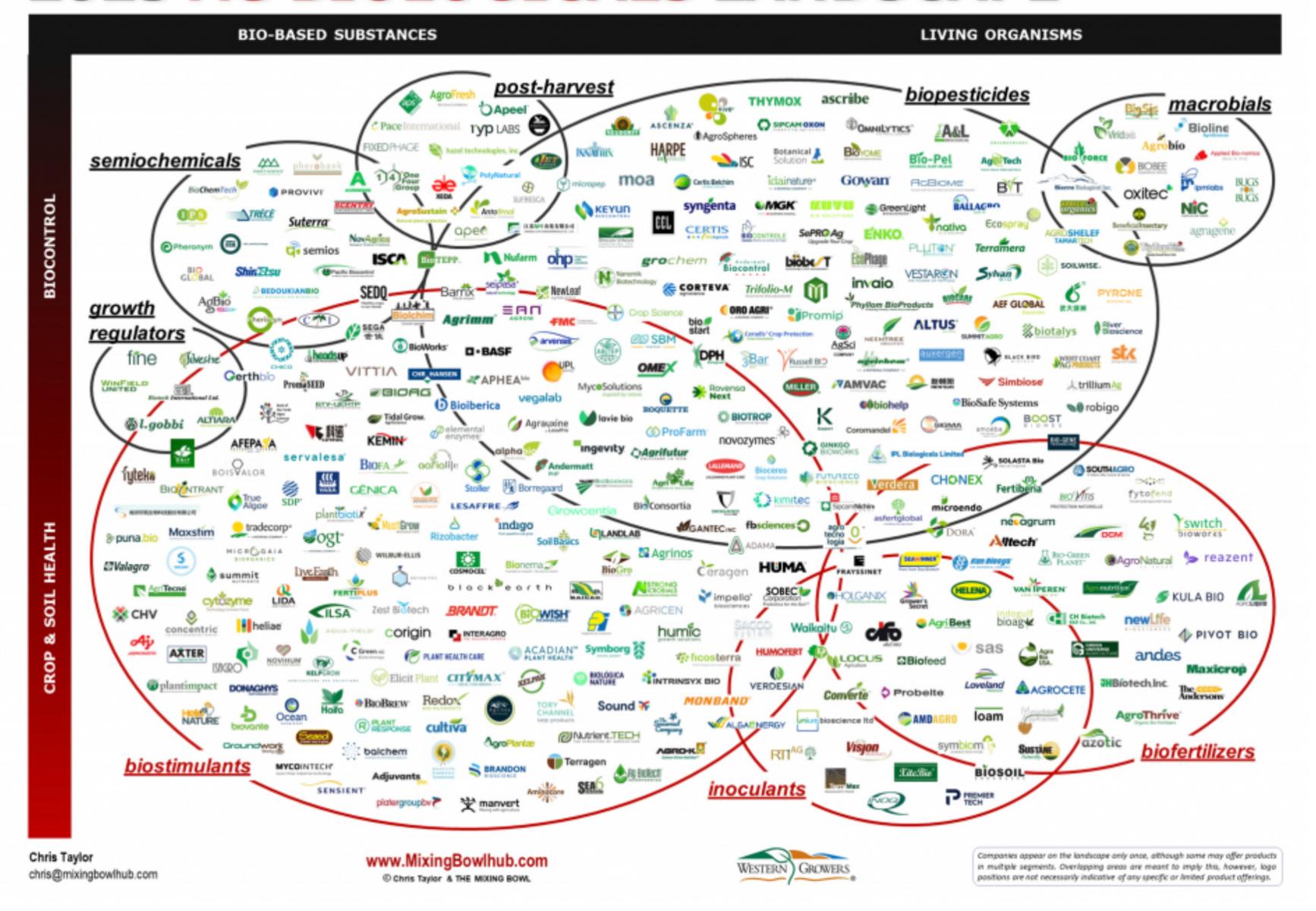
- Retrieves and synthesizes known information
 - Operates within fixed, humandefined frames
- Responds, but doesn't infer or interpret well

Mark S. Brooks, 2025

Biológicos

2023 AG BIOLOGICALS LANDSCAPE





El drama del financiamiento de la Inovacion

Del 2021 a la fecha la inversion de VC en AgTech se ha reducido en un 70% y los compradores estratégicos no estancia en condiciones de comprar

