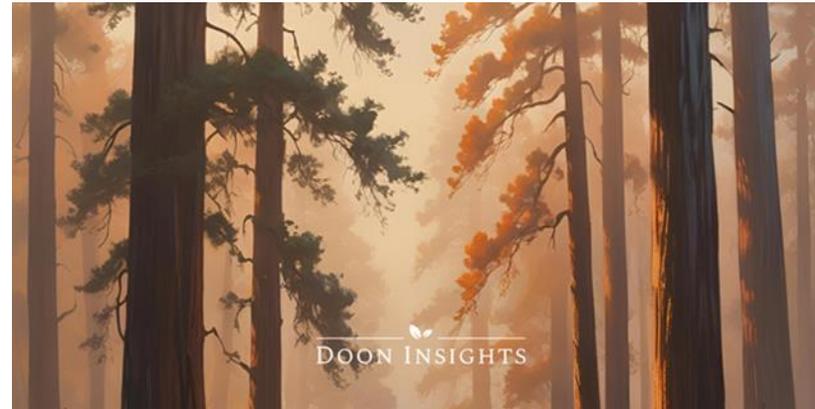Interior Lines Advisory (ILA)

A Challenge to the Doon Insights Community: Let's Think Collectively About What Technologies Will Be the Long-Term Winners and Losers in Ag Tech
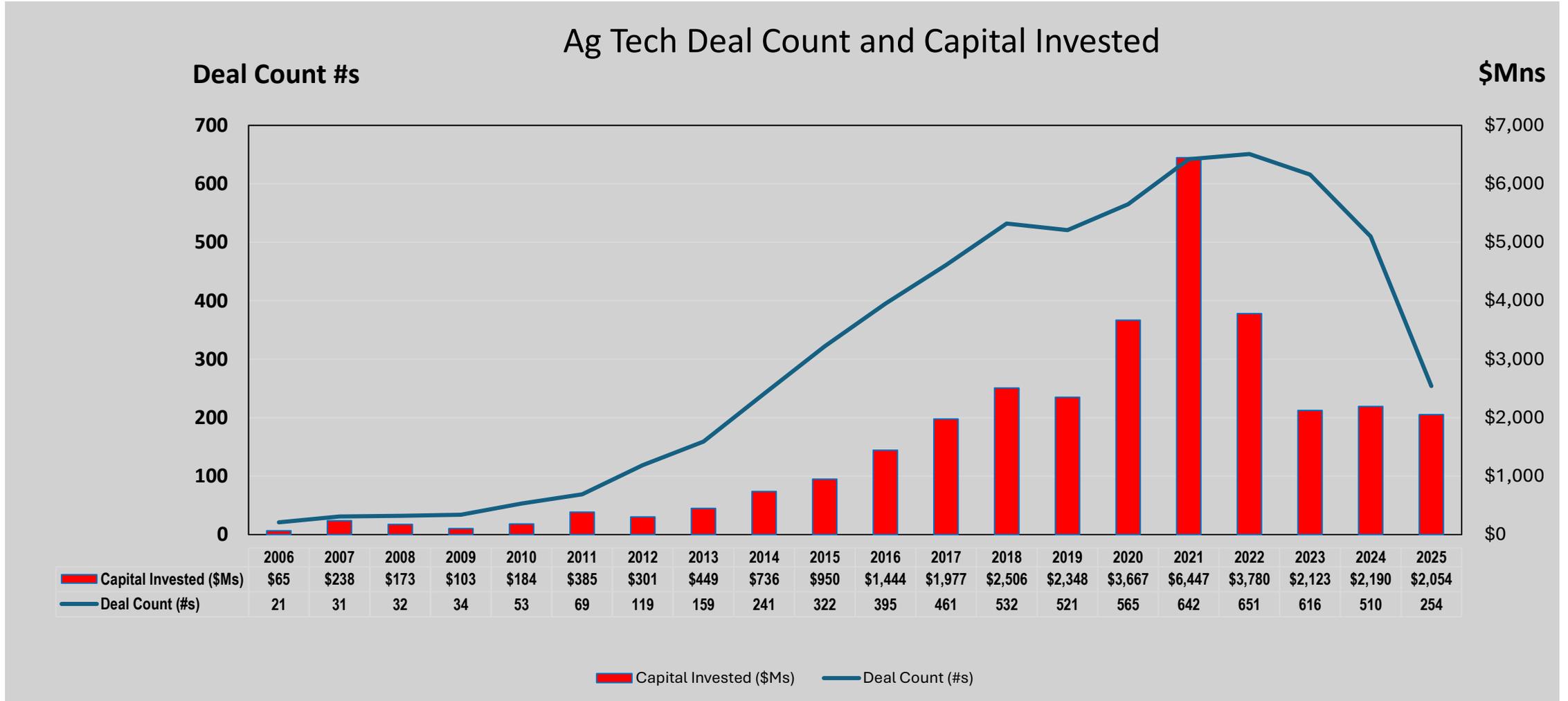
Doon Ag Tech 12

Nov 12th, 2025

Steve Haggerty
Head of Research
Interior Lines Advisory

Doon Insight: Technology & Capital Discussion

Summary

- Investment in Ag Tech is volatile

- This is consistent with sectors where new Technology is emerging

- But Ag Tech is unique in terms of the number of new Technologies available

- And sector participants may want to spend more time vetting the Technology and its fit in Agriculture before focusing on Capital side

Interior Lines Advisory (ILA)

Ag Tech focuses on Capital – Depressed investor interest

Ag Tech Deal Count and Capital Invested

Deal Count #s

$Mns

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Capital Invested ($Ms)	$65	$238	$173	$103	$184	$385	$301	$449	$736	$950	$1,444	$1,977	$2,506	$2,348	$3,667	$6,447	$3,780	$2,123	$2,190	$2,054
Deal Count (#s)	21	31	32	34	53	69	119	159	241	322	395	461	532	521	565	642	651	616	510	254

Capital Invested ($Ms)   Deal Count (#s)

Source: Pitchbook Oct 2025- Full Transactions, All VC Stages
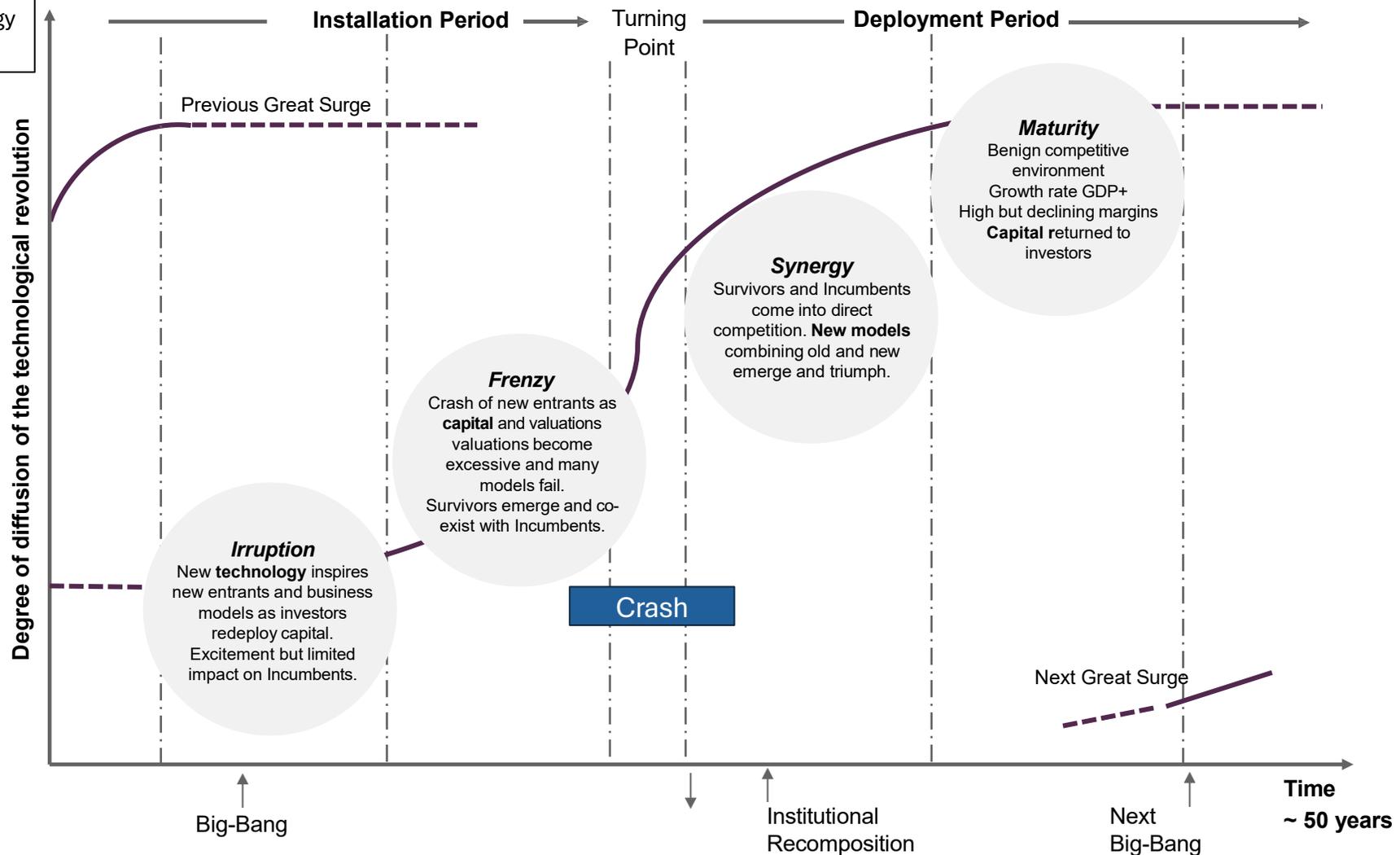
3

Interior Lines Advisory (ILA)

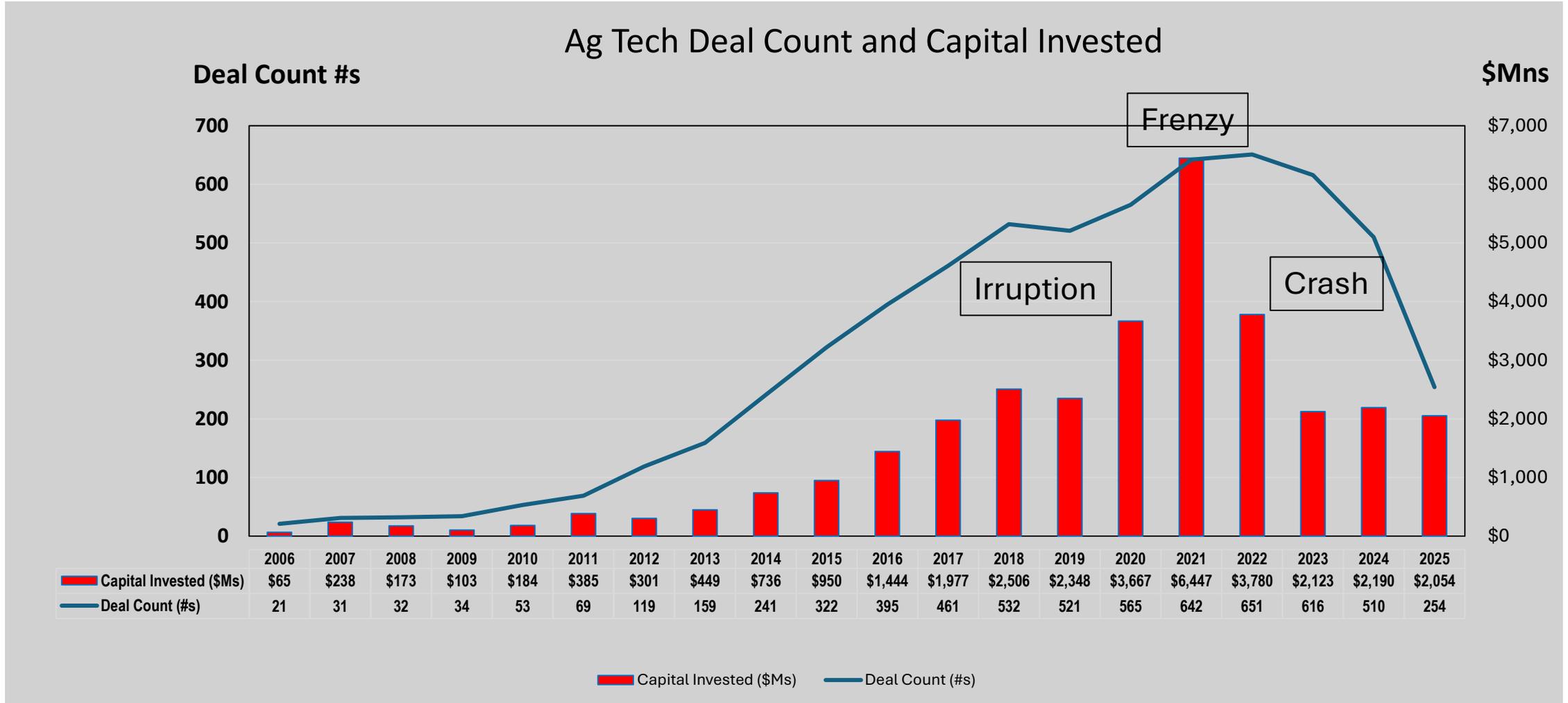But it is important to focus on the **Technology** and the Capital
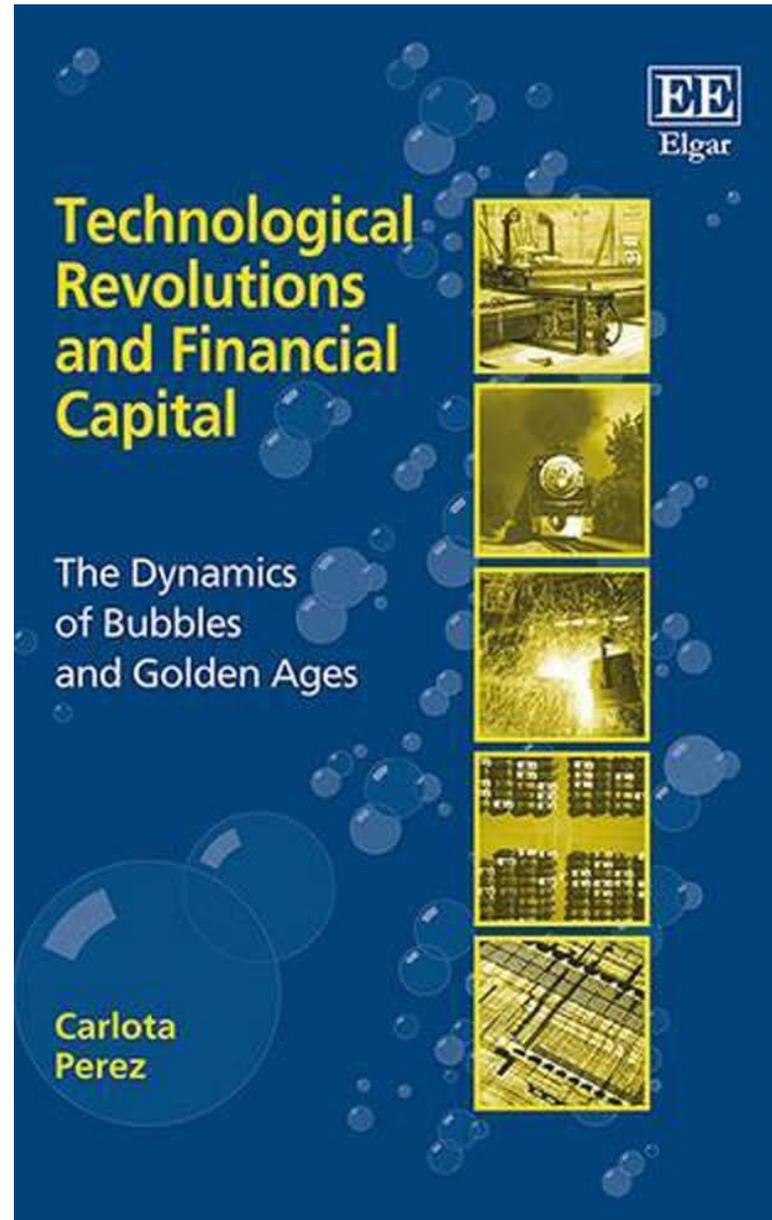
Technological Revolutions And Financial Capital – the Model

There is an observable pattern to the emergence of Technology and the flow of Capital

Installation Period → **Turning Point** → **Deployment Period**

Previous Great Surge

Maturity
Benign competitive environment
Growth rate GDP+
High but declining margins
Capital returned to investors

Synergy
Survivors and Incumbents come into direct competition. **New models** combining old and new emerge and triumph.

Frenzy
Crash of new entrants as **capital** and valuations valuations become excessive and many models fail.
Survivors emerge and co-exist with Incumbents.

Irruption
New **technology** inspires new entrants and business models as investors redeploy capital.
Excitement but limited impact on Incumbents.

Crash

Next Great Surge

Degree of diffusion of the technological revolution

Big-Bang

Institutional Recomposition

Next Big-Bang

Time ~ 50 years

Source: Based on Technological Revolutions And Financial Capital, Carlota Perez, 2002

Doon Insight: Technology Discussion

Ag Tech investment follows the pattern

Ag Tech Deal Count and Capital Invested

Interior Lines Advisory (ILA)

Deal Count #s / $Mns

Frenzy / Irruption / Crash

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
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Capital Invested ($Ms)   Deal Count (#s)

Source: Pitchbook

Technological Revolutions And Financial Capital – the Ag Tech Version

Installation Period → **Turning Point** → **Deployment Period**

Degree of diffusion of the technological revolution

Previous Great Surge

Ag Tech has a broad range of technologies offering a broad range of solutions requiring more early focus on the Technology Proof of Concept

Maturity
Benign competitive environment
Growth rate GDP+
High but declining margins
Capital returned to investors

Synergy
Survivors and Incumbents come into direct competition. **New models** combining old and new emerge and triumph.

Frenzy
Crash of new entrants as **capital** and valuations valuations become excessive and many models fail.
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Next Great Surge

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Next Big-Bang

Time ~ 50 years

Source: Based on Technological Revolutions And Financial Capital, Carlota Perez, 2002

Interior Lines Advisory (ILA) Ag Tech: Multiple, fragmented domains – Biologicals Example

Source: The Mixing Bowl Chris@MixingBowl.com

Doon Insight: Technology & Capital Discussion
3 Ag Tech Domains -Assessment

Biologicals	Seed Gene Editing	Robotics and SmartFields

Subsectors
 • **Bionutritional** – bacterial production of ammonia
 • **Bioprotective –** bacteria controls crop pests
 • **Biostimulants** – Bacteria based products stimulate crop yield
 	
 Domain Assessment
 • **Technology/Science**
     o Tech Proof of Concept
     o Degree of Capital Intensity
     o Impact on Farmer Economics
     o Complexity of Farmer Adoption
     o Integration with AI
 	
 • **Capital Track Record '22-'24 (Bionutritional)**
     o Average number of capital raises: 66
     o Average capital raised: $570mn
     o Successful exits last 3 years: 8
	Subsectors
	 • **Row crop –** yield improvement
	 • **Row crop –** insect and disease protection
	 • **Specialty crops –** tailored applications
	
	 Domain Assessment
	 • **Technology/Science**
	     o Tech Proof of Concept
	     o Degree of Capital Intensity
	     o Impact on Farmer Economics
	     o Complexity of Farmer Adoption
	     o Integration with AI
	
	 • **Capital Track Record**
	     o Average number of capital raises: 22
	     o Average capital raised: $206mn
	     o Successful exits last 3 years: 6
		Subsectors
		 • **Robotic labor** -
		 • **Drone-based** - Harvesting and application protection platforms
		 • **Machine/aerial imagery**- crop analysis and digitization
		
		 Domain Assessment
		 • **Technology/Science**
		     o Tech Proof of Concept
		     o Degree of Capital Intensity
		     o Impact on Farmer Economics
		     o Complexity of Farmer Adoption
		     o Integration with AI
		
		 Capital Track Record
		     o Average number of capital raises: 93
		     o Average capital raised: $540mn
		     o Successful exits last 3 years:16

Doon Insight: Technology & Capital Discussion

Conclusions

- Please submit suggestions for a May 2026 panel to discuss the *Winners and Losers in Ag Tech* and the criteria for making these assessments

Potential Criteria
• Rigor of Proof of Concept
• Degree of Capital Intensity
• Impact on Farmer Economics
• Complexity for Farmer Adoption
• Capital Track Record
• Integration with AI
• Others

- **Submit ideas and suggestions to Jeremy Villeneuve: jeremy@dooninsights.com**