Appendices

Appendix 1.

Company	Category	Main initiatives related to DA	
Bayer	Seeds & Crop Protection	Climate FieldView TM is an all-in-one DA platform that combines agronomic farm data, satellite imagery, and data analytics to support informed decisions. Bayer has partnered with Microsoft to develop a platform (called Azure Data Manager for Agriculture) that enables digital innovation through the value chain.	
Corteva	Seeds & Crop Protection	Corteva offers Granular Insights, a farm management software to improve agronomic decision-making. The company also provides Landvisor TM , a software that combines satellite imagery with data analytics, oriented to land productivity.	
Syngenta	Seeds & Crop Protection	Cropwise is an integrated digital farming platform that offers a set of digital solutions to optimize planting, nutrition, and monitoring tasks.	
BASF	Seeds & Crop Protection	xarvio® Field Manager is a digital farming tool that optimizes input use, enables digital mapping of weeds, provides variable-rate solutions, and offers monitoring services.	
Deere & Co.	Farm Machinery	The John Deere Precision Ag Technology integrates sensors, GPS, and software to provide real-time analysis of machine and field data. The John Deere Operations Center TM , offers a space to collect, analyze, and add value to the data collected by machinery.	
CNH Industrial	Farm Machinery	Partnership with Syngenta for integrating its precision agriculture systems, including the company's leading machinery brands (i.e., Case IH and New Holland), with the Cropwise platform to connect data sources and enhance decision-making.	
AGCO	Farm Machinery	AGCO has developed FUSE® Smart Farming, which offers a combination of precision agriculture and data analytics to all its brands.	
Kubota	Farm Machinery	Introduced Kubota Smart Agri System (KSAS), which combines artificial intelligence, IoT, unmanned vehicles, and drone technologies.	
Cargill	Agricultural Traders	Cargill Elevate+TM is a subscription that provides access to market insights, and Bushel Farm TM is a farm management software designed to support informed decision-making.	

ADM	Agricultural Traders	Association with Farmers Business Network to deploy a digital app called Gradable, connecting farmers with buyers.	
Louis Dreyfus Co.	Agricultural Traders	Launched the app "MyLDC" that helps connect farmers with the company, enabling to manage and sign contracts and monitor shipments and payments.	
COFCO International	Agricultural Traders	Partnered in an initiative to digitize and standardize trade documentation across global commodity supply chains using blockchain and artificial intelligence.	
Nutrien	Fertilizers	The Echelon PA precision agriculture app is the main driver of the Digitally Engaged Acres system, using geospatial technologies to provide acre level data and improve precision nutrition solutions.	
Yara	Fertilizers	Offers a set of solutions in the Yara Digital Ecosystems, oriented to assist farmers in crop nutrition, water management, and farming advisory. Includes both software and hardware solutions.	
The Mosaic Company	Fertilizers	DA initiatives are not clearly disclosed online.	
CF Industries Holdings	Fertilizers	DA initiatives are not clearly disclosed online.	

Source: Elaborated by authors based on companies' websites. Companies were selected according to the C4 criteria in each market.

Appendix 2. Classification of solutions provided by Argentine Agrifoodtech start-ups (according to Mac Clay et al., 2024).

Classification of solutions provided by Argentine Agrifoodtech start-ups				
Category	Number of companies	% of total		
Precision agriculture, smart farming, and farm robotics	91	41%		
Biological inputs and solutions	30	13%		
Plant, Animal and food Biotechnology solutions	15	6%		
Alternative ways of farming	17	7%		
Lab-based proteins and food ingredients	6	3%		
E-commerce and delivery solutions (Digital agribusiness marketplaces)	17	7%		
E-commerce and delivery solutions (Other)	4	2%		
Digital food service	2	1%		
Functional and healthy foods	13	5%		
Logistics, food safety, and traceability solutions	14	6%		
Financial solutions for food and agriculture	15	6%		
Waste reduction and cascading uses	9	4%		
Total	239	100%		

Appendix 3. List of the 114 Argentine *Digital Agriculture* Start-ups under study. AccessMan Harvest, Acronex, AgriRed, Agro24, Agroapp, AgroBrowser, Agrocheck, Agroconsultas, Agrofy, Agrohub, Agrology Agro, AgroPro, Agrosense, Agrosty, AgroToolbox, AgroTrack, Agrovants, Aprilis, AR-PUF, Auravant, Avansys, Avismart, Bastó, Bipolos, Bold, Bright Data Analytics, Briste, Caburé, Cacta, Canopilogger, Cattle Trace (Onsen Ingeniería), Cattler, Clarion, Climate Sense, Control Campo, Corvus (AGDP), Cowdoo (Raíces), CROPilot.tech, Culti, Dale Vaquita, DeepAgro, Digirodeo, DVL Satelital, Dymaxion Labs, EcoDrip, Edra, Eirú, Eiwa, El Ojo del Amo, Enbaca, Fauno, FieldData, Finca, Flashagro, Forrager, GenGanar, HaciendaGo, Hidromotic Ingeniería, Hi-Terra, iAgro, IDanimal, Indegap, Innova Space, Integra Labs, Inteliagro, Kilimo, Kan Territory & IT, Kuna, La Rotonda, Lievrex, Magno, Magoya, Malevo, Mercado Agrario, Minnow, MKL Agro, Modo Agrario, Muu Mercado Digital Ganadero, Nandi, Novimetrics, Nutrixya, Ñandú, OKARATech, Omixon, Pacta, Pampe.ro, Pastech, Ponce, PreSeeds, Puma, Qira, Rastro Agropecuario, Rastros, Riante, RumIA, Ruuts, SaiLO, Satellites On Fire, Satellogic, Sendevo Software, Servidrone, Sima, SmallData, Smartium, Terratio, Uco Drone, Ucrop.it, Uniagro soft, UrsulaGIS, vertrey, Vistaguay, Wiagro, Wymag, Yield Data