The Dairy Brain project: From Data to Insights



















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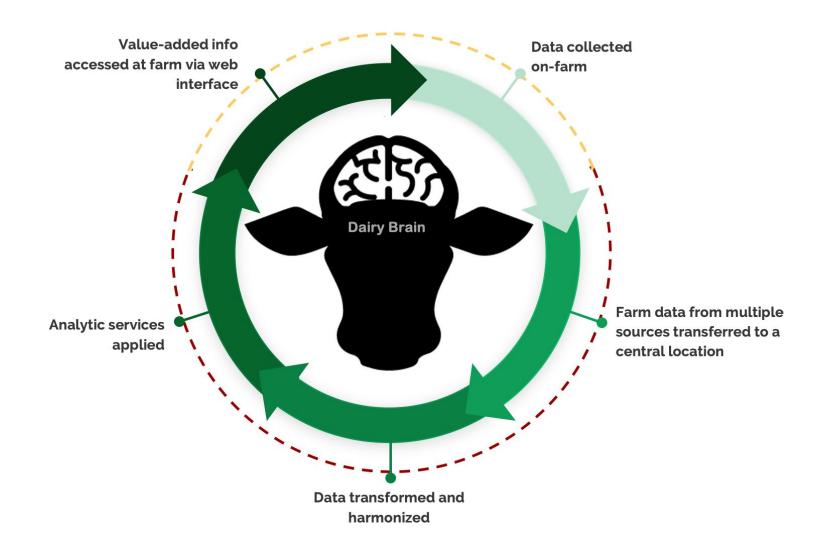
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Strategy **Extension program** Design and execute an innovative Extension program **Build the Dairy Brain** A suite of analytical modules that leverages the aggregation service and available data to provide insight to the management of dairy operations and services as an exemplar of an ecosystem of Create an AgDH connected services A prototype Agricultural Data Hub to gather and disseminate multiple data streams relevant to dairy operations **Create a CIN** A Coordinated Innovation Network to shape the data service development



Dairy Brain CIN



The



definition of the CIN is:

"A larger community that addresses bottlenecks... by bringing together experts from different disciplines and domains to identify innovative and synergistic solutions."

Dairy Brain CIN



Roles of the CIN

- Raise awareness
- Facilitation exchange opinions and discussion
- Create guidelines



Opinion articles



The foundation for more technical/scientific articles



Dairy Brain CIN opinion articles



Help us help you make better use of dairy data Feb. 10 2020

As more and more data is collected on land use, farm operations, animal health, and food supply chains, many initiatives, including the Dairy Brain project at the University of Wisconsin-Madison





Farming out data-driven decisions
March 25 2020

Data has played an integral role in dairy farmers' decision-making process for many decades. Much of this started with foundational work from landgrant universities and state extension services

https://hoards.com/articles.sec-136-1-dairy-brain.html



Dairy Brain CIN opinion articles





Data: Think big, but start small April 10 2020

Data collection, integration, and analysis are unavoidable factors when it comes to advancing the development of decision support tools in livestock operations



Making data work on the farm April 25 2020

The University of Wisconsin-Madison Dairy Brain's team is committed to developing data-integrated, data-driven, time-sensitive decision support tools (DST) that disseminate research and help improve...



Creating value from data May 10 2020

Data is a key driver for improving operations and sustainability of physical and business systems

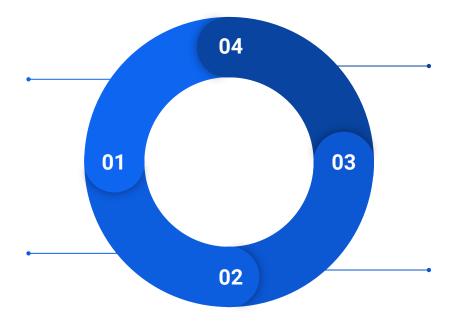
CIN Articles

Identify key topics

Rank them in order of importance

Organize groups by topics

CIN members select which topic or topics they want to participate



Publish the Opinion articles

Write the article: Online collaboration

Zoom meetings and google docs to facilitate the process of collaboration







Commentary

Integrated Decision Support Systems (IDSS) for Dairy Farming: A Discussion on How to Improve Their Sustained Adoption

Michel Baldin ¹, Tom Breunig ², Roger Cue ³, Albert De Vries ⁴, Mark Doornink ⁵, Jan Drevenak ⁶, Robert Fourdraine ⁷, Regi George ⁸, Robert Goodling ⁹, Randall Greenfield ¹⁰, Matthew W. Jorgensen ¹¹, Andy Lenkaitis ¹², Doug Reinemann ¹³, Amit Saha ¹⁴, Chakra Sankaraiah ¹⁵, Saleh Shahinfar ¹⁶, Cori Siberski ¹⁷, Kevin M. Wade ³, Fan Zhang ¹⁸, Liliana Fadul-Pacheco ¹⁸, Steven Wangen ¹⁸, Tadeu E. da Silva ¹⁸ and Victor E. Cabrera ¹⁸,*

- Currently there are few examples of IDSS and no successful business models in the dairy industry
- IDSS will change the way that dairy farms operate in the future and reshape the entire dairy products supply chain
- Sustainable adoption of IDSS will depend on the willingness of dairy sector stakeholders to coordinate data sharing that benefits the entire value chain







Commentary

Data Governance in the Dairy Industry

Roger Cue ¹, Mark Doornink ², Regi George ³, Benjamin Griffiths ⁴, Matthew W. Jorgensen ⁵, Ronald Rogers ⁶, Amit Saha ⁷, Kyle Taysom ⁸, Victor E. Cabrera ⁹, Steven R. Wangen ¹⁰ and Liliana Fadul-Pacheco ^{9,*}

- Challenges regarding data management, availability, use, and security
 are a growing concerns as there are no existing laws that regulate data
 usage in the dairy industry in the U.S.
- There are codes of practices, but these are voluntary
- Spark a discussion of some of the challenges and their possible solutions.
 - A first step is proposed: creating a Farmers Bill of Rights to standardize data governance and data regulations and to promote an equitable relationship of dairy data governance between farmers, industry professionals, and companies.

Other CIN Articles coming...

Best practices for data collection and communication

 Addressing data bottlenecks in the dairy farm industry (Survey)