The DairyBrain project: From Data to Insights

DairyBrain.Wisc.edu

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Strategy

Create an AgDH
A prototype Agricultural Data Hub to gather and disseminate multiple data streams relevant to dairy operations

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 connected services

Create a CIN
A Coordinated Innovation Network to shape the data service development

Extension program
Design and execute an innovative Extension program
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 land-grant universities and state extension services

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**

1. **Identify key topics**
   - Rank them in order of importance

2. **Organize groups by topics**
   - CIN members select which topic or topics they want to participate

3. **Write the article: Online collaboration**
   - Zoom meetings and google docs to facilitate the process of collaboration

4. **Publish the Opinion articles**
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.
Challenges regarding data management, availability, use, and security are a growing concern 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)