DataGene
Solutions for Herd Development

BUSINESS PLAN FY2025-2029

JUNE 2024

DataGene Limited

TABLE OF CONTENTS

1. Executive summary

This five-year Business Plan sets out how DataGene plans to service the agriculture sector now and into the future to enable sustainable and profitable agriculture through data-driven decisions.

The DataGene Business Plan for FY 25-29 delineates the priorities and achievements that the organisation aims to accomplish over the upcoming five years, spanning from July 2024 to June 2029. This plan encompasses four primary functions:

Defining DataGene's course: The plan sets a clear trajectory for DataGene for the forthcoming five-year period.

Establishing goals and objectives: Aligned with the organisation's vision and mission statements, the plan outlines specific goals and objectives.

Building on past successes: The plan aims to consolidate the progress made under the previous Business Plans to further enhance the organisation's standing.

Identifying investment areas: DataGene identifies key domains where investments will be directed to bolster services and capability.

This plan is the result of a significant consultative process. A series of business planning meetings and workshops with internal and external stakeholders were conducted over an eighteen-month period. Priority areas were tested through an online survey of DataGene stakeholders. This survey, conducted in July 2023, gathered feedback from farmers, broader industry participants, and DataGene staff. The survey sought answers about priorities and recent developments that could impact on DataGene's 5-year Business Plan.

Overview

DataGene is an independent and Australian dairy industry-owned organisation responsible for driving herd improvement and enabling data driven decisions in the agriculture sector. It is an initiative of Dairy Australia and the broader dairy industry. DataGene brings together non-competitive functions under the one umbrella, including genetic evaluation, herd recording, and data systems. DataGene also provides software development services and strategic consulting services in technology.

A recent impact analysis by Marsden Jacob Associates found that:

> *DataGene investments from 2016/17 to 2022/23 has delivered net benefits to the Australian dairy industry in the order of $638 million (with a benefit-cost ratio of 17.9 to 1) in present value terms. The net benefits occur through improvements in rate of genetic gain in the industry, improvements in the efficacy of breeding and herd management decisions and the efficacy of data management and use. Future DataGene investments from 2023/24 to 2027/28 are expected to deliver net benefits of $342 million (with a benefit-cost ratio of 13.0). The combined impact of investments from 2016/17 to 2027/28 results in expected net benefits of $981 million (with a benefit-cost ratio of 15.8).*[1]

This report has highlighted the importance of continuing to invest in genetics and data within the dairy industry. This Business Plan describes how DataGene will work towards achieving its Vision and Mission.

Our vision

Leading sustainable and profitable agriculture by facilitating data-driven decisions.

[1] Marsden Jacob Associates, *DataGene Cost-benefit analysis* Draft 14 November 2023.

Our mission

An independent DataGene supports Australian dairy farmers to improve the sustainability and profitability of their farms by delivering world-class genetic evaluation, data-driven decision-making tools, and software and professional services to the agricultural industry.

Infrastructure and Assets

Provision of DataGene's products and services is underpinned by extensive infrastructure and key industry assets. These assets are the outcome of major investments in multi-year IT projects. Assets include the Genetic Evaluation System New Platform (GESNP), the Centralised Data Repository (CDR), DataVat, HerdPlatform and Ginfo.

Operating environment

DataGene's primary focus is on providing products and services to the Australian dairy industry. The long-term outlook for the dairy industry remains optimistic, based on the ongoing strong demand for dairy products globally. For good reason, farmers and their customers are striving to improve sustainability within a profitable economic environment. Applying clever, data-driven solutions on-farm will be important in achieving this goal. There are tremendous opportunities to aggregate and synthesise data to produce information that drives agricultural businesses forward.

Data access

DataGene is reliant on access to a range of data to deliver its products and services - and has a clear role as an independent, industry-good data aggregator. DataGene has several strategies in place to ensure ongoing access to data including a shareholding in the International Dairy Data Exchange Network (iDDEN), use of Ginfo for genotypic and phenotypic data, the Data Connect project, and providing a clear value proposition for a range of organisations to share data.

Data connectivity is critical for farmers and for DataGene. Farmers should be able to enter data once and have it used across different systems without any double handling. This was the rationale for the creation of the CDR, but connection to existing software is entirely voluntary and competitive forces and lack of capacity can hinder connections. This means that data connectivity remains a significant and long-term commitment at DataGene.

Planning for growth

DataGene is committed to a growth strategy that relies on building the business through its software development services and strategic IT consulting business. While there are multiple competitors, DataGene has an unmatched understanding of the Australian dairy industry and broader agriculture and has developed deep, specialised, knowledge in both software development and its application in the agricultural sector. This capability will be leveraged to develop and improve future DataGene products and services, and support partners in their businesses.

Operating Plan

DataGene is committed to acting on specific priorities within each of its five strategic pillars that move us closer to our company's vision. There are many opportunities available to DataGene, but these priorities have been selected following consultation, feedback and discussion and are outlined more fully in Appendix 2. DataGene's operating plan is built around five strategic pillars and its top three priorities are noted within their pillars:

1. Make efficient decisions using data

Seamless data transmission

DataVat provides seamless 2-way transmission of data between on-farm systems, DataGene, and industry data users.

- Expand the acquisition of new data from a range of industry participants through the Data Connect project.
- Continue integration of the iDDEN data exchange hub with international equipment manufacturers and the CDR.
- Support industry partners to develop APIs, tools, resources and analysis that leverage the data for the benefit of farmers.

2. Improve sustainability and animal performance through the application of R&D and herd improvement

Genetic evaluations

DataGene delivers world best practice genetic evaluations.

- Maintain a focus on dairy genetic evaluation, specifically Australian Breeding Values, indices and the services to farmers and genetics companies.
- Deploy new breeding values to industry as they are developed by DairyBio.
- Independent validation of proprietary products to ensure Australian farmers can make informed herd decisions.
- Review existing traits to ensure reliability is maximised.
- Calculate Forage Value Index.

3. Capture and promote the value from herd improvement

4. Diversified and improved services

Software and Data Services

DataGene is a leader in the coordination, development and maintenance of software and data services.

- Leverage expertise and capacity to provide software and strategy services to the agriculture sector.
- Support and enhance the functionality of DataGene infrastructure, including GESNP, Centre, CDR and DataVat.
- Support and enhance the functionality of HerdData.

5. Efficiently deliver DataGene services

Communication and Extension

DataGene's communication and extension program supports the organisation in delivering its mission. This includes promoting awareness and adoption of DataGene products and services (including public ABV releases), developing extension resources and collateral, creating opportunities for interactive communication with stakeholders, and influencing product and service development to ensure user-friendly products and messages.

2. Introduction

This five-year Business Plan sets out how DataGene plans to service the agriculture sector now and into the future to enable sustainable and profitable agriculture through data-driven decisions.

The DataGene Business Plan for FY 25-29 delineates the priorities and achievements that the organisation aims to accomplish over the upcoming five years, spanning from July 2024 to June 2029. This plan encompasses four primary functions:

Defining DataGene's course: The plan sets a clear trajectory for DataGene for the forthcoming five-year period.

Establishing goals and objectives: Aligned with the organisation's vision and mission statements, the plan outlines specific goals and objectives.

Building on past successes: The plan aims to consolidate the progress made under the previous Business Plans to further enhance the organisation's standing.

Identifying investment areas: DataGene identifies key domains where investments will be directed to bolster services and capability.

This plan is the result of a significant consultative process. DataGene's Board and Leadership Team reviewed the previous Business Plan (FY 2020-2024) during 2023. A series of business planning meetings and workshops with internal and external stakeholders were conducted over an eighteen-month period to shape DataGene's business planning for the next five years. Priority areas were tested through an online survey of DataGene stakeholders. This survey, conducted in July 2023, gathered feedback from farmers, broader industry participants, and DataGene staff. The survey sought answers about priorities and recent developments that could impact on DataGene's 5-year Business Plan.

Survey respondents clearly articulated a shift in the context within which DataGene operates. On-farm data recording practices now utilise a larger range of systems and sensors, genetic choices have changed to adapt to market opportunities, data analysis is more complex and less 'user friendly' for farmers, and there is more diversity in farming systems that may require a higher level of segmentation in the tools and information provided.

Survey results emphasised the critical role DataGene plays in gathering production and non-production data from the range of systems and sensors. In addition to data acquisition, the survey highlighted the importance of independence and managing infrastructure, on behalf of industry, so that data can be used to conduct genetic evaluations and develop new reports and tools to make the best whole-farm decisions. DataGene is seen as a leader in the development of data and software services and tools for the benefit of the dairy industry and this was identified as a very high priority by stakeholders. The importance placed on improved environmental sustainability, through genetics, has increased. There was more focus placed on improving Australian Breeding Value (ABV) reliability, lifting confidence in indexes and ABVs, and maintaining best practice evaluations rather than creating new ABVs. Compared to the previous plan, the survey suggested a lower level of interest in several areas - tools to predict lifetime performance of individual cattle, increasing the percentage of replacement heifers from AI sires, and working with herd recording centres to rapidly introduce new technology and services.

3. Organisation overview

DataGene is an independent and Australian dairy industry-owned organisation responsible for driving herd improvement and enabling data driven decisions in the agriculture sector. It is an initiative of Dairy Australia and the broader dairy industry. DataGene brings together non-competitive functions under the one umbrella, including genetic evaluation, herd recording, and data systems. DataGene also provides software development services and strategic consulting services in technology.

A recent impact analysis by Marsden Jacob Associates found that:

> *DataGene investments from 2016/17 to 2022/23 has delivered net benefits to the Australian dairy industry in the order of $638 million (with a benefit-cost ratio of 17.9 to 1) in present value terms. The net benefits occur through improvements in rate of genetic gain in the industry, improvements in the efficacy of breeding and herd management decisions and the efficacy of data management and use. Future DataGene investments from 2023/24 to 2027/28 are expected to deliver net benefits of $342 million (with a benefit-cost ratio of 13.0). The combined impact of investments from 2016/17 to 2027/28 results in expected net benefits of $981 million (with a benefit-cost ratio of 15.8).*[2]

This report has highlighted the importance of continuing to invest in genetics and data within the dairy industry. This Business Plan describes how DataGene will work towards achieving its Vision and Mission.

Our vision

Leading sustainable and profitable agriculture by facilitating data-driven decisions.

Our mission

An independent DataGene supports Australian dairy farmers to improve the sustainability and profitability of their farms by delivering world-class genetic evaluation, data-driven decision-making tools, and software and professional services to the agricultural industry.

Our values

Commitment to clients: We see the world through a farm lens and are farmer centric. We create collaborative and innovative outcomes.

Independent and science-based: We value our independence, act on evidence and are a trusted data partner to our stakeholders.

Innovative: We are creative and innovative in our products and services.

Engagement with employees: We respect our people and value their contribution to our success.

Transparent and inclusive: We are genuinely inclusive and value transparent and sustained communication with stakeholders and our clients.

Integrity and ethical values: We follow best-practice governance principles and embody our ethics every day.

[2] Marsden Jacob Associates, *DataGene Cost-benefit analysis* Draft 14 November 2023.

Membership

DataGene is owned by the dairy industry, with foundation members being Dairy Australia, Australian Dairy Farmers (ADF) and the National Herd Improvement Association (NHIA). As of July 2023, DataGene has a total membership of 27 organisations.

Dairy Australia	Cobden Artificial Breeders Co-op	National Herd Development
Australian Dairy Farmers	Farmwest	Neogen Australasia
National Herd Improvement Association of Australia	Genetics Australia	Nu-Genes
ABRI	Guernsey Cattle Society of Australia	Semex
ABS Australia	Herd Improvement Co-operative Australia	TasHerd
Agri-Gene	Holstein Australia	Viking Genetics
Apiam Animal Health	Jersey Australia	Wellbred Genetics
Australian Reds	Livestock and Business Centre	Yarram Herd Services
Brown Swiss Australia	Livestock Improvement	Zoetis

Collaboration

DataGene collaborates with many organisations in pre-competitive areas such as data sharing, research and development, extension activities, strategy development, and promotion of the dairy industry and herd improvement sector. Key collaborations include:

Industry organisations: Particularly Dairy Australia, the Gardiner Foundation, Australian Dairy Farmers, and the National Herd Improvement Association.

Private sector entities: Including herd testing centres, genetics companies, breed organisations, genomic service providers, resellers, software companies, machinery companies and farm advisors.

Farmers: Particularly Ginfo farmers, as well as other farmers in both the dairy industry and other agricultural commodities.

Government agencies: Particularly the Victorian Government, through Agriculture Victoria and its partnership in DairyBio, and with the Australian Government, through the Department of Agriculture, Fisheries and Forestry (DAFF).

Universities: Principally La Trobe University and the University of Melbourne, but also Sydney University, University of Technology Sydney and Charles Sturt University, and including the collaboration with the University of Sydney for Dairy Up.

Many of these collaborations are created to support broader industry objectives. Where collaborations are of a longer-term nature and/or involve a commitment of resources or capability, these are formalised through Memorandums of Understanding or contracts (such as for research and development initiatives).

Dairy Moving Forward (DMF) is the dairy industry's research, development, and extension (RD&E) strategy under the National Primary Industries RD&E Framework. The national framework structure through DMF has become widely accepted as the basis for coordinated RD&E in the industry. The objective of the national framework is to develop, oversee and guide the coordination and alignment of research, development, and extension in the dairy industry, and to ensure the outcomes of investments in RD&E address the industry-agreed priorities. DataGene and its Standing Committees operate as highly effective forums to identify and provide guidance on the priority of research, development, and extension initiatives within the Animal Performance theme area, which encompasses herd improvement as well as touching on other aspects such as animal performance, health and welfare.

Governance and management

DataGene Board

DataGene is governed by a seven-member, skills-based board. Directors are elected at an annual general meeting based on their knowledge and experience in dairy, herd improvement, finance, research and development, and governance. The board must include three directors with direct expertise in dairy farm management. Directors are entitled to serve a three-year term and up to three consecutive terms (i.e., nine years). The rotation of directors ensures the ongoing refreshment of skills and experience on the Board.

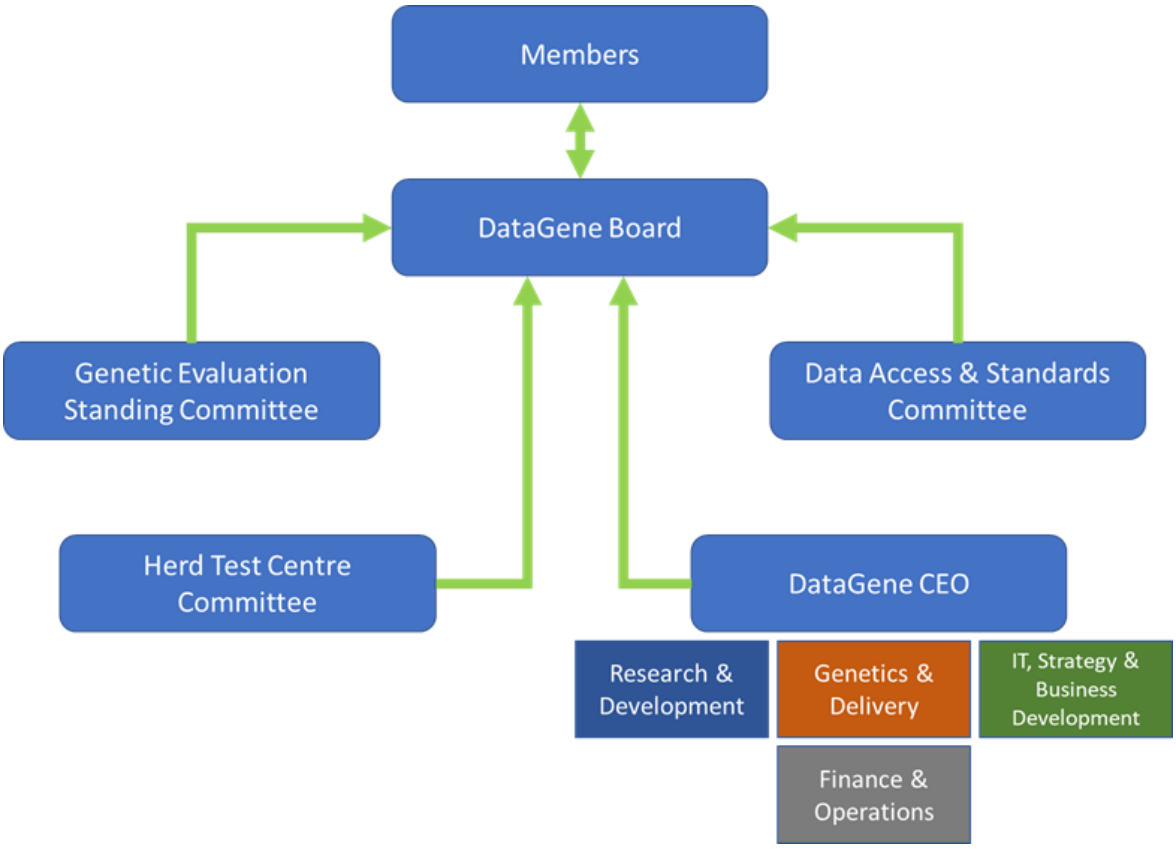
Standing committees

DataGene's standing committees enable members to have direct influence over DataGene's priorities and program activities. These committees are not simply advisory bodies, but exercise authority as delegated by the DataGene Board in areas of industry policy and guidelines.

These committees comprise individuals from within the dairy industry and herd improvement sector who possess relevant skills and experiences. Standing Committee members are nominated by stakeholders and appointed by the DataGene Board. Each standing committee is chaired by a member of the DataGene Board and includes at least one member of the DataGene management team.

DataGene's committees are:

- Genetic Evaluation Standing Committee
- Data Access and Standards Standing Committee
- Herd Test Centre Committee



User groups

User groups provide an additional level of industry consultation. Informal groups comprise a small number of active users on specific DataGene software products or tools. Their role is to ensure a better alignment of resources to fulfil user needs and to identify and prioritise improvements to DataGene products. User Groups meet as required.

Financial management

DataGene applies best practice financial management. The company is growing through establishing new revenue streams that complement funding from Dairy Australia for the delivery of core genetic and data services to the dairy industry.

Risk management

The risk register and management plan are reviewed regularly by the Board and management to monitor and address risks, as well as establish a plan for ongoing management of these risks. Key risks are grouped around finance, operational and personnel, strategic, compliance and reputation.

Structure and management

DataGene's organisational structure has evolved since its formation and will continue to be refined as the company changes and grows. The management structure established by the CEO is fit for purpose to deliver DataGene's vision. Staff have been placed into functional areas based on the types of work completed and routinely form multi-disciplinary teams to complete project activities. The company applies agile work practices throughout its business and utilises a bespoke system of work that is tailored to the agriculture sector and scaleable to suit the size of the project.

Central to the structure is the leadership team who work closely together and with the rest of the company to establish and enhance the culture, standards, and processes that enable DataGene to achieve its vision.

A lead science function is provided by DairyBio rather than by a DataGene employee. However, the integration of the science into the implementation framework is a key driver for the creation of DataGene. Therefore, it is important to recognise this in a management structure and institutionalise the shared planning and implementation across the organisations.

DataGene's organisational structure is based on the following functional areas:

- Research and development
- Genetics and delivery
- IT, strategy and business development
- Finance and operations

DataGene's History

DataGene was formed in July 2016 through the leadership of the Herd Improvement Industry Strategic Steering Group (HIISSG), development of the Herd Improvement Strategy, and the commitment from many diverse organisations in the herd improvement sphere. DataGene incorporated the functions of MISTRO Centre in July 2016, and acquired the operations and staff of Australian Dairy Herd Improvement Scheme (ADHIS) in November 2016.

Since formation, DataGene's focus has been on updating and developing the required infrastructure to deliver industry genetic evaluation, herd improvement and data services. This 'start up' or establishment phase was characterised by significant software development, incorporation of staff from different organisations, implementation of new processes and systems, establishment of new offices and working to engage and collaborate with multiple partners across the herd improvement industry. DataGene has been in a 'growth' phase

over the past few years as it leverages its infrastructure and capability to deliver improved herd improvement functions and expand into other products and services. DataGene has been moving beyond a specific herd improvement focus to ultimately being a software and data services provider across agricultural industries.

DataGene offices in Dairy House is located at AgriBio, on the La Trobe University campus at Bundoora, Victoria. This location provides proximity to the research and development activities provided by Agriculture Victoria through DairyBio and other projects. Dairy House is shared with Holstein Australia and Jersey Australia, enabling efficiency of shared services and opportunities for effective collaboration.

4. Business description

Infrastructure and Assets

Provision of DataGene's products and services is underpinned by extensive infrastructure and key industry assets. These assets are the outcome of major investments in multi-year IT projects. Assets include the Genetic Evaluation System New Platform (GESNP), the Centralised Data Repository (CDR), DataVat, HerdPlatform and Ginfo.

Genetic Evaluation System New Platform (GESNP)

GESNP is the vital industry software and infrastructure that enables calculation of Australian Breeding Values and indices and produces the associated reports. The implementation of GESNP cut the time taken for a genetic evaluation run from two weeks to under four days and allows DataGene to run more frequent evaluations. DataGene currently completes 44 evaluation runs per year.

Centralised Data Repository (CDR)

One of DataGene's key resources is the Centralised Data Repository (CDR) that currently connects data from a variety of external sources such as on-farm software, herd test centres and breed organisations. The CDR stores Australia's largest dataset of animal performance information for the dairy industry with records dating back more than 100 years. The CDR is updated with new information arriving every day.

The vision for the CDR is to enable data sharing across multiple platforms, such as those already connected and new connections to vets, milk companies, and livestock monitoring systems such as the National Livestock Identification System (NLIS) for the benefit of the farmers who contribute the data. A key principle underpinning the CDR is that each farmer should control access to their data.

DataVat

DataVat is a web portal that provides the dairy community with customised, secure access to various reports, tools and resources that draw upon data in the CDR and the genetic evaluation system. Information and data from the CDR feeds into tools and resources delivered via DataVat.

DataVat is home to a diverse range of reports and tools such as Genetic Progress Report, HerdPlatform, the Selective Dry Cow Tool and MIR Conception. Some of these are publicly accessible, while others are available only to herd owners, or fee-paying customers of DataGene services (such as genetics companies, and genomic service providers).

DataGene manages the Central Data Repository (CDR) and DataVat on behalf of the Australian dairy industry. Combined, they offer new opportunities for improved decision-making based on data.

HerdPlatform

HerdPlatform is a module of DataVat that gives dairy farmers access to their herd test results in an interactive format via a user-friendly dashboard. It is also home to other specific herd test related services such as the MIR Conception Tool. HerdPlatform was developed on behalf of the herd test centres in collaboration with ABRI.

Ginfo

Ginfo is Australia's national reference herd for genetic information. It is a large-scale genotyping project that provides genetic and performance information to increase the reliability of Australian Breeding Values (ABVs) and indices. Ginfo currently includes detailed information on more than 58,000 cows in 157 herds across all dairy regions of the country. These herds contribute high quality data, including performance and health data, classification scores and genotypes.

Ginfo is a collaboration of DairyBio, DataGene, Dairy Australia, Holstein Australia, Jersey Australia, and the Victorian Government. Managed by DataGene and funded partially by Dairy Australia, Ginfo's genetic and performance information is used by DairyBio researchers to develop breeding values for traits that are difficult to measure and to increase the reliability of Australian Breeding Values (ABVs) and indices. DataGene manages the on-going maintenance of the national reference herd with Holstein Australia and Jersey Australia classifying animals.

Products and services

Genetic and genomic evaluations

DataGene owns and manages Australia's national independent dairy genetic evaluation database and analysis service with the aim of increasing the rate of genetic improvement in Australian dairy herds. DataGene is the sole entity calculating and supplying Australian-specific breeding values.

Virtually all AI bulls with semen sold in Australia have been evaluated using DataGene's independent genetic and genomics data. Any non-DataGene derived breeding evaluation is likely to be either an overseas index or a commercial breeding company's proprietary index that has not been validated in Australia.

The data collected by the CDR and Ginfo enable the development of breeding values for traits that are difficult to measure, such as health traits, and enable the industry to use new technologies such as MIR (mid infrared) spectrometry.

Evaluations are publicly released three times per annum (April, August, and December) in line with internationally agreed Interbull release dates. Bull ABVs are updated weekly for fee-paying customers such as genetics companies and herd owners. Female ABVs are updated weekly based on the latest genomic and herd test results for herd owners and genomic service providers. Australian Breeding Values are calculated for Holstein-Friesian, Jersey, Guernsey, Brown Swiss, Aussie Red, Ayrshire, Illawarra, and Dairy Shorthorn breeds as well as their crosses. Genomic evaluations are delivered for Holstein-Friesian, Jersey, Aussie Red, Ayrshire, Illawarra, and Dairy Shorthorn breeds as well as their crosses.

NASIS registrations

DataGene manages the National AI Sire Identification System (NASIS) that registers critical information on dairy and beef bulls for the purpose of pedigree recording and genetic evaluation. NASIS is part of the CDR and holds a wealth of detailed identity information for more than 30,000 bulls from around the world.

Export heifer certification

DataGene collaborates with Holstein Australia in the certification for Holstein heifer exports, including administration of records of animal pedigrees and identification details.

Reports, tools and resources

DataGene supports and enhances a suite of decision support tools such as the Good Bulls Guide, Good Bulls App, Genetic Progress Report, Genetic Futures Report, HerdPlatform dashboard, HerdData app, Fertility Focus report, Mastitis Focus Report, national statistics, etc.

Software services

DataGene delivers software development and maintenance services including provision of Centre and inventory software to service providers. DataGene Centre is the software that supports more than 90% of herd testing in Australia. DataGene Centre is a highly specialised software solution tailored to Australian conditions. DataGene has a proven track record for developing and maintaining software for the agriculture sector, both domestically and internationally.

Strategic IT consulting

DataGene provides software and strategy services and has a portfolio of services to deliver solutions for Australian and international customers across dairy and the broader agricultural sector. These services help diversify income streams and maintain capacity at DataGene on behalf of the dairy industry.

Forage Value Index

DataGene evaluates Dairy Australia's Forage Value Index each year. Developed by Dairy Feedbase, the Forage Value Index (FVI) is a tool that helps Australian dairy farmers and their advisers to make more informed decisions when selecting ryegrass cultivars.

Customers

DataGene's current and potential customers include dairy farmers, herd test centres, breed organisations, genetics companies, artificial breeding companies, resellers, farm management software companies, milk processors, regulators and other agricultural industries.

Dairy farmers: There are 4,420 registered dairy farms located in all states of Australia. Nearly 90% of Australian dairy farms using artificial insemination for mating their cows either in isolation or in combination with herd bulls. More than 42% of dairy farms participate in herd testing.

Herd testing centres: There are eight herd testing organisations in Australia: Australian Herd Recording Services, Dairy Express, Farmwest, Herd Improvement Co-operative Australia (HICO), National Herd Development (NHD), Numurkah Nu-genes, TasHerd, and Yarram Herd Services.

Breed organisations: There are seven major breed societies in the Australian dairy industry covering Holstein, Jersey, Brown Swiss, Ayrshire, Illawarra, Guernsey, and Australian Red Dairy breeds.

Genetics companies: There are ten major genetics companies operating in the Australian market producing semen for sale to farmers. These include both domestic and foreign-owned companies and have both domestic and foreign bulls.

Genomic Service Providers: There are multiple companies offering Australian farmers genomic breeding values These include both domestic and foreign based labs and some offer both ABVs and international breeding values.

Artificial breeding companies: There are about a dozen artificial breeding companies, including a number of non-reseller affiliated providers, that perform inseminations for farmers. They may or may not be part of a bull company, a herd recording centre or a reseller. There are also a number of very small companies that sell semen and offer AI services.

Resellers: Resellers operate as intermediaries or brokers between farmers and bull companies and are often also herd testing centres and may provide many other management services such as synchronisation programs, inseminations, pregnancy testing, data entry, etc.

Farm management software companies: There are two main types of on-farm software in the market:

- Proprietary software used to operate and support equipment from that specific company (e.g., DeLaval, Lely, GEA, Jantec), which may or may not integrate with other software or industry systems.
- Software developed either in Australia or overseas to integrate with various dairy equipment brands, but may not communicate with other industry data services, e.g., MISTRO Farm, EasyDairy, DairyComp 305, etc.

Milk processors: For the collection and analysis of data to add traceability to supply chains and to ensure compliance with regulation and social license requirements.

Regulators: Such as Dairy Food Safety Victoria (DFSV) or equivalent in other states.

Other agriculture industries: Such as red meat, cotton and international dairy genetic evaluation units.

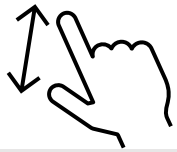
5. Operating plan

DataGene's operating plan is built around five strategic pillars:

1. Make efficient decisions using data
2. Improve sustainability and animal performance through the application of R&D and herd improvement
3. Capture and promote the value from herd improvement
4. Diversified and improved services
5. Efficiently deliver DataGene services

DataGene is committed to acting on specific priorities within each of the five strategic pillars that move us closer to our company's vision. There are many opportunities available to DataGene, but these priorities have been selected following consultation, feedback and discussion and are outlined below.

Make efficient decisions using data



Top Priority: Seamless data transmission

DataVat provides seamless 2-way transmission of data between on-farm systems, DataGene, and industry data users.

Expand the acquisition of new data from a range of industry participants through the Data Connect project.

Continue integration of the iDDEN data exchange hub with international equipment manufacturers and the CDR.

Support industry partners to develop APIs, tools, resources and analysis that leverage the data for the benefit of farmers.

Industry reporting platform

DataVat becomes the industry reporting platform for sustainability metrics.

Integrate disparate data sources to enable industry to report sustainability metrics and demonstrate progress.

Collaborate with industry stakeholders to develop and maintain appropriate metrics.

Collaboration for improved data collection

DataGene works with Dairy Australia, milk processors, animal health sector, and others on improved data collection and analytics.

Leverage greater value from combining data from different sources.

Cooperate with milk processors, industry regulators, animal health sector and others to collect, analyse, and manage industry data through DataVat.

Reports, tools and resources

DataGene develops new reports, tools, and resources to help make the best whole-farm decisions.

Support and enhance existing decision support tools created and managed by DataGene.

Partner with members to develop and support their tools.

Support industry partners to develop tools, resources and analysis that leverage DataVat for the benefit of farmers.

Develop additional tools where there is clear industry good and market failure.

Improve sustainability and animal performance through R&D and herd improvement

Top Priority: Genetic evaluations

DataGene delivers world best practice genetic evaluations.

Complete a broad National Breeding Objective Review and release revise indices.

Maintain a focus on dairy genetic evaluation, specifically Australian Breeding Values, indices and the services to farmers and genetics companies.

Deploy new breeding values to industry as they are developed by DairyBio.

Independent validation of proprietary products to ensure Australian farmers can make informed herd decisions.

Review existing traits to ensure reliability is maximised.

Calculate Forage Value Index.

Data collection

DataGene collects herd performance data to grow Australia's largest dairy dataset.

Establish the routine recording of methane and feed efficiency phenotypes.

Maintain the Ginfo reference population and continue to collect performance and genomic information for improved ABV reliability.

Data is collected from cows and herds that are diverse in their breed, region, and production system.

Explore the use of new phenotypes of farmer interest particularly for animal health traits and sustainability reporting, including antimicrobial stewardship metrics.

New breeding values

DataGene assists with development of high value ABVs.

Promote use of the Sustainability Index and tools that contribute to Australia's Dairy Sustainability Framework and in particular those related to antibiotic stewardship, methane emissions and surplus calf pathways.

Implement calf vitality and cow transition related traits from DairyBio.

Release Methane ABV

Genomic testing

DataGene promotes the use of genomic testing.

Work with collaborators, especially Dairy Australia and genomic service providers, to continue to drive the uptake of heifer genomic testing.

Assist industry in developing necessary tools to integrate genomic information into mating programs, particularly inbreeding.

Capture and promote the value from herd improvement

Confidence in indices and ABVs

DataGene promotes the use of independent, validated and science-backed indexes and ABVs.

Work closely with stakeholders on common messaging regarding the value and integrity of herd improvement, indexes, and ABVs.

Work closely with the Regional Development Programs (RDPs) and Dairy Australia to develop resources and activities that improve on-farm genetic selection and herd management practices.

Value of data-informed decisions

DataGene effectively communicates the value proposition of data-informed decisions.

Engage a wider section of the dairy industry including finance, milk companies, veterinarians and on farm consultants to communicate the value proposition of data-informed decisions, including herd testing.

Diversified and improved service offerings

Top Priority: Software and Data Services

DataGene is a leader in the coordination, development and maintenance of software and data services.

Leverage expertise and capacity to provide software and strategy services to the agriculture sector.

Support and enhance the functionality of DataGene infrastructure, including GESNP, Centre, CDR and DataVat.

Support and enhance the functionality of HerdData.

Collaboration

DataGene collaborates with stakeholders in livestock and other agricultural sectors to deliver services.

Lead a discussion on closer collaboration with the red meat industry for efficient genetic evaluation and data services in the Australian livestock industry.

Contribute to improving dairy industry IT and data services in close collaboration with Dairy Australia.

Ongoing calculation of the Forage Value Index (FVI) for Dairy Australia and Agriculture Victoria.

Herd test technology

DataGene works with herd recording centres to rapidly adopt technology and services.

Actively explore opportunities with herd recording centres to provide innovative and valuable services to their clients.

Efficiently deliver DataGene services

Governance and financial management

DataGene applies best-practice corporate governance and financial management.

Enable new sources of revenue by collaborating with existing and new customers.

Apply best-practice governance and financial management through robust oversight by the DataGene Board.

Capability

DataGene has the right capability and processes to innovate and deliver value.

Maintain the capability and the capacity to innovate and deliver impactful industry projects.

Maintain a robust and repeatable delivery framework for internal and external application.

Engagement

DataGene sustains effective stakeholder and employee engagement.

Foster collaboration with industry stakeholders through established Standing Committees and other meeting opportunities.

Strive to be an employer of choice.

Information Technology

DataGene develops and maintains appropriate IT infrastructure, and policies.

Maintain a robust data governance framework through the Data Access and Standards Group.

Undertake regular system penetration testing and security audits.

6. Communication and extension

Aims

DataGene's communication and extension program supports the organisation in delivering its mission. This includes promoting awareness and adoption of DataGene products and services (including public ABV releases), developing extension resources and collateral, creating opportunities for interactive communication with stakeholders, and influencing product and service development to ensure user-friendly products and messages.

Outcomes which the communication and extension program contribute to include:

- DataGene delivers world best practice genetic evaluations.
- DataGene promotes the use of genomic testing.
- DataGene promotes the use of independent, validated and science-backed indexes and ABVs.
- DataGene effectively communicates the value proposition of data-informed decisions.
- DataGene works with herd recording centres to rapidly adopt technology and services.

Audiences

DataGene communicates with a wide range of audiences. While the aim is for clear, consistent messaging, DataGene may customise its communication to specific audiences in terms of the content, level of technical detail, presentation format and distribution vehicles. Key audiences fall within the following groups:

- DataGene members
- Key funder: Dairy Australia
- DataGene customers: within the Australian dairy industry, and broader agricultural industries

- Australian dairy farmers
- Herd improvement sector (who have a strong influence over dairy farmers' decisions): Breed organisations, genetics companies, semen resellers, genomic service providers, herd test centres
- Data collaborators including, suppliers of on-farm software, milking equipment manufacturers, and other industry organisations with databases such as Dairy UP, Dairy Australia, etc.
- R&D collaborators: industry organisations such as Gardiner Foundation, NHIA, private sector, government agencies, universities, and overseas R&D organisations
- Potential clients: milk processors, regulators, etc.
- DataGene team (including personnel at TMA)
- Media

Extension priorities

DataGene's extension strategy is underpinned by two key initiatives: the Good Bulls Strategy and Accelerating heifer genomics.

The Good Bulls strategy encourages farmers to breed all dairy herd replacements from sires that carry the Good Bulls icon. To qualify for Good Bulls status, a bull must meet DataGene's minimum requirements for Balanced Performance Index (BPI) and reliability and be available for purchase. DataGene offers a range of tools to help farms identify Good Bulls that meet their breeding priorities, including the Good Bulls Guide and the Good Bulls App, which are both updated with the public release of Australian Breeding Values in April, August and December.

The Genomic Acceleration Project encourages farmers with surplus calves to genomic (DNA) test them at a young age so that they can make informed decisions about which to keep to enter the milk herd and what to do with the rest. When they are ready to be joined the information can also be used to make breeding decisions.

As the outcomes from DataConnect, iDDEN and other projects are implemented, it is anticipated that a third extension initiative will be developed around the collection and use of data to underpin on-farm decisions.

Key activities

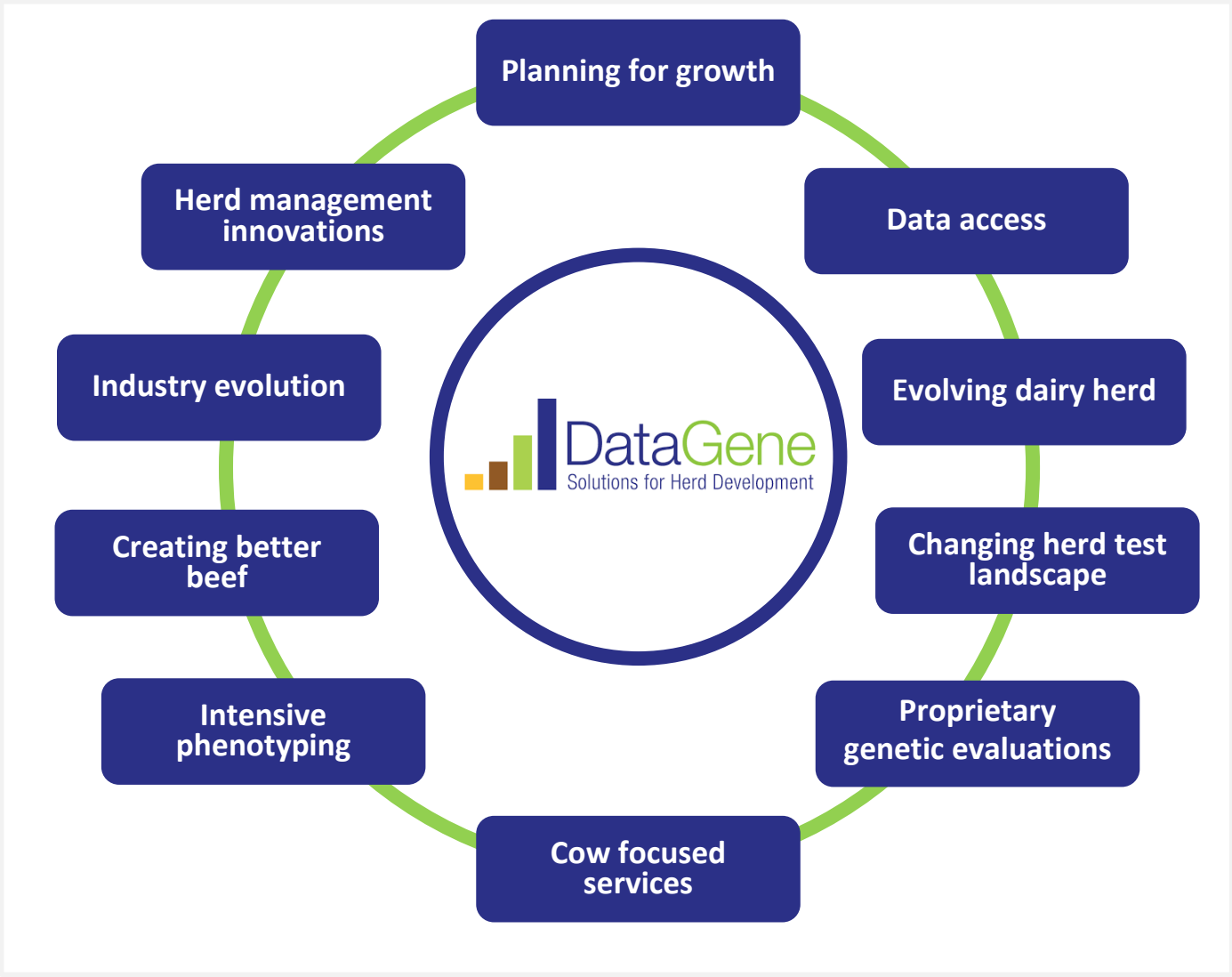
Communication activities may involve direct communication (face-to-face, print and via email) and mass media such as digital/web and traditional, electronic, and social media. Examples of DataGene's 'flagship' communication resources include Standing Committees, the Good Bulls Guide/App, Annual Update, GeneMail, DataVat and the DataGene website.

DataGene's workplan includes an on-going stream of new products and services. Where possible, launch campaigns are aligned with regular 'events' on DataGene's calendar such as public ABV releases (April, August, and December), its AGM and biennial Herd conferences.

Appendix 1: Operating environment

DataGene's primary focus is on providing products and services to the Australian dairy industry. The long-term outlook for the dairy industry remains optimistic, based on the ongoing strong demand for dairy products globally. For good reason, farmers and their customers are striving to improve sustainability within a profitable economic environment. Applying clever, data-driven solutions on-farm will be important in achieving this goal. There are tremendous opportunities to aggregate and synthesise data to produce information that drives agricultural businesses forward. Understanding the current market environment, as we see it, is helpful in setting the scene for the 5-year Business Plan.

There are 10 factors driving change in the operating environment that present both opportunities and challenges affecting DataGene's business over the next five years:



Data access

DataGene is reliant on access to a range of data to deliver its products and services - and has a clear role as an independent, industry-good data aggregator. DataGene has several strategies in place to ensure ongoing access to data including a shareholding in the International Dairy Data Exchange Network (iDDEN), use of Ginfo for genotypic and phenotypic data, the Data Connect project, and providing a clear value proposition for a range of organisations to share data. DataGene's access to data is based on its integrity and a strong data governance approach, as well as partners having an industry-good perspective and goodwill towards the organisation. Competition for data or a lack of data sharing by key partners would necessitate changes by DataGene in future and could compromise service delivery.

Data connectivity is critical for farmers and for DataGene. Farmers should be able to enter data once and have it used across different systems without any double handling. This was the rationale for the creation of the CDR, but connection to existing software is entirely voluntary and competitive forces and lack of capacity can hinder connections. This means that data connectivity remains a significant and long-term commitment at DataGene.

In the foreseeable future, it could be possible for a competitor to access genotypic and phenotypic data directly from dairy farmers. For example, Zoetis has released its own breeding values and indices in the United States. With farmers' agreement, Zoetis can access their phenotypic data and match it with Zoetis' significant genomic data. In another example, company acquisitions in the beef industry have created vertical supply chains with full data transparency from farm to fork. These initiatives could potentially occur in Australia at some point. Alternatively, a commercial entity could request access to phenotypic data via DataVat. DataGene's Board and Data Access and Standards Standing Committee would need to intensely consider the benefits to Australian dairy farmers if this request was made.

Proprietary genetic evaluations

Significant competition to ABVs exists from overseas breeding values and proprietary breeding values from international commercial companies. There are no barriers to entry for use of overseas breeding values by Australian dairy farmers. One of the most significant challenges for DataGene is to ensure that Australian dairy farmers understand the benefit of using ABVs in their herd improvement programs. Competition in this area could come from:

- Additional commercial proprietary indexes or composites developed by genetics companies to differentiate their bulls, e.g., GENEX RobotX™ values, Semex Immunity+ health index, Alta CONCEPT PLUS sire fertility evaluation, etc.
- Farm-level proprietary customised indexes being delivered at scale by genetics companies or farm consultants to dairy farms of all sizes.
- Overseas genomic evaluations being delivered for females by genomic service providers.

These developments are opportunities for DataGene, as it is capable of independently validating proprietary or customised indexes.

Planning for growth

Dairy Australia provides core, ongoing funding for DataGene.

However, the level of milk production directly impacts Dairy Australia's Dairy Services Levy revenue. Dairy Australia's income from the levy has fallen by an average of 2.0% per annum in real terms from 2007 to 2022. During the same period, Australian Government matching research and development payments for Dairy Australia only grew on average by 0.1% per annum in real terms. The expected ongoing pressure on Dairy Australia's budgets may pose a significant financial risk to DataGene.

DataGene has been proactive in efforts to diversify its revenue base and in 2023/24, Dairy Australia funding is budgeted to account for 43.3% of DataGene's total income (compared with over 60% in 2016/17, DataGene's first year of operation).

DataGene is committed to a growth strategy that relies on building the business through its software development services and strategic IT consulting business. While there are multiple competitors, DataGene has an unmatched understanding of the Australian dairy industry and broader agriculture and has developed deep, specialised, knowledge in both software development and its application in the agricultural sector. This capability will be leveraged to develop and improve future DataGene products and services, and support partners in their businesses.

A key challenge for DataGene within the next five years is how it will position itself within the herd improvement industry. The factors driving change could lead to scenarios ranging from remaining as an "industry good" organisation (predominantly levy funded and competitively neutral) through to a fully commercial entity. A transition to a more commercial footing may shift DataGene to being a competitor with some existing partners.

Evolving Australian dairy herd

The size of Australia's herd improvement industry is closely tied to the national dairy herd. Over the past five years, the number of dairy cows has been decreasing at an average rate of 2.4% annually. As of 2021/22, the national herd was estimated to consist of 1,340,000 cows[3], which is 180,000 fewer cows compared to five years previously in 2016/17. This downward trend in cow numbers is expected to persist or remain stable in the foreseeable future. Consequently, service providers involved in herd improvement face operational and economic challenges due to the slow shrinkage of the national dairy herd.

Changing herd testing landscape

In recent years, there has been a continued decline in the number of cows herd tested. In absolute terms, there were 91,000 fewer cows being herd tested during 2021/22 in comparison to the figures from 2016/17[4]. Currently, 37.8% of cows and 42.6% of herds undergo herd testing, while five years ago, these numbers were slightly higher at 39.3% of cows and 43.9% of herds.

Herd testing has historically served as the foundation for collecting and analysing phenotypic data. However, the decrease in herd test participation is causing a ripple effect, leading to a reduction in data available for genetic evaluations and other important industry purposes, such as generating reports and benchmarks.

The on-farm investment in technology to measure and monitor cow performance continues to accelerate. This also increases the importance of connecting new data sources such as inline meters, etc.

Industry evolution

The ongoing genomic revolution is having a profound impact on the herd improvement sector, and we can expect a continued trend of consolidation among companies. As a result, the number of DataGene client might experience a gradual decline over time due to mergers or acquisitions involving herd testing centres or artificial breeding companies, similar to that observed in the past.

This reduction in client numbers could potentially lead to a decrease in Centre software and genetic service revenue for DataGene. The consolidated firms or collectives resulting from the mergers or acquisitions might seek to reduce their expenses, which could lead to lower investment in Centre and genetic services compared to what they would have spent as separate entities.

[3] Dairy Australia InFocus 2022

[4] National Herd Recording Statistics 2021/22

Cow-focused services

The number of dairy females and bulls undergoing genotyping has risen significantly with both farmers and bull companies actively participating. In 2022/23, there were 8,650 genomically-tested bulls, a remarkable increase from 555 bulls in 2012/13 and a 51% growth from the previous year (2021/22). Similarly, the total count of genomically-tested females reached 92,986 in 2022/23, starting from zero in 2012/13, and experiencing a 51% surge from 2021/22. Considering the global trends and experiences, we can expect a substantial increase in genomic testing for young females in the years to come. Of those dairy farms with more than 700 cows, 65% are currently using or intend to use genomic testing[5].

This positive development lays a strong foundation for expanding DataGene's products and services, focusing on cows and heifers, even in the face of declining cow numbers. The growing interest and adoption of genomic testing underscore the potential for DataGene to offer valuable solutions and innovations for the dairy industry.

Herd management innovations

The potential for innovation in herd management and improvement technologies is immense. With the increasing connectivity of devices, larger volumes of data, faster computer processing speeds, and remarkable advances in automated systems and artificial intelligence, we are on the brink of a revolution in herd management and on-farm decision-making. These advancements offer novel opportunities to utilise data for enhancing decision-making processes and facilitating predictive analysis, moving beyond mere retrospective reporting. These developments will have increased computational hardware and software requirements, as well as the need for streamlined data exchange.

Intensive phenotyping

Genomic selection has enabled the Australian dairy industry to use precision phenotyping in smaller genotyped populations to develop recent breeding values and the industry's Sustainability Index. However, genomic selection remains a "numbers game". A large number of records and enough phenotypes are needed to get high reliability of breeding values for farmers to use in their selection decisions. The future accuracy and relevance of these breeding values is at risk due to infrequent phenotyping and the high-cost and labour-intensity of some current phenotypic data collection.

The collection of methane phenotypes in ruminant livestock industries is a priority to reduce the methane produced per unit of milk/meat produced. Globally, many organisations are searching for a cost-effective and reliable solution.

Both mid-infrared spectroscopy (MIR) and near-infrared spectroscopy are widely available and can be used for novel large-scale phenotyping or to develop 'indirect' phenotypes for MIR-based predictions. Sufficient high-quality phenotypes are critical to the dairy industry in future, especially addressing the need for intensive phenotyping for new and difficult to measure traits.

Creating better beef

Crossbreeding dairy cows with beef semen has become a growing practice on many dairy farms. 16% of dairy calves were born to beef sires according to the Dairy Australia Animal Husbandry and Genetics Survey 2022. This provides opportunities for DataGene in the collection and analysis of beef-specific phenotypes and accurate recording of the beef sires used within dairy breeding programs. It also opens the door for the provision of an Australian dairy beef index (like the ICBF Dairy Beef Index, Nordic Beef on Dairy Index, or ABS's BeefAdvantage Index™) to create a more saleable and profitable beef calf while having minimal impact on the dairy cows calving performance.

[5] Dairy Australia Animal Husbandry and Genetics Survey 2022

Appendix 2: SWOT analysis

INTERNAL	
Strengths	**Weaknesses**
Culture of transparency, openness and inclusion; Known for its independence, trust and credibility. Strong science track record. Agile, flexible and customer focused. Strong track record of collaboration with domestic and international industry partners; Leader in a unique herd improvement innovation precinct. Experienced board and staff with industry knowledge and experience, committed to DataGene's mission. Largest dairy dataset which is still growing. Redeveloped Genetic Evaluation System, CDR and DataVat provide efficient services on a modern and flexible technology platform. DataGene's products, such as animal breeding values and other reports, are routinely validated and contribute to improved sustainability outcomes for farmers. Strong business development and consulting capabilities across agricultural sectors. Experience in collaboratively driving change. Track record of delivery, domestic and international, internal and external. Standing Committees provide strong links between industry and DataGene. Strong relationship with Offshore Development Centre (TMA) and can leverage this for delivery.	The predominant source of data remains herd test centre data. Non-herd test data still required to fulfil the vision for CDR/DataVat. Funding and customer-base is focused on a small number of organisations but is growing. Limited financial resources to take advantage of technological opportunities. Speed of data source growth is faster than the ability to ingest and make available this new data. Business size restrains opportunities for a full succession plan. Dependence on relationships rather than actively hunting for new opportunities. Access to useful methane phenotypes is slow to materialise. Phenotypic data collection reliant on herd testing with little data from in-line metres.
EXTERNAL	
Opportunities	**Threats**
Increasing consumer scrutiny on social license issues generates opportunity for new sustainability, traceability and production transparency reporting services. Data services and analytics through DataVat can improve decision-making and provide predictive analysis. Upsurge in device connectivity, data volumes and computer speeds, plus rapid advances in automated systems and artificial intelligence / machine learning create opportunities for innovation. Increasing uptake of inline milk measuring tools, sensing technologies and automatic data collection create opportunities to aggregate and analyse new data. Changes in scale of farm operations and increased requirements for decision-making support generate opportunities for tailored reports for large farms.	Limited industry understanding of DataGene capabilities and business breadth. Agriculture industry profitability is inherently volatile which impacts on project funds. Consultation with heavily governed industries can slow development processes. Reliance on third party cooperation on data access; Ongoing engagement with industry opinion leaders is essential. Competition in data services; growing use of proprietary breeding values and indices; growing competition from foreign breeding values for females.

Collaboration with other Australian ag sectors, such as red meat industry leads to shared learnings. Continued engagement with industry thought leaders, especially the next generation, to deliver the next generation of products and services. Ability to provide professional services, strategy and IT consulting services across the agricultural sector enables growth and opportunity for shared learning. Focus on sustainability and use of data to demonstrate progress, such as 'one click' carbon calculator. Broaden networks with more research providers such as Dairy Up and DairyFeedbase. Lift profile as a trusted data partner for farmers and industry. Leverage iDDEN connection to expand service offering. Connection to NLIS will lift the ability to offer traceability products/solutions	Poor connectivity in some regional areas reduces uptake of digital innovation. Declining cow numbers is shrinking the markets for products and services and putting pressure on the levy. Pressure on live exports to China. Agricultural data space is crowded with untested, disconnected products; Limited window to take advantage of opportunities.

Appendix 3: Glossary

Abbreviation	Description
ABRI	Agriculture Business Research Institute
ABV	Australian Breeding Value
ADF	Australian Dairy Farmers
ADHIS	Australian Dairy Herd Improvement Scheme
AgVic	Agriculture Victoria
CDR	Central Data Repository
DA	Dairy Australia
DASC	Data Access and Standards Committee
DIF	Data Exchange Format
DAFF	Department of Agriculture, Fisheries and Forestry
DairyBio	DairyBio, a joint venture between Dairy Australia, Agriculture Victoria and the Gardiner Foundation
DFSV	Dairy Food Safety Victoria
DMF	Dairy Moving Forward
FVI	Forage Value Index
GESC	Genetic Evaluation Standing Committee
GESNP	Genetic Evaluation System, New Platform
HICO	Herd Improvement Co-operative
HIISSG	Herd Improvement Industry Strategic Steering Group
HTCC	Herd Test Centre Committee
ICAR	International Committee on Animal Recording
iDDEN	International Dairy Data Exchange Network
LTE	Linear Type Evaluations
MIR	Mid-infrared
NASIS	National AI Sire Identification Scheme
NLIS	National Livestock Identification System
NHD	National Herd Development
NHIA	National Herd Improvement Organisation
R&D	Research and Development
R,D&E	Research, Development and Extension
RDP	Regional Development Programs of Dairy Australia
TMA	TMA Solutions

Appendix 4: Activity Plan

STRATEGIC PRIORITY 1 – Make efficient decisions using data

		2024/25	2025/26	2026/27	2027/28	2028/29
TOP PRIORITY: SEAMLESS DATA TRANSMISSION: DataVat provides seamless 2-way transmission of data between on-farm systems, DataGene and industry data users.	• Expand the acquisition of new data from a range of industry participants through the Data Connect project.	✓	✓			
	• Continue integration of the iDDEN data exchange hub with international equipment manufacturers and the CDR.	✓	✓	✓	✓	✓
	• Support industry partners to develop APIs, tools, resources and analysis that leverage the data for the benefit of farmers.	✓	✓	✓	✓	✓
INDUSTRY REPORTING PLATFORM: DataVat becomes the industry reporting platform for sustainability metrics.	• Integrate disparate data sources to enable industry report sustainability metrics and demonstrate progress.	✓	✓	✓		
	• Collaborate with industry stakeholders to develop and maintain appropriate metrics.	✓	✓	✓	✓	✓
COLLABORATION FOR IMPROVED DATA EXCHANGE: DataGene works with milk processors, animal health sector, Dairy Australia and others on improved data collection and analytics.	• Leverage greater value from combining data from different sources.	✓	✓	✓		
	• Cooperate with milk processors, industry regulators, animal health sector and others to collect, analyse, and manage industry data through DataVat.	✓	✓	✓	✓	✓
REPORTS, TOOLS, AND RESOURCES: DataGene develops new reports, tools, and resources to help make the best whole-farm decisions.	• Support and enhance existing decision support tools created and managed by DataGene.	✓	✓	✓	✓	✓
	• Partner with members to develop and support their tools.	✓	✓	✓	✓	✓
	• Support industry partners to develop tools, resources and analysis that leverage DataVat for the benefit of farmers.	✓	✓	✓	✓	✓
	• Develop additional tools where there is clear industry good and market failure.	✓	✓	✓	✓	✓

STRATEGIC PRIORITY 2 – Improved sustainability and animal performance through R&D and herd improvement

		2024/25	2025/26	2026/27	2027/28	2028/29
TOP PRIORITY: GENETIC EVALUATIONS: DataGene delivers world best practice genetic evaluations.	• National Breeding Objective Review completed	✓				
	• Revised Indices released.		✓			
	• Maintain a focus on dairy genetic evaluation, specifically Australian Breeding Values, indices and the services to farmers and genetics companies.	✓	✓	✓	✓	✓
	• Deploy new breeding values to industry as they are developed by DairyBio.	✓	✓	✓	✓	✓
	• Independent validation of proprietary products to ensure Australian farmers can make informed herd decisions.		✓	✓	✓	✓
	• Review existing traits to ensure reliability is maximised.	✓	✓	✓	✓	✓
	• Calculate the Forage Value Index.	✓	✓	✓	✓	✓
	• Subsequent National Breeding Object Review initiated.					✓
DATA COLLECTION: DataGene collects herd performance data to grow Australia's largest dairy dataset.	• Establish the routine recording of methane and feed efficiency phenotypes and release methane ABV.		✓	✓		
	• Maintain the Ginfo reference population and continue to collect performance and genomic information for improved ABV reliability [5,000 hair samples; 8,000 LTEs; 20,000 genotypes].	✓	✓	✓	✓	✓
	• Data is collected from cows and herds that are diverse in their breed, region, and production system.	✓	✓	✓	✓	✓
	• Explore the use of new phenotypes of farmer interest particularly for animal health traits and sustainability reporting, including antimicrobial stewardship metrics.	✓	✓	✓	✓	✓
NEW BREEDING VALUES: DataGene assists with development of high value ABVs.	• Promote use of the Sustainability Index and tools that contribute to Australia's Dairy Sustainability Framework and in particular those related to antibiotic stewardship, methane emissions and surplus calf pathways.	✓	✓	✓	✓	✓
	• Implement calf vitality and cow transition related traits from DairyBio.	✓	✓			
GENOMIC TESTING: DataGene promotes the use of genomic testing.	• Work with collaborators, especially Dairy Australia and genomic service providers, to continue to drive the uptake of heifer genomic testing.	✓	✓	✓	✓	✓
	• Assist industry in developing necessary tools to integrate genomic information into mating programs, particularly inbreeding.	✓	✓			

STRATEGIC PRIORITY 3 – Capture and promote the value from herd improvement

		2024/25	2025/26	2026/27	2027/28	2028/29
CONFIDENCE IN INDICES AND ABVS: DataGene promotes the use of independent, validated and science-backed indexes and ABVs.	• Work closely with stakeholders on common messaging regarding the value and integrity of herd improvement, indexes, and ABVs.	✓	✓	✓	✓	✓
	• Work closely with the Regional Development Programs (RDPs) and Dairy Australia to develop resources and activities that improve on-farm genetic selection and herd management practices.	✓	✓	✓	✓	✓
VALUE OF DATA-INFORMED DECISIONS: DataGene effectively communicates the value proposition of data-informed decisions.	• Engage a wider section of the dairy industry including finance, milk companies, veterinarians and on farm consultants to communicate the value proposition of data-informed decisions, including herd testing.	✓	✓	✓	✓	✓

STRATEGIC PRIORITY 4 – Diversified and improved service provision

		2024/25	2025/26	2026/27	2027/28	2028/29
TOP PRIORITY: SOFTWARE AND DATA SERVICES: DataGene is a leader in the coordination, development and maintenance of software and data services.	• Leverage expertise and capacity to provide software and strategy services to the agriculture sector.	✓	✓	✓	✓	✓
	• Support and enhance the functionality of DataGene infrastructure, including GESNP, Centre, CDR and DataVat.	✓	✓	✓	✓	✓
	• Support and enhance the functionality of HerdData.	✓	✓	✓	✓	✓
COLLABORATION: DataGene collaborates with stakeholders in livestock and other agricultural sectors to deliver services. Contribute to improving dairy industry IT and data services in close collaboration with Dairy Australia.	• Lead a discussion on closer collaboration with the red meat industry for efficient genetic evaluation and data services in the Australian livestock industry.	✓	✓	✓		
	• Deliver efficient genetic evaluation and data services in the Australian livestock industry.				✓	✓
	• Ongoing calculation of the Forage Value Index (FVI) for Dairy Australia and Agriculture Victoria.	✓	✓	✓	✓	✓

STRATEGIC PRIORITY 5 – Efficiently deliver DataGene services

		2024/25	2025/26	2026/27	2027/28	2028/29
GOVERNANCE AND FINANCIAL MANAGEMENT: DataGene applies best-practice corporate governance and financial management.	• Enable new sources of revenue by collaborating with existing and new customers.	✓	✓	✓	✓	✓
	• Apply best-practice governance and financial management through robust oversight by the DataGene Board.	✓	✓	✓	✓	✓
CAPABILITY: DataGene has the right capability and processes to innovate and deliver value.	• Maintain the capability and the capacity to innovate and deliver impactful industry projects.	✓	✓	✓	✓	✓
	• Maintain a robust and repeatable delivery framework for internal and external application.	✓	✓	✓	✓	✓
ENGAGEMENT: DataGene sustains effective stakeholder and employee engagement.	• Foster collaboration with industry stakeholders through established Standing Committees and other meeting opportunities.	✓	✓	✓	✓	✓
	• Strive to be an employer of choice.	✓	✓	✓	✓	✓
INFORMATION TECHNOLOGY: DataGene develops and maintains appropriate IT infrastructure, and policies.	• Maintain a robust data governance framework through the Data Access and Standards Group.	✓	✓	✓	✓	✓
	• Undertake regular system penetration testing and security audits.	✓	✓	✓	✓	✓