DataGene
Annual Operating Plan

2020/21

Contents

Executive Summary

This document is the fourth Annual Operating Plan (AOP) prepared by DataGene and covers the period July 2020 to June 2021. The operating plan is based on the DataGene five-year Business Plan for 2019/20 to 2023/24 and incorporates direction from the Herd Improvement Strategy 2019-2024. It is predicated on the current operating environment and describes the 12-month deliverables for the company.

The AOP provides a clear line of sight on operations for the Board and ensures a focus on key deliverables over the year for management.
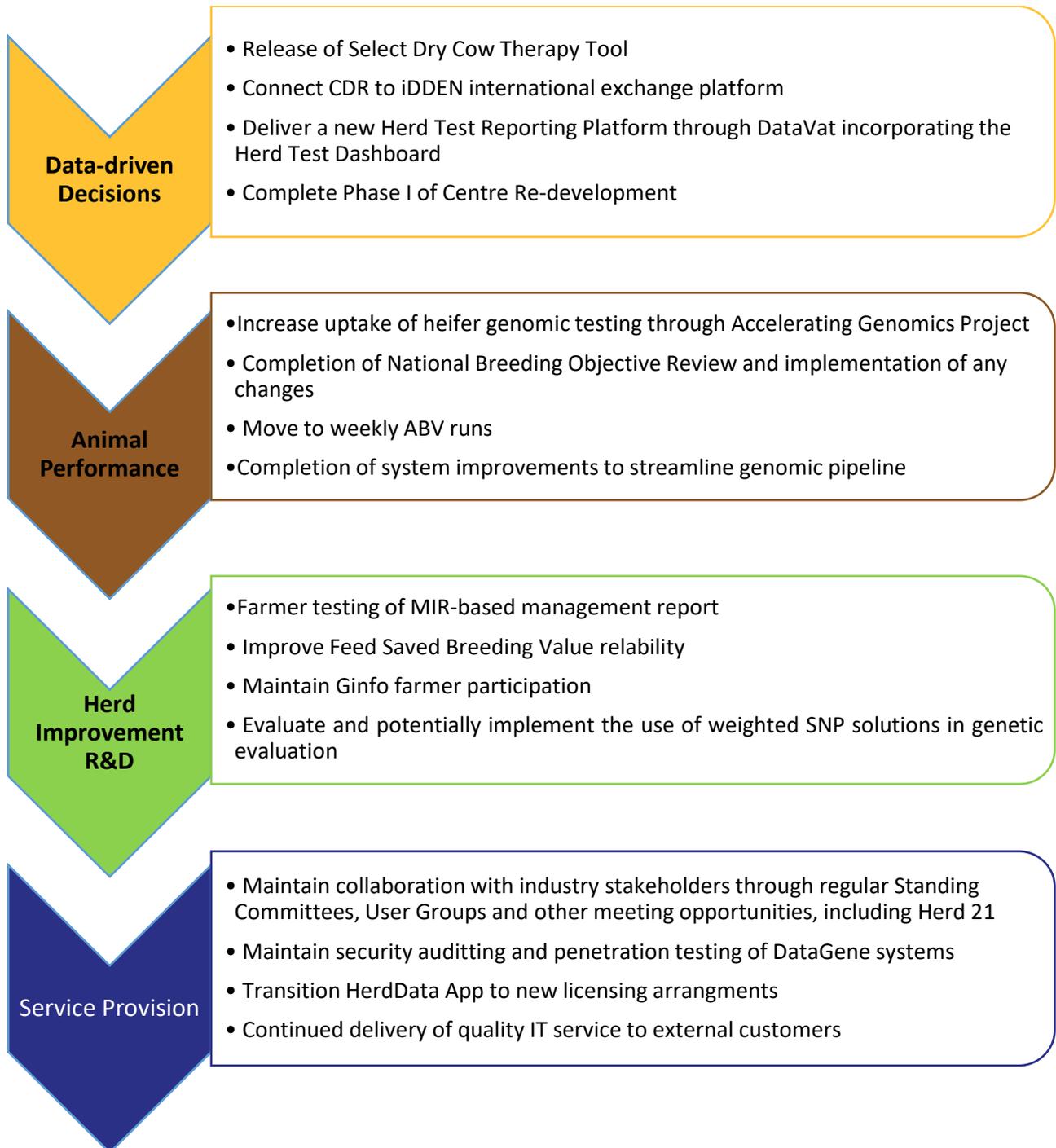
Strategic Priorities

Over the past 12 months, DataGene has transitioned from a start-up phase with a focus on delivering large infrastructure projects to one focusing on delivering industry services while expanding the data governance, data sources and functionality of DataVat. DataGene's strategic priorities for 2019 to 2024 are laid out below and reflect the industry priorities identified through the Strategy and elaborated in the DataGene five-year Business Plan 2019-2024.

Strategic Priorities			
Improved decision-making from data	**Increased animal performance through herd improvement**	**Improved animal performance from research and development**	**Improved and diversified services**
• Develop and support new decision tools • Expand and secure data • Drive and support industry innovation	• Increase reliabilities • Improve service delivery • Increase farmer and industry service uptake • Increase the number of genomically tested females	• Deliver new health breeding values • Use genomics and other technology (MIR) to predict future performance	• Build and maintain DataGene and industry infrastructure • Develop and maintain industry solutions • Establish new revenue streams

Key Deliverables for 2020/21

DataGene's key deliverables across each of the strategic priorities are:

Data-driven Decisions

- Release of Select Dry Cow Therapy Tool
- Connect CDR to iDDEN international exchange platform
- Deliver a new Herd Test Reporting Platform through DataVat incorporating the Herd Test Dashboard
- Complete Phase I of Centre Re-development

Animal Performance

- Increase uptake of heifer genomic testing through Accelerating Genomics Project
- Completion of National Breeding Objective Review and implementation of any changes
- Move to weekly ABV runs
- Completion of system improvements to streamline genomic pipeline

Herd Improvement R&D

- Farmer testing of MIR-based management report
- Improve Feed Saved Breeding Value relability
- Maintain Ginfo farmer participation
- Evaluate and potentially implement the use of weighted SNP solutions in genetic evaluation

Service Provision

- Maintain collaboration with industry stakeholders through regular Standing Committees, User Groups and other meeting opportunities, including Herd 21
- Maintain security auditting and penetration testing of DataGene systems
- Transition HerdData App to new licensing arrangments
- Continued delivery of quality IT service to external customers

DataGene
Solutions for Herd Development

Financial Projections

In general, budgeted income is at a very similar level to the previous financial year other than the full year of project work with the Council on Dairy Cattle Breeding (CDCB), DataGene's counterpart in the United States. Expenditure on salaries account for 45% of the total expenditure. The remainder of expenses are tightly controlled and are not dissimilar to the previous year. This budget framework will deliver a surplus EBITDA bottom-line. However, a reduction in cash at the end of the financial year is forecast based on residual payments on the last legacy contract which have been accrued in 2019-20 but are expected to be finalised for payment only in 2020-21.

BUDGET INCOME STATEMENT	Forecast 2019/20	Budget 2020/21
Total Income	4,887,489	5,748,899
Total Expenditure	4,880,708	5,573,899
Operating Surplus/(Deficit) excl non-cash	**6,780**	**175,000**
Depreciation & amortisation	552,432	520,000
Surplus/(Deficit) incl non-cash	**-545,652**	**-345,000**
BUDGET BALANCE SHEET	**Forecast 2019/20**	**Budget 2020/21**
Assets	8,459,325	7,861,506
Liabilities	3,536,068	3,318,407
Net assets	**4,606,000**	**4,269,000**
BUDGET CASHFLOW	**Forecast 2019/20**	**Budget 2020/21**
Cash at beginning of the financial year	570,975	513,961
Net cash provided by operating activities	79,886	-49,809
Cash used in investing activities	-136,900	-61,551
Cash at end of the financial year	**513,961**	**402,602**

Risk Mitigation

A formal risk management framework was implemented in 2017 to monitor and address risks, as well as establish an ongoing plan for management of these risks. The risk register and management plan is reviewed regularly by the Board and management and as part of this year's review, a number of changes this year were made. Overall, 22 risk categories have been identified and four risks are called out as high priority for mitigation in this AOP.

The first risk relates to the current reliance on limited sources of funding. This is proposed to be mitigated by work in two streams: new project work in the software and services areas, and the building of new services on the infrastructure of DataVat.

The second key risk relates to the uncertainty around the COVID-19 pandemic and its effects. This risk is being managed by proactive engagement with employees, suppliers, stakeholders and customers.

The third key risk relates to any significant and sustained technical failure, e.g. server outage, cybersecurity, etc. This risk is being mitigated by significant oversight and the utilisation of outside expertise to test penetration risk and audit security.

The final risk relates to data providers not implementing changes to their systems to provide data to DataVat, and service providers (and farmers) not taking up DataGene services. These risks are being mitigated by ongoing communication and extension activities with stakeholders about the benefits of DataVat.

Purpose

This document is the fourth Annual Operating Plan (AOP) prepared by DataGene and covers the period July 2020 to June 2021. The operating plan is based on the DataGene five-year Business Plan for 2019/20 to 2023/24 and incorporates direction from the Herd Improvement Strategy 2019-2024. It is predicated on the current operating environment and describes the 12-month deliverables for the company.

In general, the content of the AOP is at a summary level. A greater level of detail is contained in individual tracking tools for each business unit.

The AOP provides a clear line of sight on operations for the Board and will be a guiding document for management to focus on key deliverables during the year.

Strategic Context

In April 2019, DataGene released the Genetic Evaluation Software New Platform (GES NP) and the Centralised Data Repository (CDR), now called DataVat, into production. These were large, multi-year projects and are foundational to the future of DataGene. In April 2020, the company released eight new or improved traits to the market developed by DairyBio, including Gestation Length and Mastitis Resistance. In May 2020, DataGene released the new NASIS interface for clients. Each of these significant milestones has required significant and sustained effort.

As development for DataVat and GENSP wind down, the focus in 2020/21 will be on leveraging the dairy industry's investment in both DataGene's infrastructure and capability. DataGene is focussing on product improvement and customer delivery. The internal capacity built over the project lifecycle will continue to deliver substantial improvements for customers. For example, working with data contributors to populate the DataVat system as rapidly as possible. This capacity also creates new opportunities to leverage the knowledge, skills and infrastructure for other projects and industries. For example, working with the Forage Value Index and potentially other livestock industries or international peers. This would enable the significant investment in Australia to be leveraged and increase DataGene's ability to provide cutting-edge services to its stakeholders.

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 at November 2019, total membership of DataGene was 26 members including herd test centres, genetics suppliers, genetic service providers, data service providers and breed associations.

1.1 DataGene's Vision, Mission, Values & Strategic Priorities

Vision

Enabling farmers and industry to maximise profit through data-driven decisions

Mission

DataGene delivers world-class genetic evaluation, software and decision-making tools to enable Australian farmers to improve their herd and maximise their profit through data-driven decisions and innovative industry services

Values

DataGene has a number of values that define what's important to the organisation and guide its activities, behaviours and performance:

1.   We work towards shared and innovative outcomes for members and stakeholders (commitment to clients);

2.   We depend on genuine and sustained stakeholder engagement (direct, open & honest communication);

3.   We are genuinely inclusive and value farmer and member involvement in governance and oversight functions (inclusive);

4.   We aim to be creative and innovative in our products and services (innovation);

5.   We treat our people with respect, support them in their development and value their contribution to our success (engagement with employees); and

6.   We apply best-practice corporate governance and financial management principles (integrity & ethical values).

Strategic Priorities

DataGene has transitioned from a start-up phase with a focus on delivering large infrastructure projects to one focusing on delivering industry services while expanding the data governance, data sources and functionality of DataVat. DataGene's strategic priorities for 2019 to 2024 are laid out below and reflect the industry priorities identified through the Herd Improvement Strategy 2019-2024 and elaborated in the DataGene five-year Business Plan 2019-2024.

Strategic Priorities			
Improved decision-making from data	**Increased animal performance through herd improvement**	**Improved animal performance from research and development**	**Improved and diversified services**
• Develop and support new decision tools • Expand and secure data • Drive and support industry innovation	• Increase reliabilities • Improve service delivery • Increase farmer and industry service uptake • Increase the number of genomically tested females	• Deliver new health breeding values • Use genomics and other technology (MIR) to predict future performance	• Build and maintain DataGene and industry infrastructure • Develop and maintain industry solutions • Establish new revenue streams

Strategic Priority 1 aims to support the majority of dairy farmers and service providers to make data-informed decisions to drive animal performance, improve profitability and meet value chain requirements (including transparency, integrity and safety of dairy production). It is dependent on ensuring that industry data collection, management and analytics is seamless, streamlined and cooperative for dairy farmers and service providers. It also has a focus on increasing the measurement of individual cow performance through an increased number of cows participating in herd testing and increasing data accessed from farms with in-line meters and other sensors or data sources.

Strategic Priority 2 aims to increase the number of farmers breeding replacements from Good Bulls and using Australian profitability metrics to drive herd improvement. It relies on world-class evaluation services delivered by DataGene that are market-focused, including transparent quality assurance processes, service level agreements, and regular benchmarking of services against local needs and global trends. The priority in this area is to close the gap between potential and actual genetic gain, by increasing the number of farmers using Australian profitability metrics to drive elite sire selection.

Strategic Priority 3 DataGene also has responsibility within the Herd Improvement Strategy 2019-2024 in the area of improved animal performance from research and development. The majority of this accountability sits with DairyBio, however DataGene has a focus on increasing genomic technology use and working to bring MIR-based technology to market.

Strategic Priority 4 has four elements: to ensure development, implementation and maintenance functions are effectively resourced and responsive to a rapidly changing environment; facilitate the uptake of appropriate technologies, and adapt them for Australian conditions where appropriate; to establish new revenue streams to support core business functions; and, fulfil opportunities for innovation, co-operation and rationalisation within the sector, particularly with regards to pre-competitive services, marketing, laboratories, transport and logistics. DataGene has a clear leadership and support role in delivering on this priority.

Our People

DataGene's organisational structure has evolved since 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 to the industry. Staff have been placed into functional areas based on the types of work completed. All staff are employees of DataGene, with the exception of the science staff in Genetic Evaluation who are employees of Agriculture Victoria.

Central to the structure is the leadership team who work closely together and with the rest of the company to establish the DataGene culture, standards and processes to allow the achievement of its vision. The Leadership Team is made up of the heads of the business units and other key staff (including DairyBio) and meets regularly. The AOP forms the basis for the goals of each business unit and relevant aspects are incorporated into the performance and development plans of each DataGene employee.

The Lead Science function is provided by DairyBio rather than by a DataGene employee. However, the integration of the science into the implementation framework was 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.

1.2 Stakeholder Relationships

DataGene collaborates with a range of organisations to enable pre-competitive actions such as data sharing, the development and conduct of research and development, extension activities, strategy development and promotion of the dairy industry and herd improvement sector. DataGene has six key strategic relationships:

1. Dairy Australia is the primary funder and a founding member of DataGene. Dairy Australia also operates as a client of DataGene in the development of software solutions such as the updates to the Fertility and Mastitis Focus Reports.

2. Australian Dairy Farmers has a key role to ensure that DataGene's priorities and activities reflect the priorities of the dairy farmer community, in addition to DataGene's many direct interactions with farmers. DataGene relies on ADF to be publicly supportive of and a strong advocate for herd improvement. DataGene also has a direct relationship with farmers through its products, services, extension and communications.

3. National Herd Improvement Association is a founding member of DataGene. DataGene also has direct relationships with NHIA members, who are also members of DataGene.

4. In addition, there are important relationships with non-NHIA members such as Zoetis, Neogen and Apiam. These are key relationships for the delivery of DataGene products and services and the development pipeline for new products and services, particularly as they are major clients and contributors of data, respectively. Zoetis and Neogen deliver genomic services and Apiam provide software to the vet industry and are key collaborators for data and data services with DataVat. DataGene also works closely with other non-members, such as the Gardiner Dairy Foundation on specific projects.

5. Agriculture Victoria is a client for DataGene for certain projects; it is an in-kind contributor to DataGene in terms of supporting overhead costs for some in the Genetic Evaluation team; it is a user of DataGene data; and it is a strategic partner in its provision of research outputs to industry through DairyBio.

6. International Collaborators, such as the International Committee on Animal Recording (ICAR), Interbull, International Dairy Data Exchange Network (iDDEN) and the Council on Dairy Cattle Breeding (CDCB) work with DataGene on a range of projects. Another vital relationship is with TMA
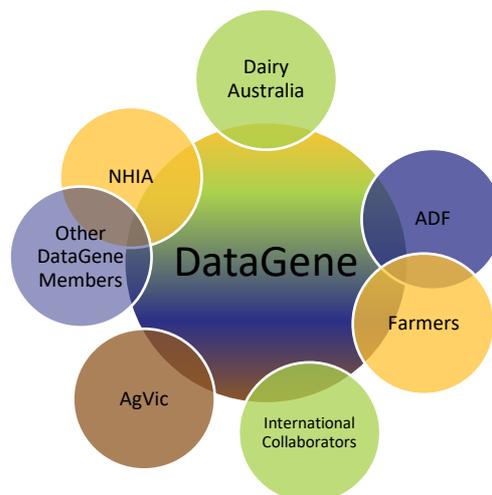
Solutions, DataGene's IT services partner in Vietnam. DataGene staff work closely with TMA on developing and maintaining systems and tools for DataGene's use and for development of other products for customers. These are key relationships that enable DataGene to deliver better services in the Australian market and to connect knowledge from around the world to applications in Australia.

DataGene has a range of end-users, customers and stakeholders with which it interacts at various levels. These are described below:

Farmers

Funding comes partially from dairy farmer levies paid to Dairy Australia.

Farmers use breeding values and tools such as the Good Bulls App, Genetic Progress Report and the Herd Test Dashboard

Farmers buy DataGene products such as HerdData and Genomic Breeding Values

Farmers are a key audience for DataGene comms and marketing

Farmers supply data to drive genetic evaluation

Service Providers

Service Providers use breeding values and tools such as the Good Bulls App, Genetic Progress Report and the Herd Test Dashboard

Service Providers work collaboratively with DataGene on projects

Service Providers are a key audience for DataGene comms and marketing

Service Providers purchase DataGene services such as breeding values and software

Service Providers are part of the industry's data pipeline

Service Providers provide data to DataVat

Industry bodies

Dairy Australia is a key funder and strategic partner, as well as a customer and data user

ADF is a strategic partner to ensure alignment of strategy and priorities with the farmer community

NHIA is a strategic partner as a conduit to its constituent members

Agriculture Victoria is a strategic partner in both research and delivery

Gardiner Foudnation

International Collaborators

Interbull is an vital partner to deliver accurate breeding values to the Australian industry

iDDEN will become an important link between the CDR and other dairy data sources

CDCB is an important partner and customer for software development

ICAR provides guidelines and networks to shape services

1.3 Operating Environment

The current operating environment for DataGene is a challenging one for several reasons. Firstly, the COVID19 pandemic has forced all staff to work from home and changed the way international projects are delivered. The impact of this on internal productivity and on the broader economy will only become apparent over time and will be largely dependent on the timeframe of social distancing restrictions. At a minimum, it means that aggressive delivery goals will be unhelpful in such an environment where staff and clients are under external pressure.

Secondly, the dairy industry has been hit hard by margin pressure over several years, which impacts farmers' financial ability to take up technology such as genomic testing of females and herd testing. While milk price has improved, farm costs are relatively high and general sentiment in the industry is still low. The slow recovery in milk production impacts DataGene's largest funder by reducing the levy income of Dairy Australia. In addition, COVID-19 and the industry discussion around DairyPlan will absorb significant resources in the industry. COVID-19, through its impact on global markets and economies, has already impacted milk price expectations and may also impact on the ability to increase uptake of heifer genomic testing and put pressure on the export heifer trade.

Thirdly, the global herd improvement industry is changing rapidly due to genomic advances and the rise of new sources of data. This is affecting all of DataGene's industry stakeholders: breed societies, bull companies, herd test centres and data providers. Each will have to adapt to the new world in different ways. DataGene is not immune to this as all of its peers in international genetic evaluation units face challenges from the rise of private (proprietary) indices and breeding values. The independent evaluation units are in ongoing discussions about how to face common threats and opportunities. COVID-19 may also place additional pressure on the industry if it drives down cow numbers or genomic testing demand.

DataGene has a track record of working with stakeholders in an open and transparent manner. The necessary transition to a collaborative industry culture is well underway but will need continued work. This is especially true in terms of the transition into DataVat where companies have to see the commercial interest in sharing data as well as the larger industry good.

Substantial progress has been made on restoring stakeholder confidence in the Australian genetic evaluation system and clearing some of the backlog of work, such as the new and improved traits released in April 2020. The next key public milestone for confidence is the manner in which we conduct and implement the National Breeding Objective Review. The previous review in 2015 was successful and underpins much of the gains achieved. The 2020 review, while not as extensive as the previous root and branch review in 2014, must build on and extend this inclusive process.

1.4 SWOT

Strengths and weaknesses of DataGene and opportunities and threats in the wider operating environment were identified as context for the DataGene Business Plan. The results presented below, coupled with input from stakeholders, were also used to prioritise the work plan presented in this AOP.

STRENGTHS	WEAKNESSES
• DataVat capable of housing data from a variety of sources and enabling new services and products • Strong membership base and close collaboration with herd improvement industry partners • In-house capability, industry knowledge and experience • Resilient staff committed to DataGene's mission • Service providers increasingly supporting DataGene and promoting Australian breeding values and indices • Standing Committees provide strong links between industry and DataGene	• Critical mass of data still required to fulfil the vision for DataVat • Substantial reliance on Dairy Australia funding, which is under pressure • Key person dependency and burnout risks • Little engagement with milk companies, banks, farm advisors and other 'non-herd improvement' stakeholders • Use of genomic testing of female animals remains relatively low • Consultation with a heavily governed industry can slow development processes • Limited resources to take advantage of technological opportunities

• Strong science pipeline of improvements • Redeveloped Genetic Evaluation System New Platform (GES NP) provides a step-change for genetic evaluations • Leader in a unique herd improvement innovation precinct • Strong international relationships • Solid track record and progress towards foundation goals	• Limited social media presence and corporate capability material that is not program-based
OPPORTUNITIES	**THREATS**
• Data services and analytics through DataVat to 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 • Increasing uptake of inline milk measuring tools and other sensing technologies and automatic data collection • Traceability and production transparency services • Changes in scale of farm operations and increased requirements for decision-making support, particularly for large farms • Greater private sector involvement and investment farms • Potential to leverage expertise and resources globally • Collaboration with other Australian ag sectors, e.g. red meat industry • Increased coordination to reduce duplication and improve efficiency of services • Flexible arrangements for accessing and maintaining key expertise • Provision of new tools for client groups, e.g. bull companies • Continued engagement with industry thought leaders	• Impact of COVID-19 on global markets and the domestic ramifications of this challenge • Declining numbers of dairy cows is shrinking the market for products and services and putting pressure on the levy • Farm and industry profitability remain volatile and under pressure • Ongoing reduction in herd test participation • Reliance on third party cooperation on data access • Difficulty in industry access to some phenotypic data, e.g. data collected from inline milk meters • Competition in herd improvement and data services • Need for greater efficiency and capacity to offer herd improvement services on-farm • Slow adoption of new innovations • Increasing activism and consumer scrutiny on how animals are treated and milk is produced, including provenance, food safety, animal treatments, dehorning, timed AI programs, etc. • Potential pressure on live exports to China • Growing use of proprietary breeding values and indices • Ongoing need to maintain engagement with industry opinion leaders • Challenges to extension and training in the industry • Herd test staff and others have little opportunity to improve skills and service provision through training • Milk production recording viewed predominantly as a management tool for managing cell count, inconvenient for farmers and technologically limited

1.5 Insurances

DataGene insurances are placed through a broker to obtain the best possible policies and market prices with reputable insurance companies. Renewal is during July each year. The current policies are as follows:

Insurance Type
Business Insurance
Public liability and Product liability
D & O Insurance
Professional Indemnity Insurance
Cyber Insurance

Operating Plan

1.6 Delivery Priorities for 2020/21

Delivery Priorities for 2020/21 for each strategic Priority area are listed below:

Data-driven Decisions

- Release of Select Dry Cow Therapy Tool
- Connect CDR to iDDEN international exchange platform
- Deliver a new Herd Test Reporting Platform through DataVat incorporating the Herd Test Dashboard
- Complete Phase I of Centre Re-development

Animal Performance

- Increase uptake of heifer genomic testing through Accelerating Genomics Project
- Completion of National Breeding Objective Review and implementation of any changes
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Herd Improvement R&D

- Farmer testing of MIR-based management report
- Improve Feed Saved Breeding Value relability
- Maintain Ginfo farmer participation
- Evaluate and potentially implement the use of weighted SNP solutions in genetic evaluation

Service Provision

- Maintain collaboration with industry stakeholders through regular Standing Committees, User Groups and other meeting opportunities, including Herd 21
- Maintain security auditing and penetration testing of DataGene systems
- Transition HerdData App to new licensing arrangments
- Continued delivery of quality IT service to external customers

1.7 Governance

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

Three Board members are due for election at the AGM in November 2020. DataGene will conduct an open call for nominations in Winter 2020 for the open position. The nominations committee will nominate the candidates who will stand for election at the AGM.

The Board and management will review significant company policies according to the agreed rotation schedule for 2020/21.

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 either nominated for DataGene Board approval by stakeholders or appointed directly by the DataGene Board, according to the terms of reference for each committee's structure. 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 Standing Committees are:

- **Genetic Evaluation Standing Committee** - provides advice and recommendations to the DataGene Board on specialist matters in relation to genetic evaluation and related technologies.

- **Data Services Standing Committee** - provides advice and recommendations to the DataGene Board on specialist matters in relation to opportunities for new tools and services that help farmers make data-driven decisions.

During 2019/20, a **Herd Test Centre Committee** (HTCC) was formalised, operating as a sub-committee of DataGene similar to existing Standing Committees. The Herd Test Centre Committee will make recommendations and proposals to DataGene Board and management, and respective centre Boards (or equivalent) on herd test-related matters, including software and service development.

The Data Governance Group is a technical group that develops policies and processes for the use and sharing of data. This will be increasingly crucial as DataVat becomes operational and decisions around access to, and use, of data become more complex. The Data Governance Group makes detailed technical decisions about the way data is handled, presented and disseminated to industry. The Data Governance Group is a sub-group and not one of the main Standing Committees. It exists primarily to help establish the guidelines for DataVat and works closely with the Data Services Standing Committee. In the following diagram, it is shown as not connected to the main reporting lines to demonstrate its unique position.
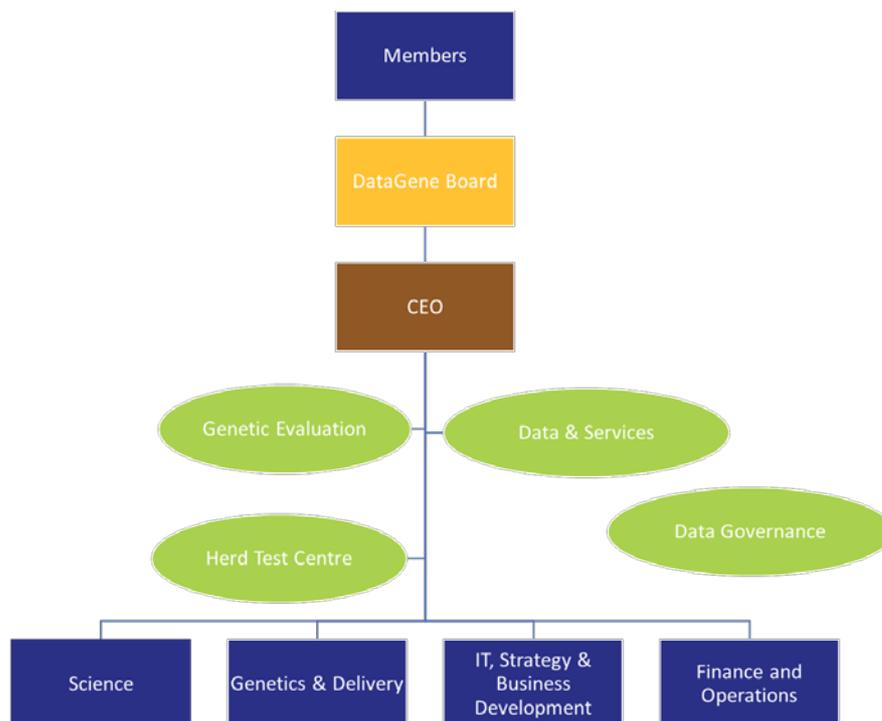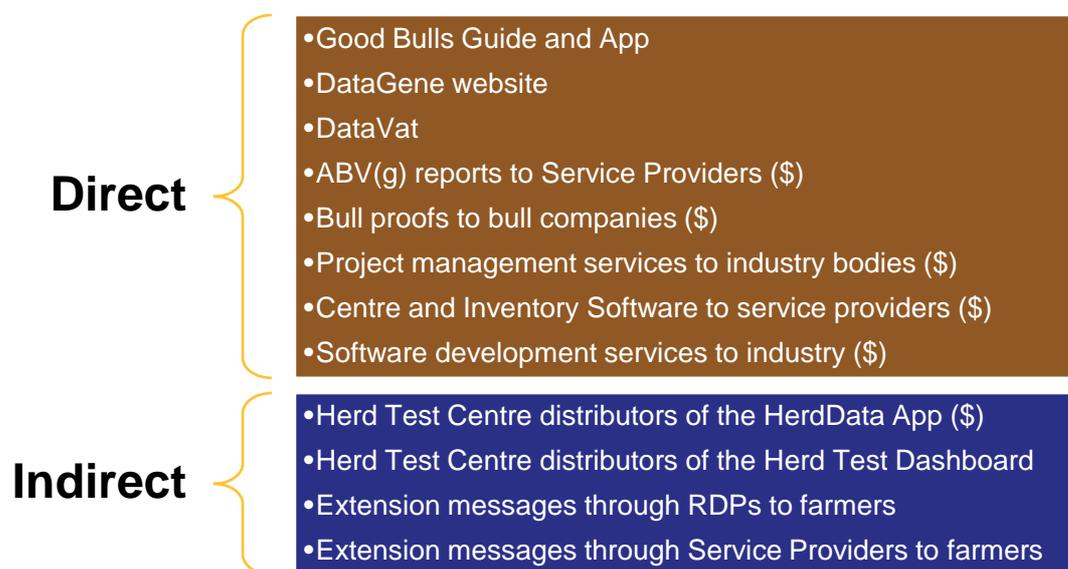
The Genetic Evaluation Standing Committee helped prioritise projects that are presented in this AOP. The Data and Services Standing Committee has not been active since the group did not have immediate policy questions to answer. This is expected to change as DataVat expands and the group will meet as required in 2020/21. The newly established Herd Test Centre Committee has been very active in 2019/20 and this is expected to continue in 2020/21. The Data Governance Group will grow in importance as DataVat expands.

DataGene will continue to work pro-actively with its users of DataGene Centre software as well as its farmer facing software, such as HerdData and the Good Bulls App. This work with users will ensure a better alignment of resources to meet user needs and help to prioritise the development of improvements to DataGene software solutions.

1.8 Delivery Channels, Marketing & Communications

With the strategic priorities clearly in mind, DataGene's delivery priorities are developed with its stakeholders and Board, while the actual delivery of products and services is driven by its staff. There are both direct and indirect channels for delivering products and services to DataGene clients, only some of which are monetised.

Direct
- Good Bulls Guide and App
- DataGene website
- DataVat
- ABV(g) reports to Service Providers ($)
- Bull proofs to bull companies ($)
- Project management services to industry bodies ($)
- Centre and Inventory Software to service providers ($)
- Software development services to industry ($)

Indirect
- Herd Test Centre distributors of the HerdData App ($)
- Herd Test Centre distributors of the Herd Test Dashboard
- Extension messages through RDPs to farmers
- Extension messages through Service Providers to farmers

Marketing and communications have been identified for several years as key priorities for herd improvement. DataGene's marketing and communications plan is aligned to the deliverables coming out of the AOP, corporate communications needs, and support required for DataGene's extension program.

DataGene's main communications objectives focus on: encouraging the use of Australian Breeding Values and indices; promoting the use of herd recording and data collection; supporting the launch and continued use of new services, products and tools for industry; and building awareness of the DataGene brand and reputation. A variety of collateral, resources and delivery vehicles are used to achieve these objectives. DataGene also collaborates with other key players (including Dairy Australia, DairyBio and agribusinesses) to support the delivery of clear, consistent herd improvement messages across the industry.

The target audiences for DataGene's marketing and communications are varied and have different needs. Some examples include farmers, from elite breeders to the non-interested, members, herd improvement industry service providers, collaborators, industry bodies. Available market segmentation and farmer survey work offer useful insight into the dairy farmer segments and can help inform the creation of campaigns.

Over the coming 12 months, changes to the NBO will be integrated into routine communication and extension activities. These will continue to focus on building awareness of critical herd improvement messages such as genetic selection and data collection. Additional communication and marketing activities this year will be driven by the roll out of enhancements to DataVat functionality. This will create the opportunity for the promotion and support for products/services such as Genetics Futures Report (for farmers and their advisors), the NASIS module (for bull companies, GSP, DPCs) etc. Each have its own

plan for customer support, communication and extension. The heifer genomics project is likely to involve the development of communication and extension resources. DataGene will work with Dairy Australia and the Herd Test Centres in this financial year on a marketing and communications plan to encourage uptake of herd testing and add value to the existing services.

1.9 Performance Metrics

The Board and management monitor a variety of performance metrics on a regular basis. These cover the genetic merit of the national herd, the market acceptance of DataGene products and services, herd recording levels, and extension and communication reach. The primary metrics for DataGene are:

1. The rate of genetic gain of sires of cows for BPI exceeding $18/cow/year over a 10-year period

   In April 2020, this is currently at $14.70/cow/year over the previous 10 years. However, the annual rate has increased from $33/cow for cows born in 2018 to $44/cow for cows born in 2019, keeping in mind the lower numbers of cows recorded for 2019;

2. The level of female genomic testing increasing annually by at least 15%

   Genomic testing decreased in 2018/19 because of industry conditions but has rebounded in 2019/20 and as is expected to increase by over 30% from the previous year; and

3. The number of cows with phenotypes in DataVat increasing annually

   The number of cows has increased by over 400,000 to 13.3 million cows.

1.10 Annual Work Plan & Key Performance Indicators

In order to drive improvements in key metrics, aggressive AOPs have been proposed and followed over the past few years. This means that the expectation is not that all KPIs will be delivered but are presented as stretch targets. This continues to be true for the 2020/21 AOP. However, this year a Priority rating has been assigned to make clearer what are the key deliverables that we need to focus on; what are the mid-level deliverables that we focus on but which may slip; and what are the low priority items that will be delivered if the resources are available.

3	Lower priority and will be delivered if resources allow
2	Medium Priority and secondary deliverables
1	Highest Priority and key deliverables

1.10.1 Strategic Priority 1 – Improved Decision Making From Data

		Activity	*Completion Date*	*KPIs*	*Priority*	*Dependencies & prerequisites*
1.1 DataVat		Continue development of DataVat	30 June 2021	Connect up Holstein and Jersey Australia and all herd test centres to DataVat via the API	1	3rd party cooperation
			30 June 2021	Connect up two of Jantec, EasyDairy, DairyData/Apiam into DataVat via the API	1	3rd party cooperation
			30 June 2021	Connect a minimum of one domestic milk processor to CDR via an API to automatically transfer daily bulk tank results	3	3rd party cooperation

		15 December 2020	Commercial release of Select Dry Cow Therapy tool with marketing and comms plan agreed with DA and Herd Test Centre	1	Collaboration with Herd Test Centres, Vets and Dairy Australia
		30 June 2021	CDR connected to iDDEN project	2	Collaboration with iDDEN partners and 3rd parties
		30 June 2021	Provide leadership on a data governance framework for CDR	2	Willingness of 3rd parties to engage
	Streamline and automate DataVat	30 September 2020	The update of DataVat is automated to efficiently release weekly ABV, animal ID and related animal information. This includes animal search, NASIS, ABV reports ABV reports are automatically piped to DataVat for viewing by logged in users	1	GES NP components complete and Genomic Acceleration Phase 1 complete Timing dependent on Dairy Australia for continued funding of development resources
1.2 Enable Innovation	Herd Reporting Platform – Herd Data Report	15 December 2020	Delivery of new herd reporting platform and transition to interactive Herd Test Dashboard	2	Collaboration with Herd Test Centres and ABRI
	Project – Re-developing Centre	15 December 2020	De-risking plan, possible BRD and phase 1 delivery plan written	1	Availability of key SMEs
	Project – Re-developing Centre	30 June 2021	Phase 1 delivery	1	Availability of key SMEs and timing dependent on funding

1.10.2 Strategic Priority 2 – Increased Animal Performance Through Herd Improvement

		Activity	*Completion Date*	*KPIs*	*Priority*	*Dependencies & prerequisites*
2.1 Innovation in Breeding Values		Include genomic information for yield and SCC in Red Breed evaluations	15 December 2020	Aussie Red genomic breeding values for Yield and SCC delivered	3	Timing dependent on Dairy Australia for continued funding of development resources
		Evaluate options in Mix99 to handle weighted SNPs and/or new variants including decisions around application by trait and breed	15 December 2020	An options paper weighing up the costs and benefits of implementing weighted SNP analysis and/or using new variants	2	Dependent on science outcomes

	Program changes for weighted SNPs in genetic evaluation system	30 June 2021	Weighted SNPs and/or variants are implemented Reliability improves for genomic evaluations	3	Dependent on options paper recommendations
	Weekly delivery of ABVs	30 August 2020	Phased implementation of more frequent runs begins	1	Timing dependent on Dairy Australia for continued funding of development resources Availability of key SMEs
	Prepare requirements to evaluate haplotypes. Program reporting of haplotypes	June 2021	Full suite of Haplotypes are reported in CDR, DataVat and customer reports	3	Availability of key SMEs
	Program new indices and base updates, as advised by the NBO review.	November 2020	New indices are reported in all reports, tools, apps Potential base changes have been implemented and comms plan complete	1	Options Paper and Stakeholder Agreement
2.2 Increase Farmer and Industry Services Uptake	Continued implementation of extension strategy targeting bull selection	June 2021	Significant increase in reseller use of BPI Increase in bull company use of BPI Evidence of BPI use continues to increase	2	3rd party engagement, including herd improvement industry and Dairy Australia/RDPs
	Implement extension strategy targeting heifer selection	June 2021	Genomic acceleration project phase II is funded Heifer scan is complete Genomic testing activity increases Development of extension resources	1	Phase I being completed and Dairy Australia funding secured
	Review ABV publication rules and agree on any changes	June 2021	Publication rules are reviewed and updates made	3	Availability of key SMEs
	Scope and complete genetic trend analysis for standing committee and breed organisations	March 2021	Trend analysis complete and communicated	3	Availability of key SMEs Timed with HI report.

	Automate semen fertility analysis. Develop sexed semen fertility analysis and program Scope strategy to recruit additional data	June 2021	Semen fertility values are widely available and valued	2	API available for additional data to be added to CDR
	Parent average is calculated and published for herd owner use.	June 2021	A standard approach to publishing parent average ABVs is implemented across DataGene products	3	Availability of key SMEs
2.3 Genomic Acceleration project	Improve performance of CDR UI	31 August 2020	CDR UI is fast and efficient to use for internal and external users	1	Timing dependent on Dairy Australia for continued funding of development resources
	Implementation of Genomics Acceleration Phase 1 is complete	31 July 2020	Confirmed pedigrees are always used in genomic evaluations and conflicts reported to suppliers	1	Timing dependent on Dairy Australia for continued funding of development resources
		31 July 2020	Multiple files can be loaded at the same time	1	Timing dependent on Dairy Australia for continued funding of development resources
		31 July 2020	Create National ID API is created and used by third parties to share data with CDR for use in genomic evaluations	1	Timing dependent on Dairy Australia for continued funding of development resources
	Pedigree preference field is implemented	30 June 2021	DataVat records individual customer preferences for pedigree confirmation and this is used in evaluation	1	Timing dependent on Dairy Australia for continued funding of development resources
	Self service file uploads enabled and customers trained	30 June 2021	External users have relevant access to CDR External users can load their own files, with permission	1	Timing dependent on Dairy Australia for continued funding of development resources
	Implement automated genoinconsistency reporting	31 August 2020	Customers get near real-time feedback following the loading of new data.	1	Timing dependent on Dairy Australia for continued funding of development

	Activity	Completion Date	KPIs	Priority	Dependencies & prerequisites
			resources		
	Define and program a range of metrics, statistics and customer service information to report on demand	31 August 2020	Metrics reporting, national statistics, benchmarks and invoicing information is automated	3	Availability of key SMEs
	Report breed percent in CDR UI and DataVat	30 June 2021	Customers have access to breed purity reporting	3	Availability of key SMEs
	Routine Runs	Ongoing	Ontime delivery of each scheduled release	1	

1.11 Strategic Priority 3 – Improved Animal Performance Through Research and Development

	Activity	Completion Date	KPIs	Priority	Dependencies & prerequisites
3.1 Improve Traits	Maintain Ginfo farmer participation and data collection activities	30 June 2021	27,000 genotypes 8,400 Linear Type Evaluations	2	
	Finalise a plan to implement ongoing Heat Tolerance phenotypes integration and using weighted SNPs	30 June 2021	Document describing implementation of continual integration of Heat Tolerance phenotypes	2	Dependent on DairyBio science outcomes
	Consider using MIR enhanced ABV	30 June 2021	Document describing implementation of MIR enhanced ABV	3	Dependent on DairyBio science outcomes
	Implement improved Feed Saved	15 December 2020	Improvement in Feed Saved ABV reliability through updated prediction equations	2	Dependent on DairyBio science outcomes
	If recommended, prepare implementation plan for implementing Feed Saved within Mix99	30 June 2021	Implementation plan with BRDs for incorporating Feed Saved Genotypes and Phenotypes within DataGene through Mix99	2	Dependent on DairyBio science outcomes
3.2 Improve Accuracy	Pass Interbull Tests	30 September 2020	Pass key Interbull test for traits	1	Availability of key SMEs
	Gain DNA accreditation	30 June 2021	Earn the title of accredited DNA interpretation centre	3	Availability of key SMEs
3.3 Improve Interbull data linkage	Assess implementation requirements for Interbull exchange of parentage genotypes and genetic defects	30 June 2021	Decision made on implementing GENOX-PSE exchange and Genetic Defect exchange	3	Availability of key SMEs

	Activity	Completion Date	KPIs	Priority	Dependencies & prerequisites
3.4 New Tools	Implement for testing purposes a MIR-based management report for farm use	15 December 2020	Field testing of a MIR-based management report and decision made on next stages	1	Dependent on DairyBio science outcomes and cooperation of HTCs and Dairy Australia

1.12 Strategic Priority 4 – Improved and Diversified Service Offerings

	Activity	*Completion Date*	*KPIs*	*Priority*	*Dependencies & prerequisites*
4.1 Improving software offering	Phase II Export Heifer	30 September 2020	Implement additional protocols	2	Holstein and Jersey requirements
	EzeGene App	31 October 2020	Deliver native apps to HA	2	Contract being agreed
	HerdData App is transitioned to Herd Test Centres and Vets	31 March 2021	Licence and adapt the HerdData App to integrate with Herd Test Centres and Vets for use with their clients	1	Herd Test Centres and Vets taking over marketing and support
	Maintain Security Plan and Audit	31 March 2021	Pass the audit	2	
	IT Disaster Recovery Test	15 December 2020	Disaster Recovery Plan maintained and tested	2	
	Shared file structure review	15 December 2020	Review file sharing platform and implementation plan complete	3	
4.2 New Business	Maintain at least two external clients	30 June 2021	Two external clients with contracted projects	1	Ability to identify opportunities
	CDCB Web Connect	30 June 2021	Deliver the WebConnect project for CDCB	1	Dependent on contract negotiations and continued focus from CDCB
4.3 Improving Capability	Continue on the job training and external training as appropriate	Ongoing	Development and training needs assessed and acted upon	2	Resource constraints
	Election for Board positions	19 November 2020	A professional selection process results in the election of directors at the AGM	1	Appropriately skilled applicants
	Refine DataGene's customer service approach	September 2020	All DataGene staff understand the agreed customer service model	3	
4.4 Improving Collaboration	Establish and maintain strong communication with stakeholders through effective Standing Committees	30 June 2021	Hold Data and Services Standing Committee meetings as required	3	Need for relevant agenda items
		30 June 2021	Hold a minimum of 2 meetings of the Genetic Evaluation Standing	2	

			Committee		
		30 June 2021	Hold a minimum of 2 meetings Herd Testing Standing Committee	2	Continued interest of Herd Test Centres
	Herd 21 is delivered	March 2021	Strategically strong and high-quality program is delivered. Participants recognise the conference as successful	1	Travel restrictions may impact ability to build strong program
	Ginfo Workshop	March 2021	Engaging and high-quality program is delivered. Participants recognise the workshop as successful	1	A strong Herd 21 program will encourage more attendance
	Maintain effective communication with users	Ongoing	Maintain communication with users of DataVat, Centre, HerdData and the website, including any necessary training in use of GES NP and DataVat	1	
	DataVat Comms and Extension	30 September 2020	Create DataVat Marketing, Comms and Extension Plan with Agreed KPIs	2	Successful release of DataVat
	Marketing and communications plan completed based on 2020/21 AOP	30 August 2020	Marketing and communications plan completed based on 2020/21 AOP and integrated with extension	1	

1.13 Financial Outlook

The budget for 2020/21 has been prepared with the goals of achieving a surplus EBITDA income statement, maintaining a sound Balance Sheet and realising a fiscally prudent cash reserve.

These outcomes are based around ongoing income investment from Dairy Australia in accord with the new funding agreement, ongoing fees for genetic service and centre services and continuing project work for CDCB and other parties. The expenditure budget has been contained to deliver these goals. The cash reserves will be sound based on these actions.

The Board is sufficiently confident at the time of signing off the AOP that the presented budget is robust and the results will be reviewed regularly to ensure delivery of the financial goals. Additional changes to expenditure in order to mitigate any shortfall in expected revenue would be instituted by management in a timely manner.

In general, budgeted income is at a very similar level to the previous financial year other than the full year of project work with CDCB. Expenditure on salaries account for 45% of the total expenditure. The remainder of expenses are tightly controlled and are not dissimilar to the previous year. This budget framework will deliver a surplus EBITDA bottom-line.

DataGene's headline software GES NP came into use in April 2019. All development costs up to that time were capitalised in accord with accounting standards. Due to the capitalisation there are substantial amortisation costs each financial year and these push the company to a deficit from operations in 2020/21. With the major developments complete, these costs will stabilise.

The cash reserve position in the Balance Sheet at the end of 2019/20 is expected to be around $400,000. However, a reduction in cash at the end of the financial year is forecast based on residual payments on the last legacy contract which have been accrued in 2019/20 but are expected to be finalised for payment only in 2020/21.

The major risks lie with CDCB income and the unidentified new project income. Management has clear strategies in place which will be implemented to mitigate these risks should they materialise.

Assumptions

The financial outlook has been prepared using the following assumptions:
- The industry is able to operate close to business as usual under the State and Federal restrictions around COVID-19.
- Not all new project income has been identified at this stage. Historically the team has been able to deliver new projects over the 12-month period to fill this income gap.
- A stable workforce
- Maintenance and refinement of GES NP, CDR and DataVat will continue to occur
- A suitable development contract is signed to continue working with the CDCB
- Continued export heifer activity
- Minimal travel during the first half of the financial year
- GES NP was operational late 2018/19. Work has shifted from development to ongoing maintenance
- GES NP was capitalised and has been amortised for the full year

2020/21 Budget

INCOME STATEMENT BUDGET	2020/21 Budget	2019/20 Forecast	Variance
INCOME			
Dairy Aust Funding Agreement	2,425,000	2,653,446	-228,446
New Business	270,000	603,327	-333,327
Genetic Evaluation Services	1,085,559	1,025,000	60,559
Vic Gov - DEDJTR - DairyBio4	80,000	217,829	-137,829
Software Services	1,678,624	218,000	1,460,624
Misc income and interest	114,000	64,138	49,862
Rent contribution	96,000	105,750	-9,750
TOTAL INCOME	5,749,183	4,887,489	861,694
EXPENSES			
Consultants inc calf testing and Ginfo	786,415	735,000	51,415
Marketing & Communications	213,600	192,000	21,600
Memberships	75,695	70,000	5,695
Office accommodation	263,387	231,554	31,833
Software development & maintenance	1,117,660	568,515	549,145
Software licences and IT Support	118,680	120,000	-1,320
Salaries & employment incl Directors	2,505,781	2,678,280	-172,499
Operating & other	442,510	210,359	232,152
Travel	50,455	75,000	-24,545
TOTAL EXPENDITURE	5,574,183	4,880,708	693,475
NET SURPLUS/(DEFICIT) FROM OPERATIONS	175,000	6,780	168,220
Depreciation & amortisation	520,000	552,432	-32,432
SURPLUS/(DEFICIT)	-345,000	-545,652	200,652

DATAGENE FINANCIAL OUTLOOK

DataGene
Solutions for Herd Development
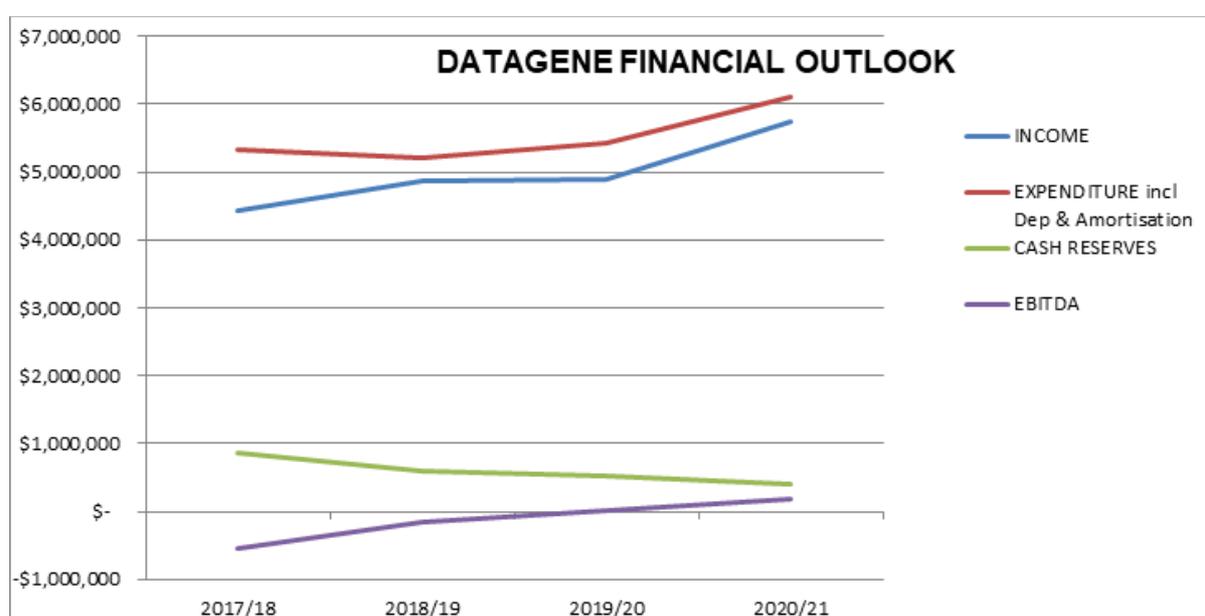
BALANCE SHEET BUDGET   **2020-21**

Current Assets

Cash and cash equivalents	402,602
Receivables	404,356
Other assets	75,920
Inter Company transactions	2,336,000
Total current assets	**3,218,877**

Non-current Assets

Intangible assets	4,137,458
Property, plant and equipment	505,171
Total non-current assets	**4,642,630**
Total assets	**7,861,506**

Liabilities

Payables	210,000
Other liabilities	772,407
Inter Company transactions	2,336,000
Total liabilities	**3,318,407**

Net assets

Assets	7,861,506
Liabilities	3,318,407
Net assets	**4,543,100**

DATAGENE STATEMENT OF CASHFLOW   **2020/21**

Receipts from clients

DA Investment	2,425,000
Receipts from services	3,609,895
Other	2,383

Payments to suppliers and employees

Salaries	2,444,724
Operating	3,068,484
GST Paid	189,483
Net cash provided by operating activities	-49,809

Cash flow from investing activities

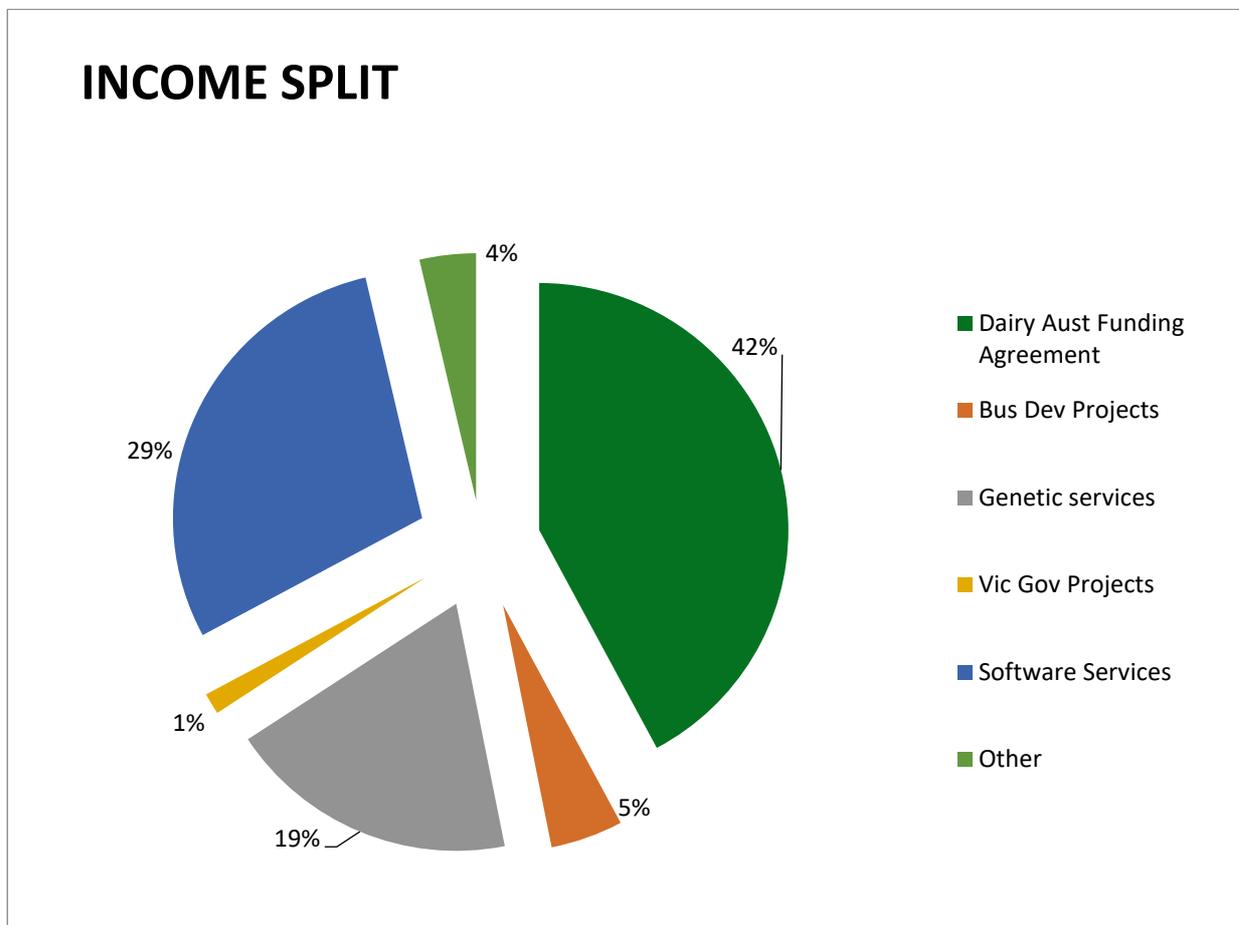|	
Payment for property, plant and equipment	-61,551
Payment for other non-current assets	
Net increase / (decrease) in cash held	-111,360
Cash at end of the period	402,602

Income commentary

DataGene has four main streams of revenue. Firstly, core funding comes from Dairy Australia via a new funding agreement which runs through to June 2024. Secondly, AI companies and farmers pay for genetic evaluation services. Thirdly, herd improvement companies pay for centre software services. Finally, customers pay for IT projects delivering improved software, tools and reports across the industry. It is important to note that investment from the Victorian Government has diminished this financial year.

The goal remains to increase revenue through new projects and thereby reduce Dairy Australia's percentage share of total revenue over the years ahead.

Genetic evaluation services comprise service fees associated with ABV(g), pre-determined access fees, new calf testing, NASIS registrations and workability. $400,000 has been budgeted for fixed fees. $120,000 has been included as a conservative outlook for export heifers.

Software Services, which includes IT development projects for third parties, is primarily generating revenue through a major development project with CDCB. In addition, new projects with an estimated value of $270,000 are currently being negotiated with customers and this has been included in the budget. The IT development projects require a mixture of existing staff skills and offshore development resources which DataGene project manages. During the previous two financial years DataGene has generated new projects of a greater value than that appearing in this budget.

INCOME SPLIT

- Dairy Aust Funding Agreement — 42%
- Bus Dev Projects — 5%
- Genetic services — 19%
- Vic Gov Projects — 1%
- Software Services — 29%
- Other — 4%

Operating expenditure commentary

Salaries and associated costs remain the largest expenditure item and equate to 45% of the total expenditure. Staff retention remains strong which is reflected in the salary estimates.

Ginfo will move into a maintenance phase following the efforts to deliver an increased number of herds in the last financial year.

Consultants expenditure includes costs incurred for calf testing which offset revenue for calf testing.
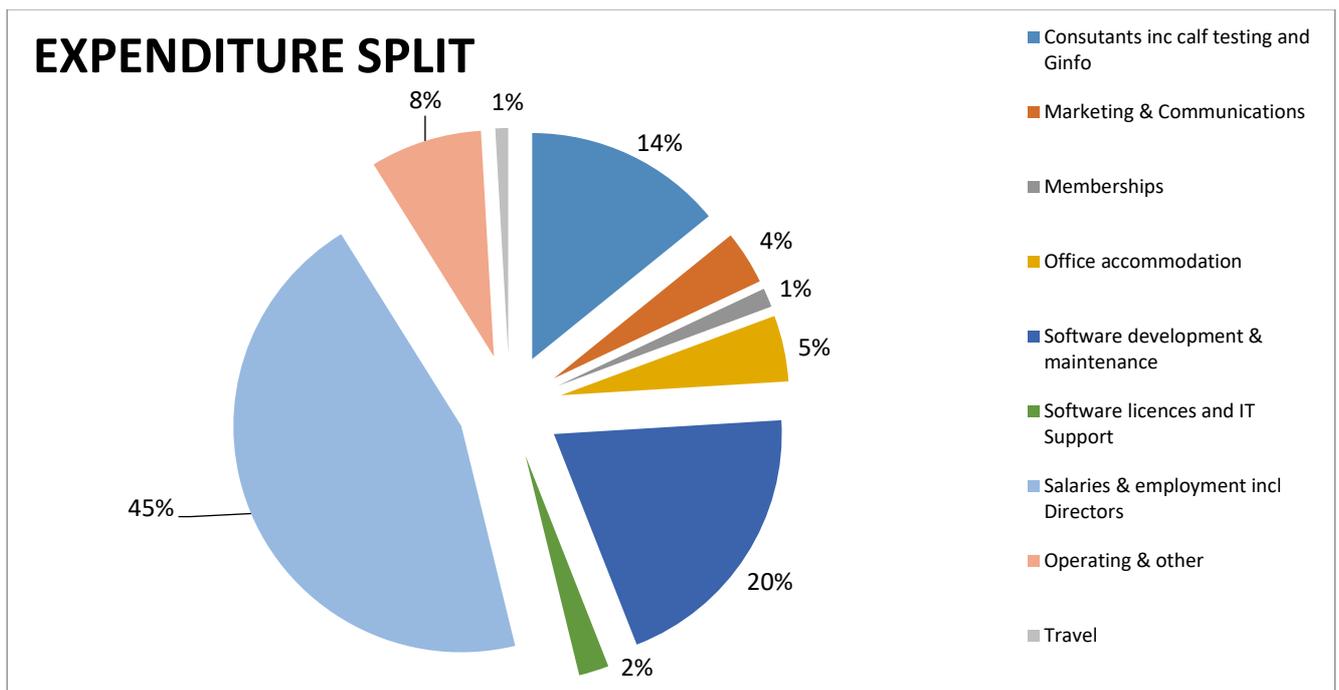
Marketing and communications activities remain very important. Expenditure will remain at similar levels to the previous financial year.

Software development captures the costs to maintain GES NP/CDR/DataVat plus work we undertake with customers such as CDCB.

Amortisation and Depreciation appear in the income statement to capture the full cost of running the business however have been removed from the table below as they are non-cash items

Other expenditure is at similar levels to the previous financial year.

As has been demonstrated in previous financial years, all expenditure will continue to be carefully monitored and well controlled throughout the year. Expenditure will be reviewed in line with income and will be adjusted accordingly in order to maintain a sound budget.

EXPENDITURE SPLIT

Legend:
- Consutants inc calf testing and Ginfo
- Marketing & Communications
- Memberships
- Office accommodation
- Software development & maintenance
- Software licences and IT Support
- Salaries & employment incl Directors
- Operating & other
- Travel

Capital expenditure

During the year there will be a need for a new server plus expansion trays to support more regular ABV runs. $61,500 has been budgeted for these purchases.

Cashflow

As shown above the budget income statement results in a cash surplus. At the end of the 2019/21 financial year it is anticipated that DataGene will have a number of large invoices in Accounts Payable awaiting payment. These invoices have been under negotiation for some time and are still being worked

through. As a result, given the timing of when these invoices are settled, they will generate an operating payment to suppliers in the cashflow in 2020/21 financial year thereby reducing the cash balance. This highlights the difference between accrual and cash accounting processes.

1.14 Key Current Risks

The risk management framework has been in place since 2017 and provides an efficient mechanism for Board and management to monitor and address risks. It is updated at least monthly and reviewed at each Board meeting and each Leadership Team meeting.

Management and the Board have identified the key risks facing DataGene in the coming 12 months. These are presented below, along with their mitigation strategies and the risk number from the May 2020 Risk Register.

Risk # 1	Likelihood	Consequence	Rating	Residual Risk
Funding Risk	Possible	Major	Very High	High

Context, Cause and Consequences:

A key business risk is that of Dairy Australia funding falling due to milk production falling to a lower level, levy polls reducing the levy rate or changing priorities within Dairy Australia. This would put pressure on DataGene's budget as most of its funding currently comes from Dairy Australia.

There is some risk that ongoing funding of the reference population through Ginfo is not financially sustainable. In this case, the broader dairy industry does not recognise the magnitude of benefits or a model cannot be agreed among beneficiaries to fund the cost of the reference population. This would leave the cost of maintaining the reference population to be borne by Dairy Australia alone or require the program to be wound down.

Controls, mitigations and management actions:

The key risk of DA funding will be mitigated by the ongoing effort to find additional sources of revenue for DataGene. One crucial focus for new revenue is increasing the level of female genomic testing. Another focus will be using the capability within DataGene to develop projects for other industries or countries. DataGene also actively collaborates with DA to ensure that DataGene infrastructure is valued for its contribution to farm productivity.

In addition to increasing funding through female testing, another mitigation for Ginfo funding will be to collaborate with other program areas within DA to ensure full value is achieved from the 200 herds, demonstrating the value of the initiative to industry.

Risk #7	Likelihood	Consequence	Rating	Residual Risk
COVID-19	Almost Certain	Moderate	Very High	High

Context, Cause and Consequences:

The impact of COVID-19 and the resulting social distancing and potential illness will become apparent over the coming months. While working remotely has worked for the group, it will become more challenging to maintain productivity the longer it continues. The impact on our clients, from farmers to service providers, is unclear at this stage but could be quite negative as the economic shocks reverberate. The volume of genomic testing and export heifers could be impacted. Social distancing will make our stakeholder engagement more challenging.

There are also potential impacts on our service providers, particularly TMA and ABRI, if staff become ill or business is suspended. If developers are unavailable, we will experience time delays.

Controls, mitigations and management actions:

Continual engagement with staff, the Board, members, funders, customers and service providers will be very important to maintain strong connections across all groups. Flexibility, proactiveness and resilience will be the keys in responding to changing and challenging circumstances. Scenario plans are in place should any key stakeholders become unavailable. Interaction with stakeholders will be maintained with new mechanisms explored to encourage ongoing communication.

Risk #12	Likelihood	Consequence	Rating	Residual Risk
Technology and Software Risk	Unlikely	Major	High	Medium

Context, Cause and Consequences:

Inappropriate selection of either hardware or software for the DataVat project would potentially result in a system that is not fully functional or does not meet all delivery requirements. Reduced functionality would mean that the full benefit of the development would not be realised, potentially leaving out key data sources for DataVat or missing key functionality.

Controls, mitigations and management actions:

A Solution Architect completed a full systems architecture review which ensured that the technical solution for GES NP and DataVat are robust, scalable and fit for purpose. This delivered a detailed solution design for the GES NP – DataVat solution and a technical strategic roadmap for the next 5 -10 years.

The technical solution has been assessed by independent IT expertise (SMS Consulting) with extensive experience in projects of this scope and complexity.

DataGene IT will conduct an annual technology review, including use of physical and web enabled services. The annual technology and architecture report will propose the most appropriate use of physical assets in our data centre and consider where and how to use Web Services such as Amazon. The report will consider performance, sizing (storage and operational space) and costs. There is also significant alignment to the privacy and security risk mitigation strategies.

Risk #13	Likelihood	Consequence	Rating	Residual Risk
DataVat User Risk	Possible	Major	Very High	High

Context, Cause and Consequences:

There is some risk that that data providers do not implement the necessary changes within their own systems or processes to provide data to and allow access to DataVat. If key data providers do not do so, this would ultimately reduce the effectiveness of the DataVat.

Issues around data security and privacy of data need to be dealt with to the satisfaction of all users to ensure they participate in DataVat.

Controls, mitigations and management actions:

Early and continued communication with the providers will ensure alignment and awareness of the project. The single point of animal information will be of significant benefit to all of them as their clients are requesting such connectivity. This will incentivise them to implement the necessary changes. In addition, the connection tool will allow DataVat to talk to any system using almost any format, which will reduce the need to significant change early in the process.

Development and operation of DataVat will comply with ongoing compliance obligations under Australian Privacy Principle (APP) 1.2. DataGene will undertake penetration tests and security audits on a regularly scheduled basis.