Title	Select and implement information technology for primary industry management		
Level	5	Credits	5

Purpose	This unit standard is for people working in a primary industry context.
	People credited with this unit standard are able to: determine the need for quantitative data to inform primary industry management decisions; implement information technology to inform primary industry management decisions; and implement management practices in response to information technology results.

Classification	Primary Sector > Primary Sector Resources Management

Available grade	Achieved

Guidance information

- 1 Performance criteria must be consistent with all relevant legislation, standards and subsequent amendments; this includes but is not limited to:
 - Enterprise standards
 - Organisational requirements
 - Health and Safety at Work Act 2015.
- 2 Definitions

Accuracy means a degree of correctness or precision attached to data that is accepted as representing the real world truthfully.

Completeness means the state or condition of having all the necessary or appropriate data.

Data means facts and statistics collected together for reference or analysis. *Information* means data that is processed, interpreted, organized, structured or presented in a way that makes them meaningful or useful.

Information technology means the use of systems for gathering, storing, retrieving, and sending or presenting information, and may include, but is not limited to:

- Physical measurement tools, such as soil moisture meters, compaction meters, weather stations, laser levels, dumpy levels, total stations, GPS receivers
- Remote sensing tools such as Normalised Difference Vegetation Index (NDVI) or Light Detection and Ranging (LIDAR) from satellites, aircraft or Remotely Piloted Aircraft Systems (RPAS, or "drones")
- Forecasting and modelling tools, such as weather forecasting websites
- Data management portals
- Geographic Information Systems (GIS).

Enterprise standards – the standards and procedures set by the client or employing organisation for evaluating the effectiveness of management decisions.

Enterprise refers to a specific entity which may be – in private, public, or community and volunteer sectors; a business, a separate unit within a larger entity, or a special-purpose body. It may form part of an organisation's activities or it may constitute a complete organisation.

Organisational requirements may include but are not limited to:

- organisation purpose and/or direction
- organisation policies and processes
- compliance: legislative/legal, health and safety
- risk management
- sustainability.
- 3 Assessment

Assessment for this unit standard is based on evidence from authentic experience in an organisational context, with all the expectations and possible consequences of that context.

Outcomes and performance criteria

Outcome 1

Determine the need for quantitative data to inform primary industry management decisions.

Performance criteria

- 1.1 Define the scope of the decision in terms of the area of interest, the management practice to be applied, and the effect this management practice may have on other management practices.
- 1.2 Identify the data required to inform the decision and the degree of completeness and accuracy required.
- 1.3 Identify the information technology needed to gather, store, retrieve, send or present the data.
- 1.4 Where the information technology needed to gather, store, retrieve, send or present relevant data are unavailable, identify alternatives, or record limitations of the approach.

Outcome 2

Implement information technology to inform primary industry management decisions in accordance with manufacturer's guidelines.

Performance criteria

- 2.1 Implement at least two data gathering processes using information technology relevant to the management decision required.
 - Range data gathering may include but is not limited to manually recording measurements, automatically recording measurements, remote sensing and recording measurements.
- 2.2 Implement and monitor the data validation process.

Outcome 3

Implement primary industry management practices in response to information technology results.

Performance criteria

- 3.1 Display information in a way that enables decisions about the primary industry management practice to be made effectively.
 - Range information display types may include but are not limited to geographically, as charts or graphs, in tabular form; digitally as interactive dashboards, or static displays, or in print.
- 3.2 Interpret information in terms of the current condition of the primary industry and compare to historical trend information.
- 3.3 Document and communicate decisions for the management of primary industry based on the interpretation of the information.
- 3.4 Implement and review management practices in response to the information.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2018	N/A

Consent and Moderation Requirements (CMR) reference	0052	
This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.		

Comments on this unit standard

Please contact the Primary Industry Training Organisation <u>standards@primaryito.ac.nz</u> if you wish to suggest changes to the content of this unit standard.