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| Title | Use problem solving techniques and critical thinking to make informed decisions about digital solutions | | |
| Level | 2 | Credits | 5 |

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| Purpose | <p>People credited with this unit standard are able to use problem solving techniques and critical thinking to make informed decisions about digital solutions.</p> <p>This unit standard has been developed primarily for assessment as an option within programmes leading to the New Zealand Certificate in Computing (Foundation User) (Level 2) [Ref: 4132].</p> |
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| Classification | Computing > Generic Computing |
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| Available grade | Achieved |
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Guidance Information

- Assessment, where applicable, will be conducted in and for the context of a real or realistic situation and/or setting, and be relevant to current and/or emerging practice. The assessor may gather evidence over time from a range of scenarios rather than using one assessment where the learner has to demonstrate all of the required skills. The assessment context for this unit standard must be suitable to meet the criteria for level 2 in the NZQF Level Descriptors, which are available by searching for “level descriptors” at www.nzqa.govt.nz.
- Scenario, data files and/or unformatted text may be provided to the learner in a brief, either as part of the learner’s employment (in the case of workplace assessment) or in response to stakeholder specifications. A brief is a clear description of both the desirable outcomes sought and the constraints to be met by the solution.
- Definitions**

Critical factors are those factors important in the decision-making process, such as end-user needs and resources required, and clarify what is essential for the solution to be fit for purpose.

Critical thinking refers to clear, rational thinking, to make reasoned judgements that are logical and well thought out. It may involve challenging the basis of assumptions and perceptions (bias).

Digital solutions may refer to hardware, software, and/or a combination.

Success criteria are those measurable terms essential for the solution to the problem to be able to be judged as fit for purpose, such as major functions, performance levels.

- 4 Legislation relevant to this unit standard may include but is not limited to the:
Copyright Act 1994
Harmful Digital Communications Act 2015
Health and Safety at Work Act 2015
Privacy Act 2020
and any subsequent amendments.
Current legislation and regulations can be accessed at <http://legislation.govt.nz>.
- 5 Reference
ACC5637 Guidelines for Using Computers - Preventing and managing discomfort, pain and injury. Accident Compensation Corporation - Department of Labour, 2010; available from Worksafe New Zealand, at <https://www.worksafe.govt.nz/topic-and-industry/work-related-health/ergonomics/safely-using-computers-at-work/>.

Outcomes and performance criteria

Outcome 1

Use problem solving techniques and critical thinking to make informed decisions about digital solutions.

Performance criteria

- 1.1 The problem(s) is identified and defined in terms of key issues involved in the given scenario(s).
- 1.2 Critical thinking, problem solving, and decision-making techniques are used to investigate and describe the problem and possible causes.
- 1.3 Critical factors for the solution to the problem, and success criteria are identified in the analysis.
- 1.4 Informed decisions are made to identify potential digital solutions for the problem.

Range includes strengths, weaknesses, potential risks.
- 1.5 A digital solution to the problem(s) is proposed and justified.
- 1.6 Expected outcomes of applying the digital solution to the problem(s) is described.

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| Planned review date | 31 December 2026 |
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Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
|--------------|---------|-------------|--------------------------|
| Registration | 1 | 26 May 2022 | N/A |

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| Consent and Moderation Requirements (CMR) reference | 0099 |
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Toi Mai Workforce Development Council qualifications@toimai.nz if you wish to suggest changes to the content of this unit standard.