

Framework for Evaluation of Assistive Technology

What information will I gain from the Framework for Evaluation of Assistive Technology?

The Framework for Evaluation of Assistive Technology (FEAT) is a decision-making tool that aims to support allied health professionals or other assistive technology advisors to consider potential assistive technology or other options that may be used for cognitive support following brain injury.

The FEAT has nine domains (see Figure 1) to help consider and respond to questions about a product, allowing for comparison to inform decision making before selecting the final product for trial.

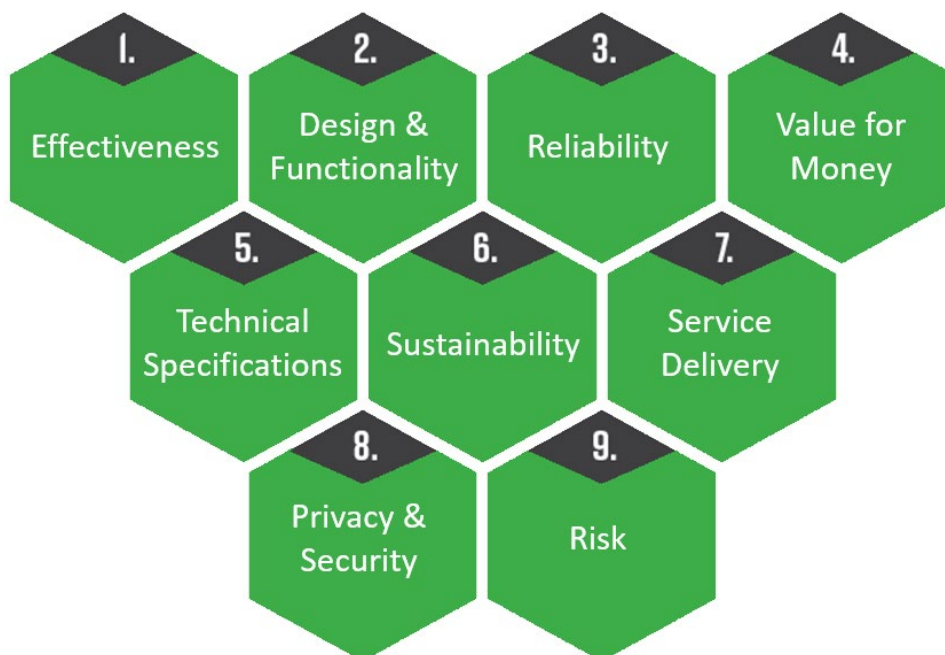


Figure 1: The nine FEAT domains.

Table 1 provides definitions of each of the nine domains of the FEAT.

Table 1: The FEAT domain definitions.¹

Domain	Definition
1. Effectiveness	The extent to which the functioning of the technology improves the user's living situation, as evaluated by the practitioner, and as perceived by the user, including whether it enhances functional capacity and/or independence, improves safety and/or enables participation in meaningful activities.
2. Design & Functionality	The ease of learning to set up, operate and continue to use the technology through its functions and controls, together with the physical design, aesthetics, interface, and capacity for personalisation.
3. Reliability	The extent to which the technology operates with repeatable and predictable levels of accuracy under all conditions of reasonable use over an extended period.
4. Value for Money	Whether the investment of money, time, or other resources to purchase, use, maintain and service the technology over time represents good value for money.
5. Technical Specifications	The key technical specifications of the technology and how compatible it is with other technologies on the market.
6. Sustainability	The currency of the technology and the sustainability of the technology over time (including operating system and network).
7. Service Delivery	The quality, timeliness, expertise and reliability of the professional services or technology suppliers in providing customer support, repairs, and servicing.
8. Privacy & Security	The usage, privacy, security, and storage of data collected through regular use of the technology. Consider also regulatory and legal compliance.
9. Risk	The likelihood of device malfunction relative to the level of consequence to the user and/or their supporters.

¹ <https://www.resna.org/sites/default/files/conference/2020/GAATO/144Layton.html>

Up to four different products can be considered and compared at one time. The FEAT enables short-listing of those assistive technology solutions deemed appropriate in supporting a person's cognitive function in their everyday activities, based on the person's identified goals and future support needs.¹

The development of the FEAT was informed by research comprising of an international literature scoping review, including both peer reviewed and grey literature, and product and website reviews to understand the current assistive technology market. Rigorous testing and consensus work with key user groups – including both people with brain injury, as well as allied health professionals working with them – was also integral to the Framework's development.

How long does it take to administer the FEAT?

The FEAT can take anywhere from 15-45 minutes to complete, depending on the number of products considered, the level of access to information available on the products being reviewed, and the individual goals and needs of the AT user.

How do I report on or score the FEAT?

The FEAT is available as a fillable Excel spreadsheet. The spreadsheet contains in-built scoring which converts data obtained from question responses ('yes', 'no', 'don't know' and 'not applicable') into product rankings across the nine Framework domains. For each item, you can document comments and notes using free text, to keep track of information specific to a particular item in the Framework. See Figure 2 for an applied example of two technologies using the FEAT Excel spreadsheet.

¹ <https://www.resna.org/sites/default/files/conference/2020/GAATO/144Layton.html>

Assistive Technology (AT): Summary				
		Smart lighting		Tiimo App
1. Effectiveness	!	60%	✗	40%
2. Design & Functionality	✓	93%	✓	86%
3. Reliability	!	71%	✓	86%
4. Value for Money	✓	83%	✗	33%
5. Technical Specifications	✓	100%	✓	100%
6. Sustainability	✓	100%	✓	83%
7. Service Delivery	✓	100%	✓	89%
8. Privacy & Security	✓	100%	✓	86%
9. Risk	!	75%	✗	50%
Total	✓	89%	!	76%
Rank Order (Highest to Lowest)	▶	1	▶	2

Figure 2: Applied example of two technologies using the FEAT Excel spreadsheet.

How do I get more information on, or access to, the FEAT?

The FEAT is free to use. To access, download and use the FEAT, you need to fill out a survey. The survey has 10 questions and will take you 5 minutes to fill out. [Select here to start the survey](#). You will be required to complete a brief survey and agree to its 'terms of use'.



For further information, please contact:

Associate Professor Libby Callaway
T: +61 421 356 359
E: libby.callaway@monash.edu

School of Primary and Allied Health Care
Rehabilitation Ageing and Independent Living Research Centre
Faculty of Medicine, Nursing and Health Sciences
Monash University, Peninsula Campus
47-49 Moorooduc Hwy
Frankston VIC 3199