Creating a Business Case
TECHNOLOGY IN AGED CARE

This evidence theme on creating a business case is a summary of one of the key topics identified by a literature review on testing frameworks for technology in aged care.

Key points

- The technology needs assessment provides valuable information that can be used to create a business case.
- A business case is a documented argument for purchasing a technology. It outlines the pros and cons associated with the various options before providing a final recommendation.
- The business case should use the language of values—the things people would like to see reflected in the technology or improved or maintained by it. Values can be determined from the needs of the different stakeholder groups which the project team documented during the needs assessment.
- Values can be linked to specific design and technical features that will support those values, (e.g., dignity, privacy, fun). These become the requirements that the vendor/developer works with to deliver a product that is fit for purpose.

Background

The information gained from a careful technology needs assessment can be used to write a business case for purchasing technology. A business case is an important part of project documentation that helps with decision-making, justifies expenditure, and protects the project team if anything goes wrong. Business cases precede and assist with the development of an implementation plan.

A good business case:

- Outlines the problem and argues why the organisation should invest time and resources in pursuing a solution via a specially funded project outside of normal day-to-day operations.
- Helps decision-makers understand the available options, their costs, and the anticipated benefits for stakeholders. This might include the risks associated with implementing each option as well as not doing so.
- Shows decision-makers that each option is supported by evidence in the form of data, statistics, and/or evidence from needs assessment research into vendors or technology developers and their products. [1]

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The role of values

Technologies generate value for people and organisations. As such, they are not value-neutral. The values of the people and organisations who have an interest in a product and how it will meet their needs (i.e., 'stakeholders') should therefore have a role in shaping and justifying purchase or design decisions. [2]

Values are what people hold as important in their lives. [2] They might be ideals or interests that they aspire to or have already. [3] In relation to technology, values are the things people would like to see reflected in the product or improved or maintained by it. [4] These values might encompass:

- Dignity
- Privacy
- Security
- Safety
- Usability
- Ease of access
- Personalisation
- Fun
- Social interaction. [2]

Organisational values may include:

- Quality of care
- Fiscal responsibility
- Efficiency
- Reputation.

The quality of communication with stakeholders is an important factor in technology acceptance. [5] Communication that uses the language of values which matter to stakeholders can be very persuasive in selling the benefits of a proposed technology. [6] As technology developers will bring their own set of values to a design project, value-based communication may also serve well in specifying a product's technical requirements. [2]

Whose values?

The people who will use or be affected by the technology should have their values understood and accounted for in the business case. This will support good decision-making but also build support for future testing and implementation phases. [4] It may be easiest to focus on staff, aged care recipients with relatively high physical and/or cognitive functioning, and people who make decisions or form policy. However, if harder-to-reach groups are expected to use the product, it will be important to invest effort in including them for optimal product design, implementation, and use. [7] This might include culturally diverse, frail, or cognitively impaired people and their carers. [5, 8]

When there are many stakeholders involved in a decision, values may not always align. This can occur when an option supports the goals and values of one group at the expense of another. [2] Conflicting values can lead to purchases that are not fit for purpose or which have unintended consequences. For example, a service provider focused on the values of efficiency and economy might value a robotic solution that replaces manual direct care tasks

usually performed by a personal care worker. If aged care residents value the human contact and interactions they have with their personal care workers, this change may have a negative impact on their health and wellbeing.

Identifying values

At the core of the business case is the 'value proposition' which details the values of the organisation and its stakeholders [9] and describes how a product will support these values. [6, 9] Although this process establishes the entire project as stakeholder-focused and value-driven, in practice this work is often overlooked. [9] Stakeholder values may have been explicitly sought during the technology needs assessment stage. If the values were not intentionally explored, the needs uncovered during this phase may be translated into values. For example, the need expressed as 'It's important to me that my personal information stays confidential' might be translated into the values 'personal privacy and security'.

If it becomes clear in this process that there are conflicting values at play, it may be worthwhile bringing stakeholders together to discuss the problem to try to reach a consensus or middle ground. The groups might together rank the different value-driven priorities. This process might also help different groups within an organisation become more aware of each other's problems and how they affect processes. [9] It can also establish good communication between different groups at an early stage which will help when it comes time to implement the product. Ideally, solutions will align with high-level commonly held values such as 'provide a high standard of care'. [10]

Translating values into design requirements

From an understanding of values, it becomes possible to develop a prescriptive list of requirements or goals for the product. These can help specify to vendors/developers the overall expected value of the product, what it should do, and the kind of user experience it should provide. [11] For example, if 'security' is the value most highly sought by stakeholders, vendors or developers know they need to conduct research into the optimal security features that will meet regulatory requirements and design standards. [9]

Other elements of the business case

In addition to linking values to specific products requirements, the business case can include other important information obtained from the needs assessment. Decision-makers may find the following helpful:

- A list of strategic objectives along with the measures that will determine if they are being met
- Details of demonstrated benefits, disadvantages, major risks, and costs (direct, associated, and ongoing) associated with each option
- A statement of the preferred option with accompanying reasons based on the evidence provided
- A statement of what steps are required to procure the technology

- A project strategy with key milestones and deliverables
- A cost-benefit analysis that highlights where and how saving and benefits will be made and a projected timeline for return on investment
- Details on project management and control processes including who will have oversight of the project and who will manage it (governance), how risks to the project will be managed, and mechanisms for monitoring and reporting progress. [12]

Conclusion

A business case for a technology investment is an opportunity to explain to decision-makers how a product will align with the values of the people and organisations who have an interest or claim in it. It also ensures a technology purchase project is stakeholder-focused and value-driven. The foundation for the business case is the preceding technology needs assessment. The case itself will inform a values-derived list of design and technical requirements for communicating user needs to developers (if designing new products) or vendors.

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