

## Feasibility Investigation - Bedrock integration into BLVNZ Alexa Skill Project: Final Report

### **User Testing Progress:**

Over the past 30 days, we've run early testing of the updated BLVNZ Library Alexa skill. The aim is simple: help people find a book and start listening faster by letting them talk naturally (e.g., "Find the next book in the series and start it").

### **What's working well:**

- Testers are finding and starting titles with fewer steps.
- The skill now handles follow-up requests about series and can list books in order.
- Users can search with more parameters and speak naturally without Alexa becoming confused
- Real user reactions:
  - "My reflection on the improved BLVNZ Alexa library functionality is that it is much more intuitive and quicker. Being able to speak instructions or request a title or author search is much more efficient... this will enable members to access the library far easier than having to follow a series of prompts." - **Sarah** (used the BLVNZ skill years ago; does not use Alexa currently, returning user)
  - "It was really interesting testing Alexa. I was surprised that advanced AI can understand and find what I'm looking for based on just the author's description or the names of characters I remember, even without knowing the title or author." - **Jamie** (new to the BLVNZ skill; regular Alexa user)
  - 'I asked it to find a title, and that worked, but followed up with asking for other books in the series and it listed them all in order, which was pretty cool.' - **Mike** (new to the BLVNZ skill; regular Alexa user)

### **What needs improvement:**

- Some responses can feel a little slow after follow-up questions (e.g., "What's next in the series?"). We're exploring ways to speed this up.

- When a request has several parts, the skill sometimes asks extra clarifying questions. We'll tighten these to keep things moving.

#### **Early indicators (to be confirmed):**

- Average number of voice prompts before listening begins: **3**
- First-try success rate: **60%** - success is far higher if the reader knows what title they want and if they are aware if it's in the library catalogue or not.

#### **What we're changing next:**

- Speeding up responses by trailing different AI models and settings.
- Adding in additional metadata, such as the title index, which will allow for a book to be read from a specific chapter, for instance 'start Harry Potter book 2 at chapter number 3'
- Adding in additional content types available in the old skill, such as Magazines and Newspapers.
- Adding in a short tutorial for first time users of the skill to get the best results when interacting with the AI.

#### **Next steps:**

- Re-check improvements against the current baseline.

After testing, participants told us the new natural-language feature made Alexa feel more useful and engaging, renewing their interest and motivating them to start using Alexa again - or more often than before. Re-engaging with our Alexa users is another significant benefit of this project; we are confident that it will lead to higher than anticipated levels of adoption of the Alexa service.