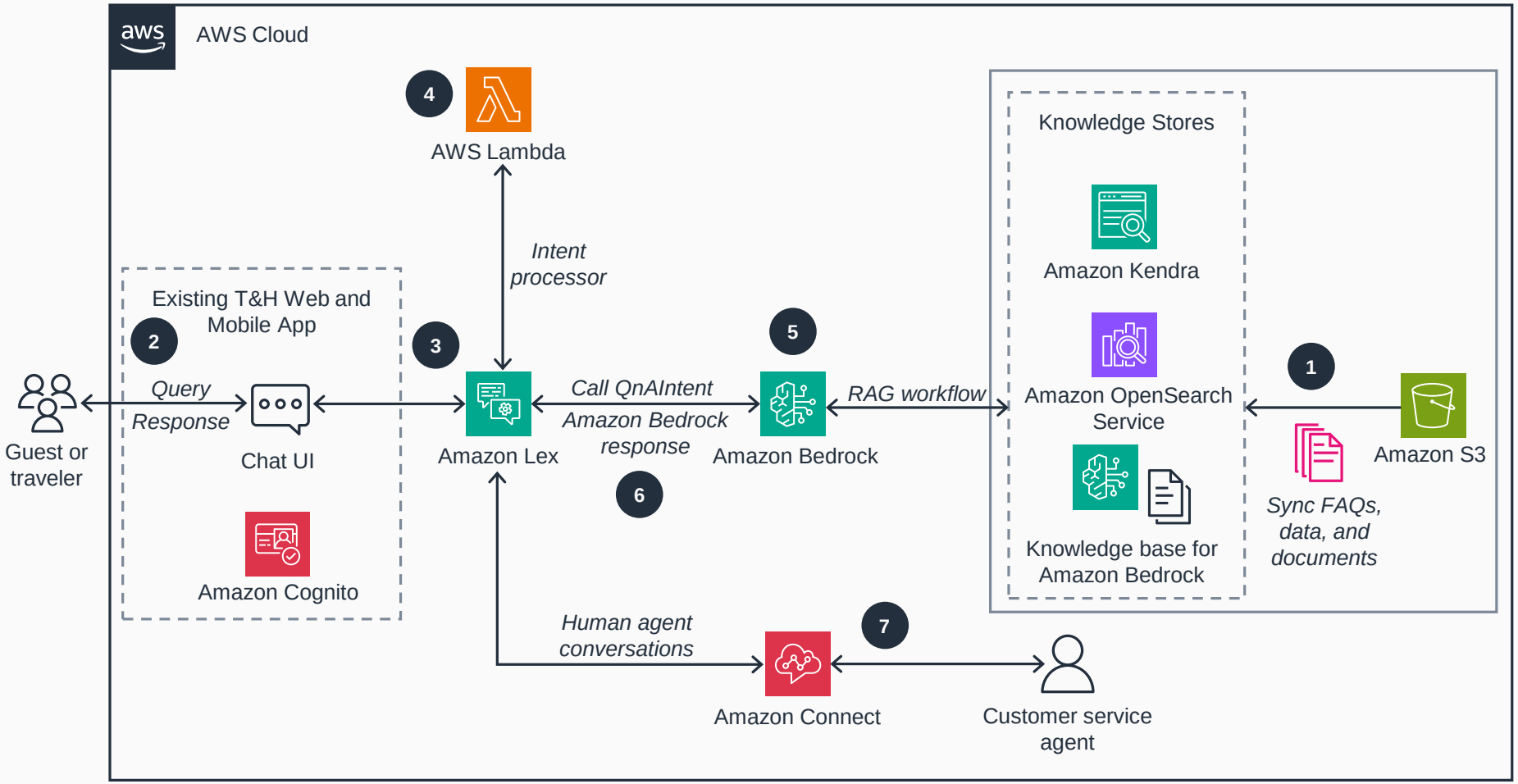
Guidance for Enhancing the Customer Experience in Travel & Hospitality Using Amazon Bedrock

This architecture diagram demonstrates how organizations in the T&H industry can enhance their customer service experience and improve operational efficiency by integrating generative AI into their chat applications using Amazon Bedrock. The chat application can handle common inquiries, freeing agents to handle more complex issues.



1. T&H companies index FAQs, data, and documents stored on **Amazon Simple Storage Service (Amazon S3)** using **Amazon Kendra**, **Amazon OpenSearch Service**, or **Amazon Bedrock** knowledge base to build vector knowledge stores for enterprise data.

2. Use **Amazon Cognito** or your custom authentication service to authenticate the guest or traveler. Initiate the conversation using the chat user interface (UI) from your existing web and mobile app.

3. **Amazon Lex** identifies and understands the intent of the guest or traveler query to process it further.

4. If intent is available, **Amazon Lex** invokes an **AWS Lambda** function to process the guest or traveler intent.

5. If intent is not identifiable, **Amazon Lex** calls pre-built QnAIntent, which leverages FMs offered on **Amazon Bedrock** to answer guest or traveler queries from the enterprise knowledge store using a retrieval augmented generation (RAG) workflow.

6. **Amazon Bedrock** FMs return the response from the knowledge store in natural language, and **Amazon Lex** serves it to the guest or traveler through the chat UI.

7. If the guest or traveler asks for a customer support representative at any point, then **Amazon Lex** identifies the intent and passes the conversation to a human agent using an **Amazon Connect** chat.

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AWS Reference Architecture