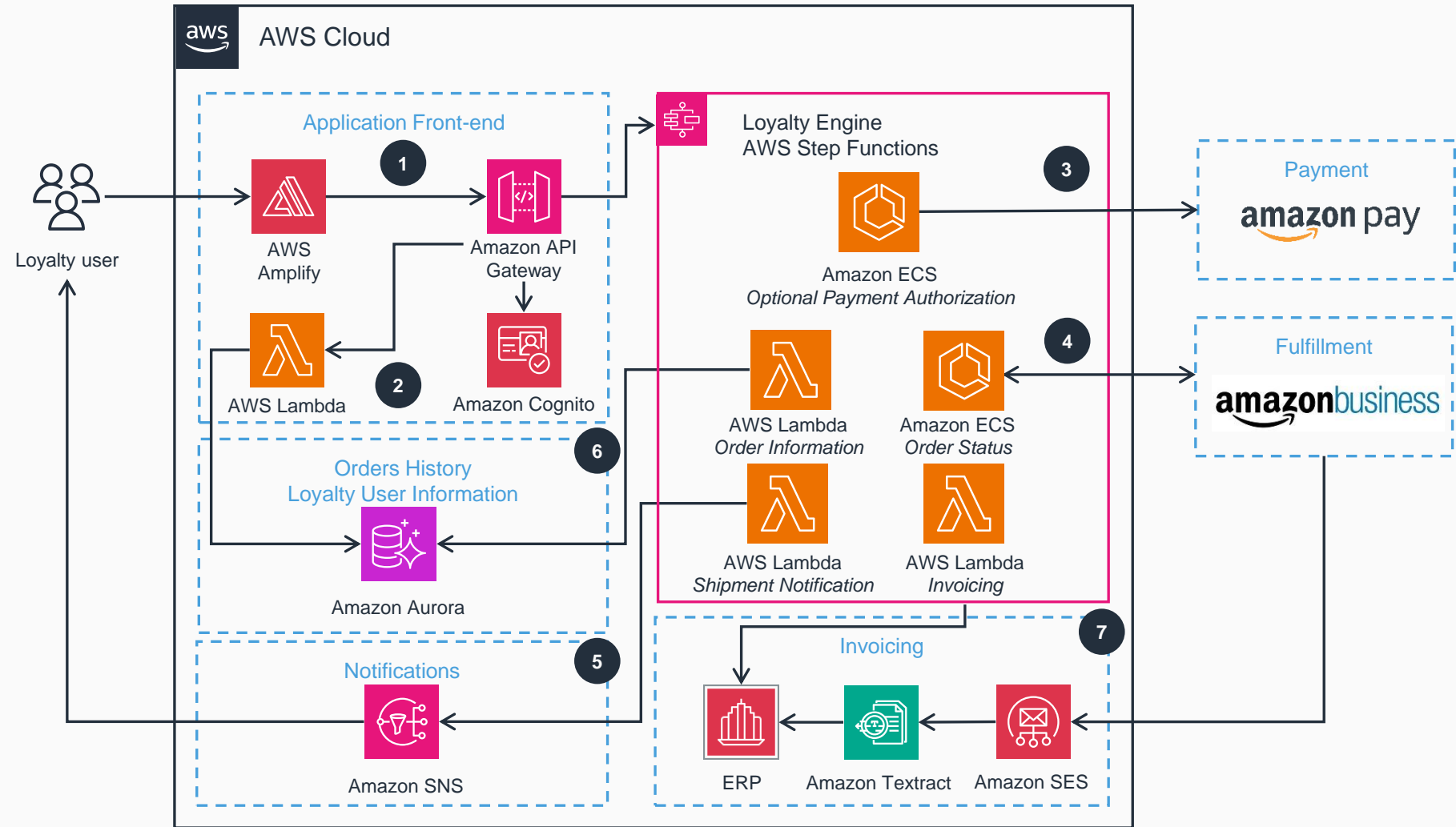


# Guidance for Loyalty Reward Redemption with Amazon Business

This architecture diagram shows how loyalty users can access the portal as defined by the catalog manager to redeem products using points and money. Amazon Business then delivers these products directly to users.



1 With a web browser or mobile application, the loyalty user browses the products catalog hosted on **AWS Amplify**, authenticating with **Amazon Cognito**.

2 The loyalty user chooses a product and uses points earned through the loyalty program. **Amazon Aurora** stores points, and **Amazon API Gateway** and **AWS Lambda** retrieve points.

3 Invoke the Loyalty Engine **AWS Step Functions** workflow if the loyalty user chooses to pay an optional fee to redeem points. Authorize the payment using **Amazon Elastic Container Service (Amazon ECS)** and third-party payment services such as **Amazon Pay**.

4 The loyalty user orders the product using **Amazon ECS** and **Amazon Business** direct ordering APIs. The loyalty user then waits for the order and shipment confirmation from **Amazon Business** through the **Amazon ECS Order Status**. Generate an invoice for payment calling **Invoicing Lambda**.

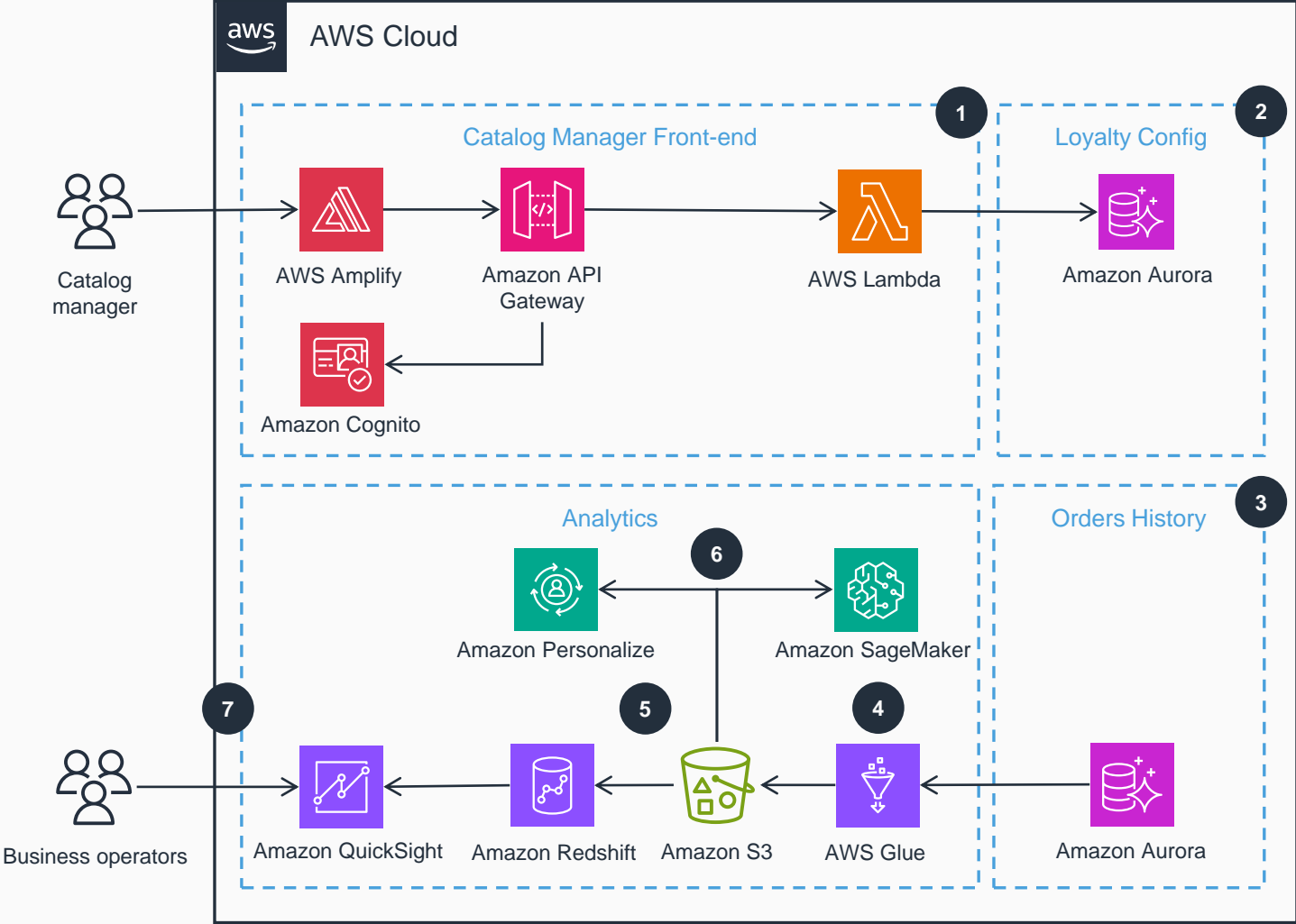
5 Invoke **Amazon Simple Notification Service (Amazon SNS)** through **Shipment Notification Lambda** to notify the loyalty user about shipment status.

6 Store order information into **Amazon Aurora** using **Order Information Lambda**.

7 Receive the invoice from **Amazon Business** through **Amazon Simple Email Service (Amazon SES)**, and extract relevant data to store in Enterprise Resource Planning (ERP) software using **Amazon Textract**.

# Guidance for Loyalty Reward Redemption with Amazon Business

This architecture diagram shows how the catalog manager configures the experience and appearance of the loyalty portal and how the business operator monitors loyalty program performance.



- 1 Access the catalog manager application hosted on **Amplify** to configure the loyalty experience, authenticating with **Amazon Cognito**.
- 2 Configure the loyalty experience using **API Gateway** and **Lambda**. Store all configuration information on **Amazon Aurora**, including price and points conversion factor, customer brand (such as colors and logo), integration with external payment and integration systems (such as API endpoints and ERP), tiers of users, and marketing campaigns.
- 3 Store loyalty orders on **Aurora** to run analytics workloads.
- 4 Perform analytics using data exported to **Amazon Simple Storage Service (Amazon S3)** through one or more **AWS Glue** jobs.
- 5 Load **Amazon Redshift** tables from **Amazon S3**.
- 6 Perform personalization of products displayed in the loyalty portal using **Amazon Personalize**. Forecast loyalty inventory with a custom forecast model on **Amazon SageMaker** and determine trends in product popularity, intercepting potential out-of-stock issues.
- 7 Report loyalty performance in **Amazon QuickSight** to business users allowing them to know more about their customer base, most loved products, seasonality trends, and more.

