

Product features	Curent state	GAP	Future state	Action plan
Multilingual Support	Good for major languages and standard accents	Struggles with regional accents	High accuracy for all accents, dialects, and noisy environments	<ul style="list-style-type: none"> • Expand NLP models to include regional dialects • Support real-time language switching within conversations • Beta test in multilingual markets • Collaborate with local linguists
Voice Recognition	Accuracy - 95%	Poor voice recognition in noisy environments	Accuracy - 99.9%	<ul style="list-style-type: none"> • Enhance voice profile storage with deeper personalization • Enable contextual history per user • Sync personalization across all Alexa-enabled devices securely
Privacy and Security	User data anonymized but concerns remain	Transparent data usage policies	End-to-end encrypted, user-controlled data	<ul style="list-style-type: none"> • Launch "Privacy Dashboard" for Alexa app • Introduce customizable voice data retention settings • Improve mic usage indicators (visual/audio cues) • Push education campaigns on data use
Offline Capabilities	Alexa is fully cloud-dependent; fails without internet.	Cannot perform basic commands (e.g., turning on lights) offline.	Alexa can execute essential commands locally even without internet.	<ul style="list-style-type: none"> • Use TinyML models for local intent recognition • Optimize firmware for hybrid execution • Prioritize critical offline tasks
Portable Form Factor	Require wall power; no first-party battery-powered option.	Limits outdoor or temporary deployments	Launch a battery-powered device (10 hr run time)	<ul style="list-style-type: none"> • Develop smaller battery-powered device with Wi-Fi hotspot auto-connect • Launch integration into wearables or earbuds • Optimize Alexa app with more hands-free offline commands