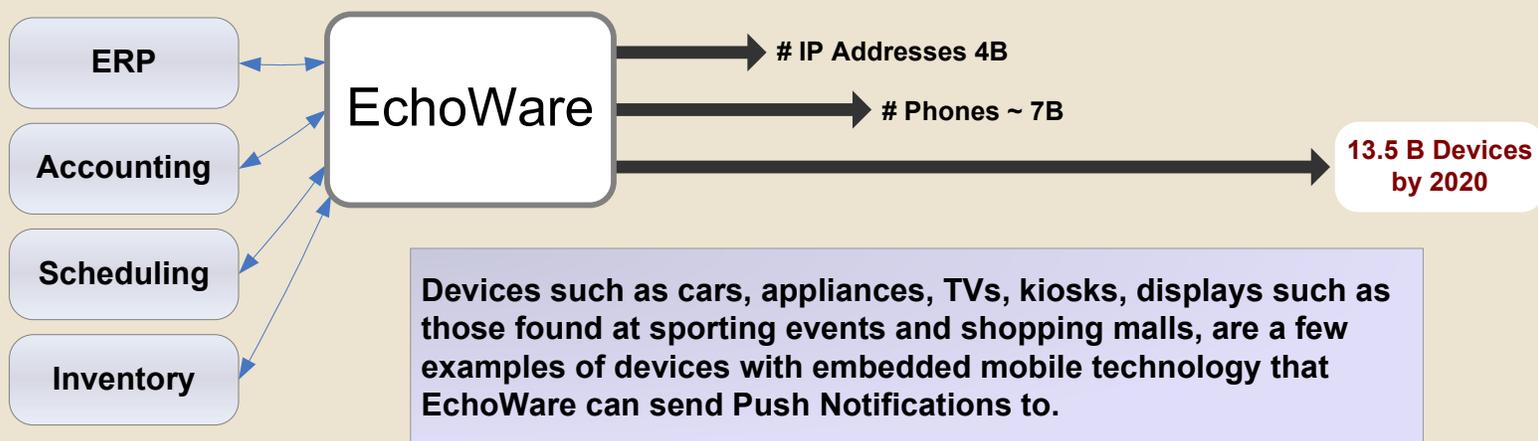


EchoWare Push Notification

With ADAN *Anomaly Detection and Notification System

Push Notification is a set of technologies that allow applications to send notifications directly to mobile devices. This can be used to send messages, media files such as voice and video, commands and application-sensitive events for mobile applications to respond to.

Push Notification uses a mobile device's internal Device ID. Push Notification does not require a SIM card, nor an IP address. This means that non-phone mobile devices can receive information from EchoWare's Agent-based Intelligent system for notifications and commands. Push Notification will be included in the next release of EchoWare.



Case Study 1 – Geo Fencing Alert System

EchoWare has been used to push notifications during an emergency to students with mobile devices registered to receive push notifications. The Push notification included a command to start broadcasting the GPS position 1x/minute. When the mobile device's GPS location crosses a virtual Geo-Fence, the students location and status was updated to school and a push notification was sent to parents registered devices, which could be their car, indicating that the student is located inside a 'safe' zone. A web application dashboard showed everyone's current position on a map in real-time.

Case Study 2 – Mall Sign Management

EchoWare has been used to push notifications to pre-registered sets of Mall Signs with updated personalized ads and messages based on mall/location profiles. End-users can update profiles to give hints on preferred content to be displayed and frequencies of content updates. Devices are registered using their Device ID to respond to direct commands and media content pushed to them. Some display devices included sensors that would report back status if a crowd size or time viewing at the screen changed, to provide a more dynamic experience for viewers. ADAN Anomaly Detection would respond with notifications immediately to administrators and stake-holders, if a display went offline, or if sensors indicated a rapid drop-off or sudden increase in viewers.

See Additional Documents in this Series:

[1\) Echoware Agents, AI and Intelligent Systems](#)

[2\) Echoware IoT Platform](#)

[3\) EchoWare and Push Notification](#)