Date: February 1, 2024

Subject: Data Off The Grid

Poor network connection is the end of the world as we know it. In industries powered by data, preferably the latest data, having no network connection is a major setback. It cripples an organization's ability to make data-powered decisions, harms data integrity, and limits your ability to take decisive action with the latest information.

With technicians in the field all over the world, a constant accumulation of data is the norm. Short of enhancing network connectivity all over the globe, there's little we can do about underdeveloped areas. We can place an emphasis on offline usage, making that a priority in the processes used for our businesses.

This includes applications that enable and prioritize:

- Caching allows for easy access to previously retrieved and computed data. This is important for easy access to data without putting strain on a network and when the user has no network connection. Caching can have many benefits, including enhancing the app's performance by reading cached data, significantly faster than disc memory.
- On-device execution saves data to your cache for the offline user's usage and then updates it when connected to a network. When multiple users are assigned to the same task, any manner of worklog from editing to entering data, offline data input can come at a time delay or cause disruptions to the online users. This requires complex conflict resolution between different versions of data marked under the same task. Ensure that offline compatibility doesn't come at the cost of your data's integrity and standardization across both online and offline users.

Because of mobile accessibility, offline needs are higher than ever. The disconnect between mobile applications and their native counterparts can be jarring to users. Progressive mobile applications (PWA) give users the accessibility and look of an app, plus the ease of jumping between mobile and local environments. Most PWAs were developed with both desktop and mobile in mind, ensuring that the user experience isn't disorienting when going between the two.

Data integrity, whether entering it online and offline, alleviates the headaches of discordant teams and processes. When you're constantly having to update, verify, and validate data, it makes for slow decision-making and even slower action. Fix your disconnected workflow, time delays, and old data with a PWA with offline use that doesn't break everything the second it's connected to a network.

When the difference between seconds and minutes means millions of dollars in profit, lost resources from rework or lost work, making your processes offline compatible seems like a no-brainer. Offline capability was a vital part of our PWA, Spearhead, which has now breezed through beta testing with its first client! Reach out if you'd like to learn more about transitioning to tools with offline capability to make crucial decisions with the latest intel.

Thank you for your continued support,
Incyte Energy Solutions