



Power worker communication, shift scheduling, and task management with apps in Microsoft Teams

Tailored solutions built
for manufacturing



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Streamline common frontline workflows using apps in Teams

Connect everyone in the flow of work with collaborative apps tailored for manufacturing. Apps in Teams help everyone better meet the demands associated with shift handoffs and task management by connecting them to the information, expertise, and tools they need to collaborate and get work done all in one place.

Scenario

- Facilitating a seamless shift handoff
 - Creating a unified space for frontline workers to share information and keep managers in the loop.

For this scenario

- Scenario vision
- Primary persona
- Scenario storyboard
- Solution design best practices
- Solution architecture



Manufacturing – Shift handover

Facilitating a seamless shift handoff



Scenario vision

Context



Plant worker (PW) Daniela works the morning shift at Contoso Manufacturing. She helps ensure that production lines are running as expected and on schedule.



Plant worker Babak works the shift after Daniela. Without a process for shift handoff, Babak doesn't know what Daniela did—or didn't—accomplish during her shift. He'll have to ask around or start tasks from scratch.



Plant manager Ray oversees all PWs at Contoso Manufacturing. He relies on passing in-person communication or one-off emails for PW status updates.

Current state

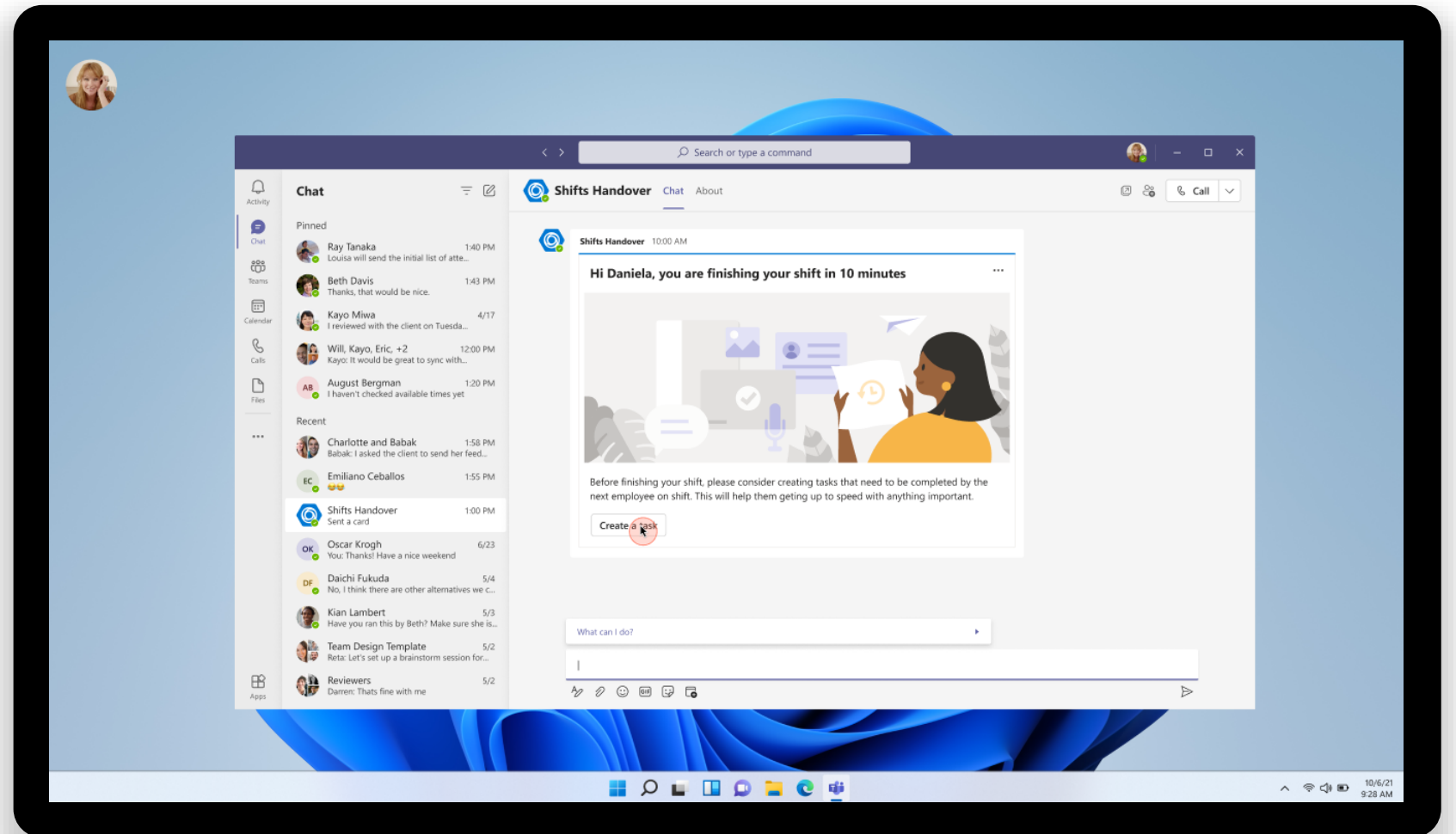
- ⚠️ **PW Daniela** doesn't know who is taking over after her shift, therefore she can't share important information, like which tasks still need to be completed, or alert them to a machine problem she uncovered.
- ⚠️ **PW Babak** must spend the first 30 minutes getting up to speed with everything that is going on with the production line.
- ⚠️ **PW Babak** discovers a problem with one of the machines that calls for urgent repair. He doesn't know if Daniela knew about this, or if she initiated any maintenance so he must halt the production line, putting Contoso Manufacturing behind schedule.
- ⚠️ **Plant manager Ray** doesn't have any digital notes from Daniela either. He wastes time trying to track down handwritten notes about the machine problem.

Future state

- ✅ **PW Daniela** receives a notification before her shift ends, telling her Babak is next on shift. The notification reminds her to add shift notes and assign tasks that still need to be completed.
- ✅ **PW Babak** receives a notification when his shift starts. In one view, he checks Daniela's shift notes, sees tasks assigned to him, and learns about a machine problem she uncovered.
- ✅ **PW Babak** picks up where Daniela left off solving the machine problem. Babak can quickly finish fixing the issue and note his actions in the task Daniela assigned to, all without disrupting production.
- ✅ **Plant manager Ray** checks in on all PW shift notes, task completion status, and reviews who is scheduled for the day all through Teams. He notices Daniela and Babak collaborated across shifts to solve a machine issue. Ray sends them both a "thank you" praise via group chat.

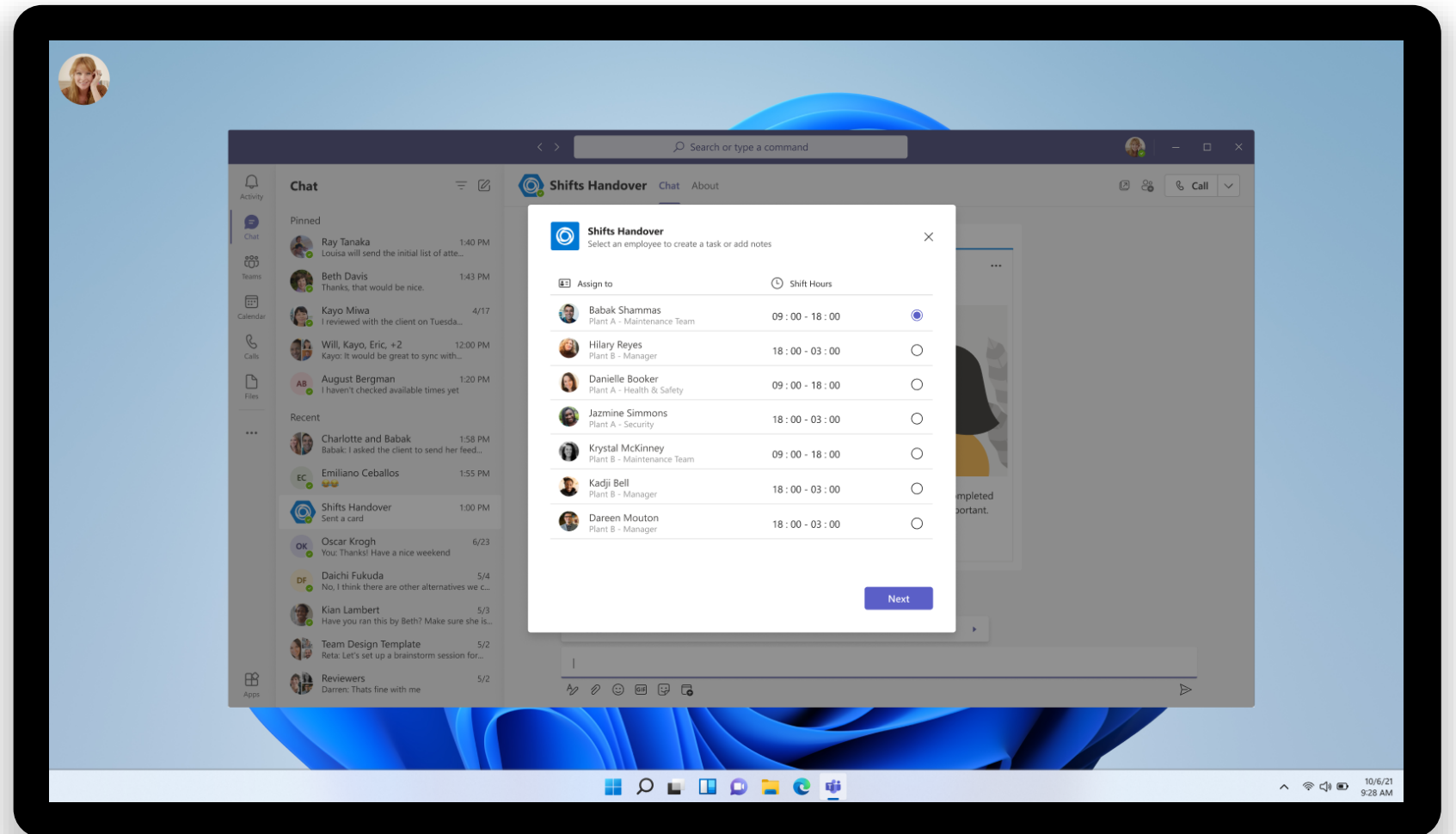
Manufacturing – Shift handover

Automate end-of-shift notifications for a smooth handoff



Manufacturing – Shift handover

Get an overview of who is scheduled for the day, their role, and shift hours to easily assign tasks to the right person



Manufacturing – Shift handover

Use a task template to help ensure plant workers have everything they need to get their work done

Shifts Handover
Select an employee to create a task or add notes

Create a task
Tasks have reminders, can be resolved or shared with others.

Add notes
Send simple notes to others without reminders.

Shifts Handover
Create a task

Title
Replace parts on Machine A - Line A

Assign to: Priority:

Due date
20/05/2022

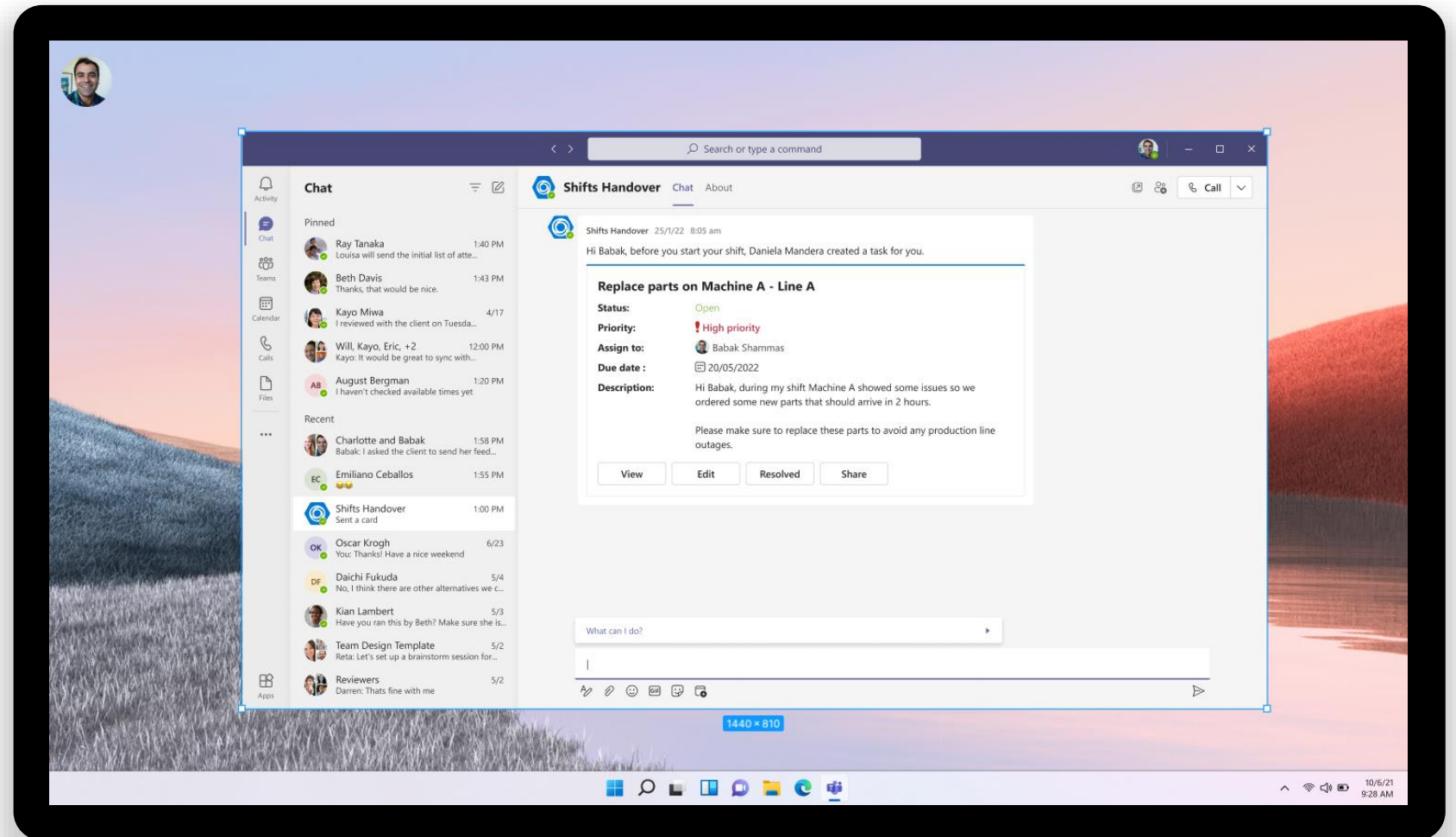
Description
Hi Babak, during my shift Machine A showed some issues so we ordered some new parts that should arrive in 2 hours.
Please make sure to replace these parts to avoid any production line outages.

Add document

Notify assignee

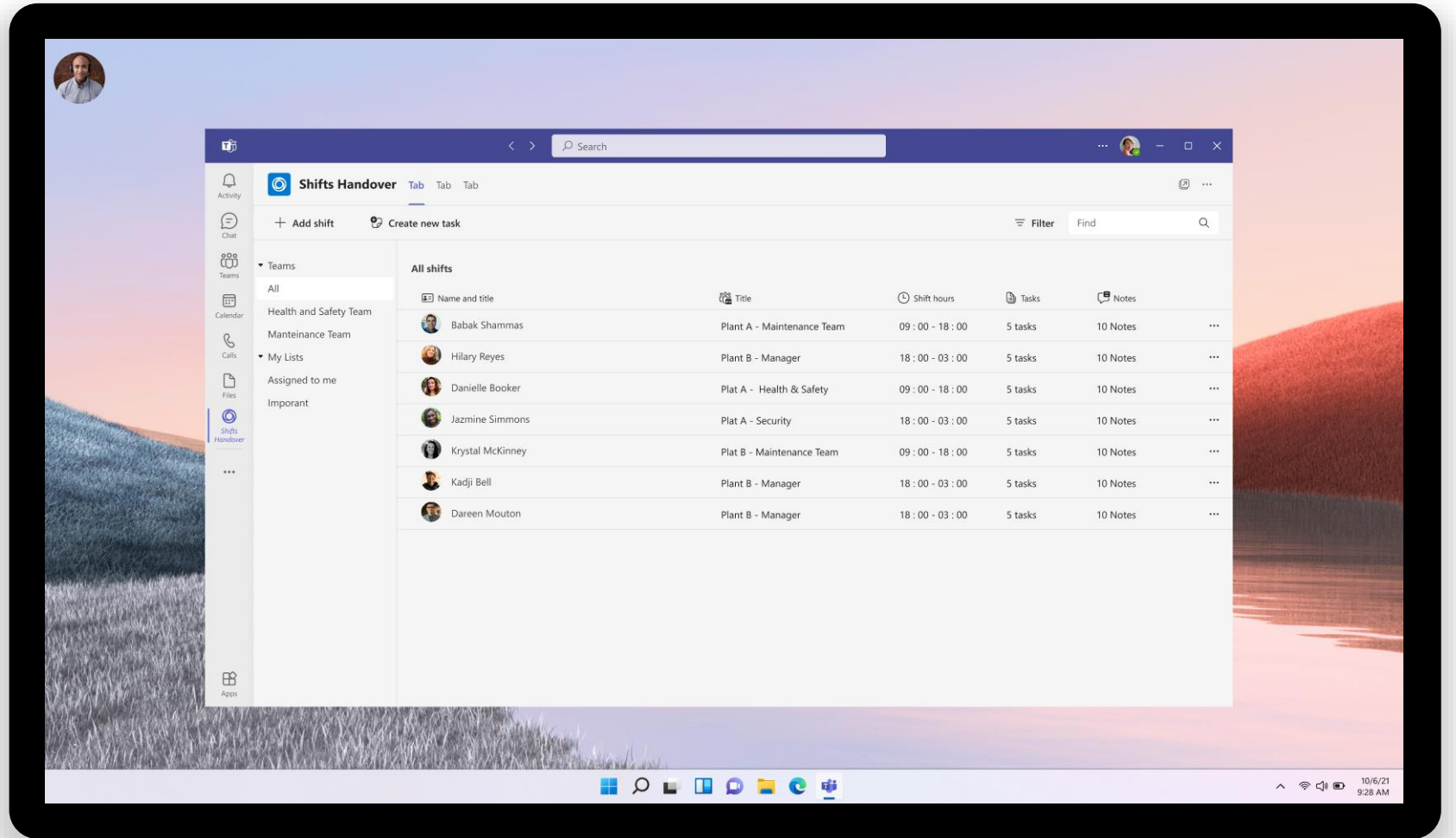
Manufacturing – Shift handover

Boost worker productivity by giving them an overview of assigned tasks before their shift starts



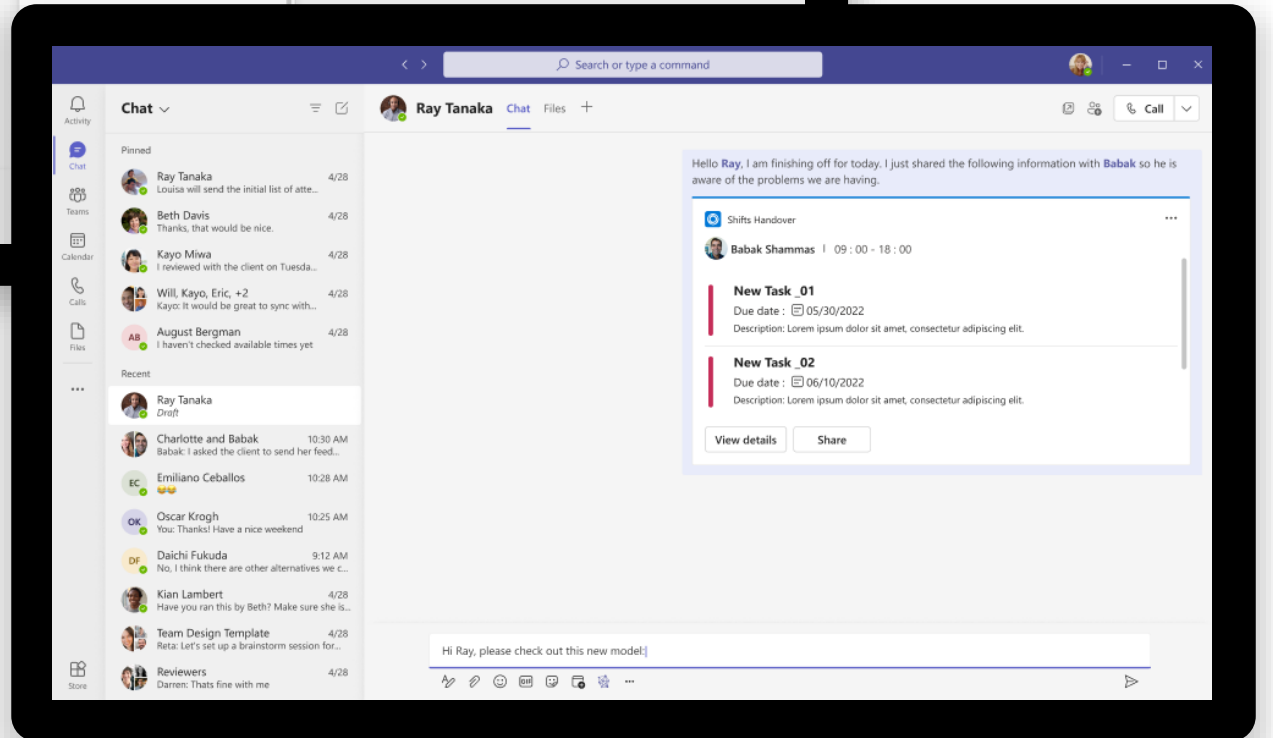
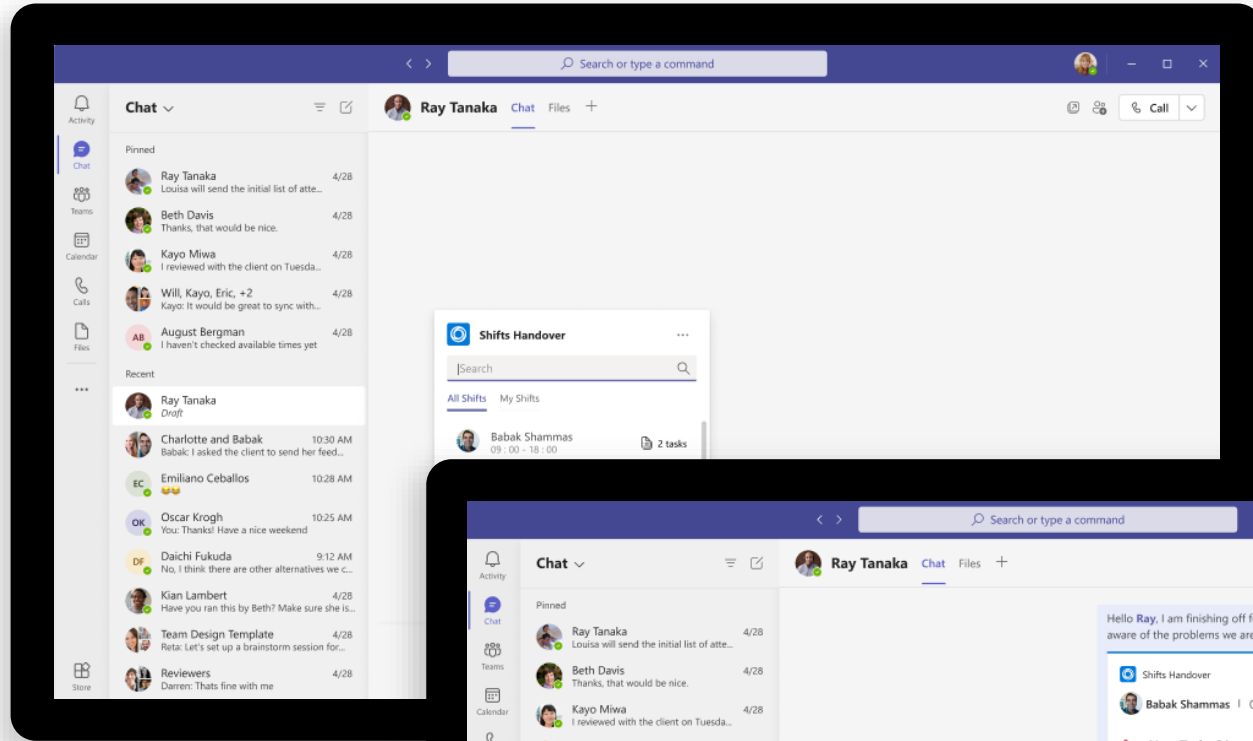
Manufacturing – Shift handover

Keep managers in the loop with a dashboard of all tasks assigned for the day



Manufacturing – Shift handover

Triage issues faster by connecting with experts right from a chat—including on the go via the mobile app



Solution highlights – best practices

Key solution design considerations



Platform extension points

- **Bots** send proactive notifications to plant workers using **Adaptive Cards**, this bot helps support card refreshes.
- **Shifts** app is a simple way to store shift details using out-of-the-box functionality.
- **Planner** is used to store tasks that needs to be completed by PWs.
- **Personal app** is used by plant mangers, giving them an overview of all information shared between PWs.
- **Message extension** is used to search and share shift information with others.

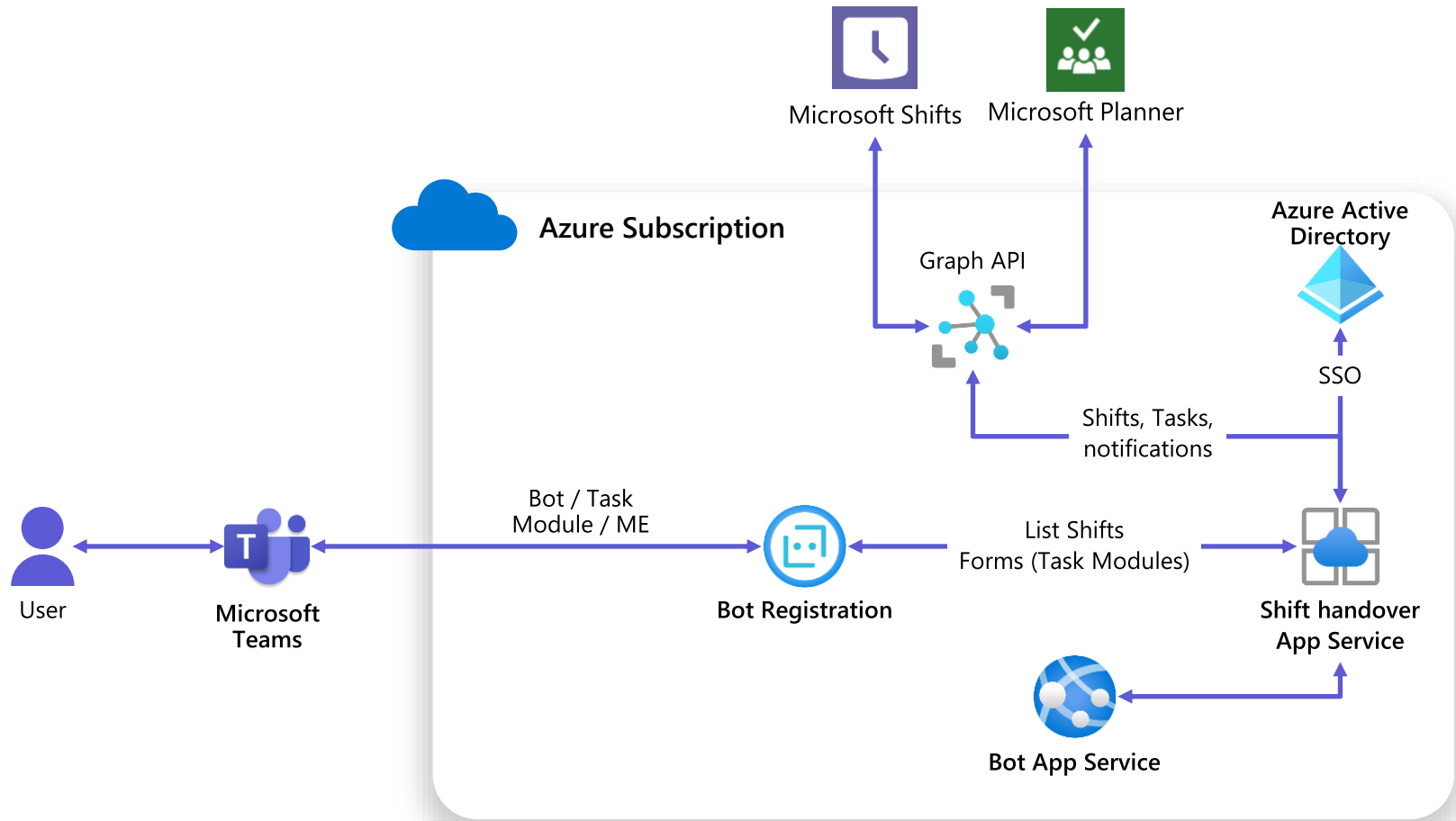
User experience

- **Card refreshes** update a single card's status rather than sending multiple cards for the same request, improving readability and streamlining the number of updates the user receives.
- **Proactive messages** are sent before PWs finish or start a shift.

Graph APIs

- **Send chat message** lets you send proactive message to users.
- **List shift** and **Get shift** allow you to get information about shifts.
- **Create planner task** enables you to create tasks.

Solution architecture



Thank you

