UNIPHI AT WORK

EASING SYDNEY CONGESTION

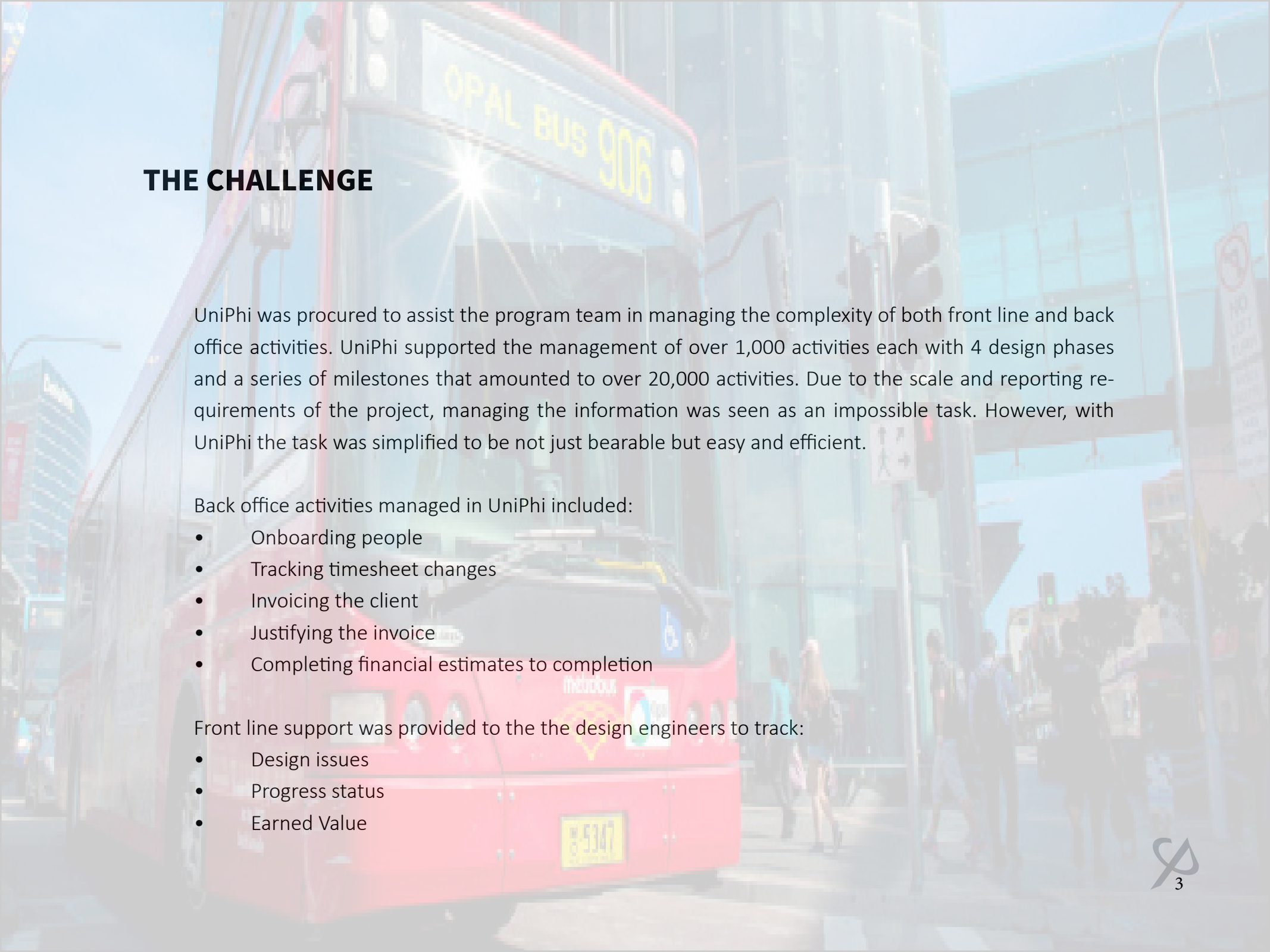
NSW GOVERNMENT

AECOM

BACKGROUND

To support Sydney's growing population, the Easing Sydney's Congestion Program Office is working towards delivering significant improvements to transform the state's roads, freight and maritime network. Key initiatives include the delivery of the M4 Smart Motorway, the Parramatta Congestion Improvement Program and accelerated Pinch Point and Clearways Programs. ESC has a project team of 300 people. 150 of those are design engineers, whilst the rest are sustainability, environment, project managers and support staff.

AECOM was awarded the role of "Consulting Partner for Easing Sydney's Congestion Program Office" in 2016 and this contract was extended in 2018 to run through to the end of 2020. In addition to this partnership, AECOM sub-contracted HKA to support the implementation of the project.



THE CHALLENGE

UniPhi was procured to assist the program team in managing the complexity of both front line and back office activities. UniPhi supported the management of over 1,000 activities each with 4 design phases and a series of milestones that amounted to over 20,000 activities. Due to the scale and reporting requirements of the project, managing the information was seen as an impossible task. However, with UniPhi the task was simplified to be not just bearable but easy and efficient.

Back office activities managed in UniPhi included:

- Onboarding people
- Tracking timesheet changes
- Invoicing the client
- Justifying the invoice
- Completing financial estimates to completion

Front line support was provided to the the design engineers to track:

- Design issues
- Progress status
- Earned Value

THE SOLUTION

Initially, UniPhi was onboarded to help the back-office manage the continuous stream of data. To do so, we started by importing all project data from individual systems into UniPhi, then reconciling and correcting it. UniPhi then fast tracked the roll out of its internal timesheet module and training to ESC's 300 staff members. Team members were then able to capture all timesheet data and changes into the system; streamlining the work of the back office staff in tracking, invoicing and resource management.

After solving the initial issue, UniPhi then incorporated the workflows designed by the engineers into the system. This facilitated 12 design leads and 6 discipline leads in allocating tasks via UniPhi to their teams. Design issue logs were maintained in the system allowing for full collaboration to resolve these logged issues and progress the standard tasks.

THE SOLUTION

Continued

UniPhi's seamless integration meant that resource plans for each stage of the project were able to be uploaded from their multiple external spreadsheets to UniPhi. Their milestones were updated in the system with the percentage complete. Each milestone could then be awarded an earned value percentage which would be incorporated into dynamic earned value reports at a stage (e.g. concept design), project (i.e. consolidated across all stages) and portfolio level (i.e. consolidated across the 6,000 project/stage combinations).

Post contract RFIs were managed by the design team in UniPhi during the delivery stage allowing for transparent reporting, resulting in response times reducing significantly.

Financial data was reconciled between Oracle system for AECOM and SAP system for RMS and integrated into UniPhi via our open APIs (which fed SAP via CSV upload). UniPhi then became the source of truth for project financial data for both AECOM and RMS.

THE SOLUTION

UniPhi as a Distrubted Data System

UniPhi was essentially used as the central data layer that tied together all data from the various project systems. This in turn, transformed that captured data into a centralized platform that could be analyzed and interpreted efficiently.

Data was captured from all the infield, project and cost managers, as well as external systems. Our open API and web interface was used to seamlessly integrate that data into UniPhi.

Once in UniPhi, it became effortless for back office staff and managers to analyse the data captured by 300 team members, across 1,000 activities and then update, manage and report on those workflows.

Distributed data capture - unified data model

THE BENEFITS

Integrating all the data points into UniPhi allowed for all project data to be captured and managed within one system, instead of in disparate silos. This enabled effective project collaboration, transparent communication, task allocation and dynamic reporting.

By fixing back-office issues through implementing UniPhi and providing timesheet training, the need for back office support reduced from 6 to 0.8 FTE.

Furthermore, due to the design team's ability to co-ordinate a large resource pool and drive progress, the overall program scope of work has now been delivered with considerable increase.

ABOUT AECOM

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 87,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural and social environments. A Fortune 500 company, AECOM serves clients in more than 140 countries and had revenue of $20.2 billion during the fiscal year of 2018.

More can be found about AECOM's contract from the eTendering website: https://tenders.nsw.gov.au/rms/?event=public.cn.view&CNUUID=166D5622-09E2-7EBF-5AD67144653310B0

ABOUT TRANSPORT FOR NSW

Transport for NSW is a New South Wales Government agency that is responsible for building and maintaining road infrastructure and managing the day-to-day compliance and safety for roads and waterways. Transport for NSW was created in 2011 from a merger of the Roads & Traffic Authority and NSW Maritime. They manage 4,787 bridges and 17,623km of state roads and highways and employ 6,900 staff in more than 180 offices throughout NSW, including 129 Motor Registries Offices.

More can be found on Easing Sydney Congestion at the departments website: https://www.rms.nsw.gov.au/projects/easing-sydneys-congestion/index.html