






Construction SaaS company rebuild for efficiency

System-wide refactoring to ensure the PHP application operates in a view-only state. This ensures race conditions are minimized in a system that had ineffective architectural design . Difficult migration away from Power BI and Yellow Fin to Logi-composer and Snowflake.

Facts	
Location	Team Structure
 Australia	 Satellite Squad
Number of people	Duration
 3	 ongoing
Key Technologies	
<div><ul style="list-style-type: none">• PHP, Javascript and Vue.js• Kotlin and Swift• .NET 6 & C#, MySql 5.7• Notification solution integration• HashiCorp, TerraForm, RedHat Ansible, Docker, Jenkins and AWS.• AWS S3, SNS, SQS, ECR and Lamda• Git, Atlassian Jira & Confluence & Slack</div>	



CHALLENGE

- Duplication of data was occurring due to the PHP application having unsolicited permissions
- Inefficient use of power BI which was adding over \$180k USD in cost per month
- Customers having negative experiences throughout their web and mobile applications
- Over 300 customers requiring manual recording tools for Power BI – ingesting data manually
- Old product Yellow Fin (Data Reporting tool) had limited features. Migration to Logi-composer
- Current implementation of Yellow Fin MS SQL required conversion to the snowflake DSL



DY SOLUTION

- Building out the Web API to centralize existing business logic and deliver key new functionality
- Huge optimization of Yellow Fins Domain-specific query language
- Stored Procedure reduced from 3500 lines to 450.
- Expose Customer’s public APIs to allow third party applications to gain additional services
- Down-size the main Web App (PHP) so that it is presentation-only and enhanced it to deliver key new UI functionality
- Implemented Scalable three-tier **extract, transform, load** process (ETL). Automation-centric style with over 300 databases efficiently converted
- Rebuilding of the Mobile Apps (Kotlin & SWIFT) and deliver key new Mobile functionality



CLIENT IMPACT

- Enhanced customer experience across the entire platform
- Positive changes pre-deployment during the Pen testing phase
- Power BI database migration reduced annual server costs by \$180k (annual license fees)
- Improved time to revenue and business generation