

Client Profile



The client is a Fortune 500 company providing business services from 12 major operating centers running Cloud software. It uses human capital deployed from 20 regional hubs to serve over 700,000 clients in 112 countries, generating revenues of \$12 billion.

Key Issue

Human capital was the key resource for the client which has in excess of 58,000 employees. Actionable Strategies was asked to create a predictive analytics framework and supporting system to ensure that turnover did not impact revenue and client service.

Solution Approach

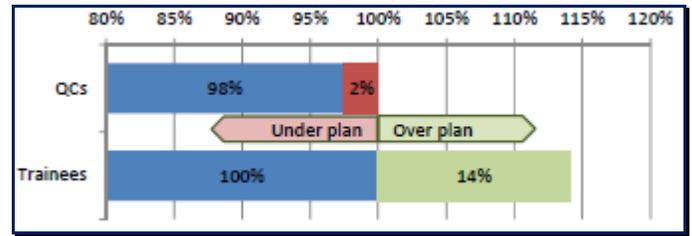
The predictive turnover framework had two major components: a user experience and an operational model. The user experience included the following:

-  Executive charts and reporting to illustrate current issues and future risks
-  Management-level analytics to highlight where in the value chain effort was required
-  Actionable drill downs to identify specific problems including geographies (including visualizations on maps), departments and individuals

Operationally, a sustainable and automated model was created. This included data quality management and the ability to extend the framework and system.

Executive Reporting

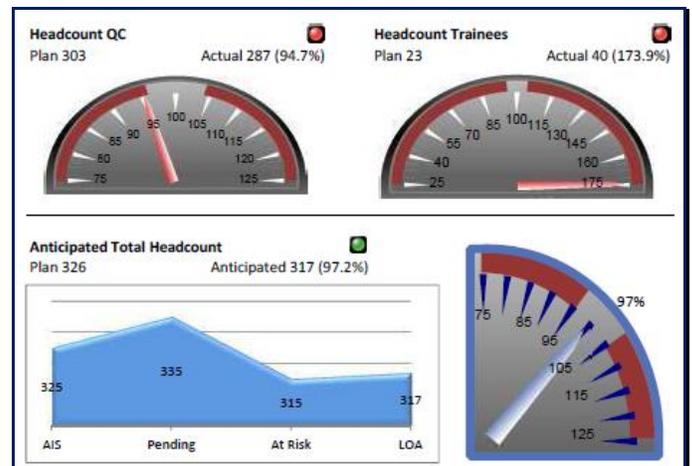
At an executive level, a concise set of indicators was presented. The actual staff against plan was displayed in addition to the trainees about to be start. (Note that the numbers and text have been removed from this example.)



In this example, executives can clearly see that there is a small, short term issue where headcount is under plan. However, a surplus of trainees will make up for this shortfall.

Predictive Management Analytics

To ensure that sufficient staffing was available for key functions, a model was created to predict staffing levels vs. plan in the future. This involved capturing data about trainees and new hires and predicting anticipated attrition.



In this example, managers can see that they do not have sufficient headcount. Trainees will make up some of the gap, but the organization will still not be fully staffed. Therefore, the large number of Pending Hires present the most risk. Retaining At Risk employees present the most opportunity to remain fully staffed.

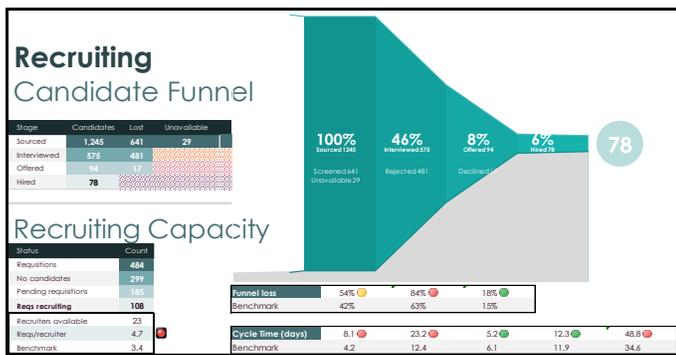
The predictive model used historical rates for attrition and captured data to enable the model to be recalibrated. This process was automated and data was placed into a database.

Actionable Drill Downs

While this data illustrated the specific risks in the value chain, it was important to make the information actionable. This required drill downs into the underlying data.

Visualizations were designed to enable immediate comprehension of the situation. For example, for geographic information, data was overlaid onto maps with color coded keys. In the example below, another predictive model was used to ensure that sufficient recruiting capacity was being applied to address attrition.

Once again, the predictive model was based on historical data that was updated as the system continued to be used. This sustainable and evolving framework reduce operating expense for the client while providing increasingly precise information



Results

After the initial pilot was successful, a structured rollout plan was developed. The model and user experience were implemented across the organization reducing the impact from turnover.

As a result, the client immediately began seeking other opportunities to apply predicting modeling and data visualization to other areas of human capital management.

Key Takeaways

Our clients should consider the following important lessons from this project.

- Align the representation of information to the audience; front-line leaders require different information than executives
- Clearly present the situation through visualizations so that users do not need to interpret information; data should support the conclusion
- Utilize metaphors that facilitate understanding such as gauges and other familiar representations
- Predictive models should utilize historical data if available; as data continues to be gathered, the models should recalibrate themselves
- Implement data quality management processes to ensure that the models continue to provide accurate predictions
- Pilot first and refine the approach and visualizations based on direct stakeholder feedback