Superannuation sector discovers value of process mining

In Australia, most working people use superannuation funds to save for their retirement. Typically, employers make regular contributions to a fund throughout the working life of their employee, who then withdraws the accrued “super” when they retire. Super funds are often large entities with many members and, as such, manage a huge amount of data.

Improving the superannuation claims process

In an increasingly digitized world, super funds – like all businesses – have to keep up with evolving customer needs and make sure processes are as streamlined as possible. This is where process mining can help. Apromore creates an “x-ray” of the organizational backbone and processes – revealing potential bottlenecks, reworks, and variants. Having these insights can help an organization become much more efficient and make big savings.

The Project

Apromore partnered with digital transformation consultancy firm Leonardo to conduct a process mining project for one of Australia’s largest and oldest super funds. The fund currently administrates over AUD 100 billion (USD 75 billion) and provides support to more than 550,000 members throughout Australia. Over 80,000 employers are registered with the fund, receiving dedicated business support and trusting the fund to maximize their employees’ financial returns. At the onset of their process mining initiative, the super fund chose to analyze their claims process. When a member chooses to withdraw their super from the fund, they must complete a claim. The super fund wanted to explore how to improve this process and maintain their customer-centric approach, as well as examine data quality and see how quickly process mining software could identify any inefficiencies.
The data

Data lies at the center of all process mining initiatives. In this project, the data was sourced from four different supporting IT systems and depicted a time period of just over one year. Overall, there were 630,000+ transaction records, which consisted of more than 17 million data points.

During the chosen time period, the super fund handled a total of 30,000+ claims lodged by 15,000+ members. Looking at the average and the median claims per member, the numbers 2 and 1 seemed in line with the fund’s expectations. However, the maximum number of claims lodged by an individual member was over 40, which suggested there were performance issues in at least some of the cases. This needed to be analyzed in more detail.

The Initial Analysis

The super fund had captured an As-Is BPMN model of the claims process prior to this project. To get started, the team analyzed whether the actual process, as observed in the data, was compliant with the prescribed process model. Most of the cases (80%) followed the “happy path”, meaning they were compliant with the best practice process model. However, these cases only accounted for two out of the total 520 case variants, suggesting the rest of the cases were highly individual and noncompliant on different levels. After a detailed analysis, it became clear that the remaining 20% of cases had varying errors, rework loops, or were withdrawn at different stages of the claims process. This caused the high number of case variants, which negatively affect customer satisfaction.

Results and Benefits

Prior to this engagement, the super fund was using estimates to calculate the costs of the end-to-end claims process. The Apromore process mining tool made it possible to understand the real processes clearly and to calculate the actual costs.
The analysis showed that 34% of all claimers contacted the member services before lodging their claim, resulting in additional costs for the super fund. Adopting an end-to-end view, in more than half of all cases, claimers made further contact with the member services, increasing overall expenditure.

**Data Extraction Improvement**

In addition to the analysis of the claims process, the team of consultants from Apromore and Leonardo also evaluated the data extraction and preparation process, providing the super fund with valuable information on future scalability. This has laid the groundwork for a cost-effective and straightforward approach moving forward.

After just a few weeks, the team was able to demonstrate that process mining enhances the business stakeholders’ understanding of the actual processes while positively affecting the speed of the analysis. The team showed that with process mining, the "discovery-to-improvement" process is 2.6 times faster than with traditional approaches. This speed-up gives analysts and managers more time to prepare and deploy the required post-analysis process changes. On this occasion, the changes led to reductions in rework, waste, and processing cost. On top of that, the super fund found opportunities to reduce potential customer frustration and to enhance their customer centricity. The super fund achieved over AUD 150,000 (USD 117,000) in cost savings after just three months, with an estimated annual ROI of over AUD 600,000 (USD 470,000).

**Sneak-peek into the future**

The Australian superannuation fund was thoroughly impressed with the results and insights achieved through Apromore’s process mining solution. They are now building up a broad and long-term strategy for process mining adoption as part of their continuous improvement efforts.