Memo – LGD Model

To: LGD Model Stakeholders

From: Adam Kehler

Modernizing credit risk modelling – Using machine learning techniques to challenge industry norms – Loss Given Default (LGD) Model

✓ Discussion item ✗ Decision item

As key stakeholders in the organization, as it relates to modelling that supports our Allowance for Credit Losses (ACL) process for our financial statements, there is an update that we would like to share. This memo is for awareness purposes only; we may come back at a future date with an approval item.

Background:
The models that support the ACL following the relevant accounting standards and are subject to numerous reviews and audits. As such, it is generally prudent to use well-established and industry common approaches to modelling. This can, however, lead to stifled innovation. To promote innovation and to see how well current techniques compare to more modern approaches, we have been running “experiments” in the test environment on the LGD model.

Outcome:
We were able to develop a model that uses a machine learning technique called “Random Forest” and provides more accurate predictions of LGD compared to the more traditional model in operation. Don’t let the term “Random” fool you, the methodology for this algorithm is sound and is replicable, like our current model.

Next steps:
We will integrate this new model into the existing model’s performance monitoring process. This will allow us to see if the outperformance will persist over time. It will also give us an opportunity to familiarize stakeholders with this new approach. When we redevelop the LGD model next, we can use these new learnings to improve our approach.

Pre-read material – I will use the accompanying slides to walk you through a quick summary of the work at our next meeting.