1. The vanishing gradient problem happends when a neural network is very deep and the gradients become very small during backpropagation. When the gradients are close to 0, the model can't update its weights, especially in the earlier layers. As a result, the network learns very slowly, and the training may stop improving. This makes it harder for model to reach good accuracy.

2. ReLU and Leaky ReLU helps reduce the vanishing gradient problem because it keeps the gradient strong when the inpout value is positive. For positive inputs, the gradient is not small, so the model can update its weight more effectively. Leack ReLU improves ReLU by allowing gradient when input is negative. This prevents neurons from stopping learning. Because gradients can still flow the network.