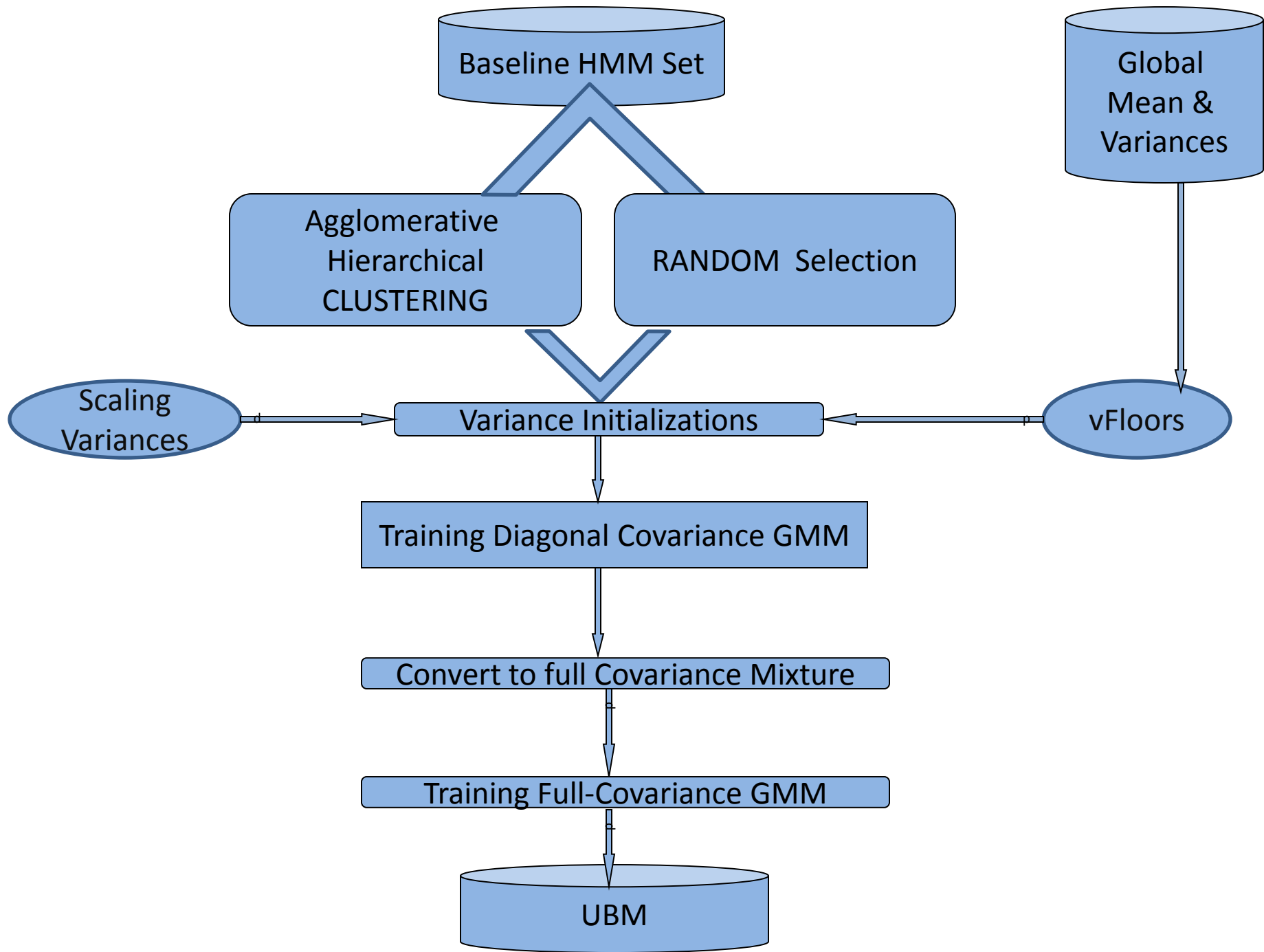
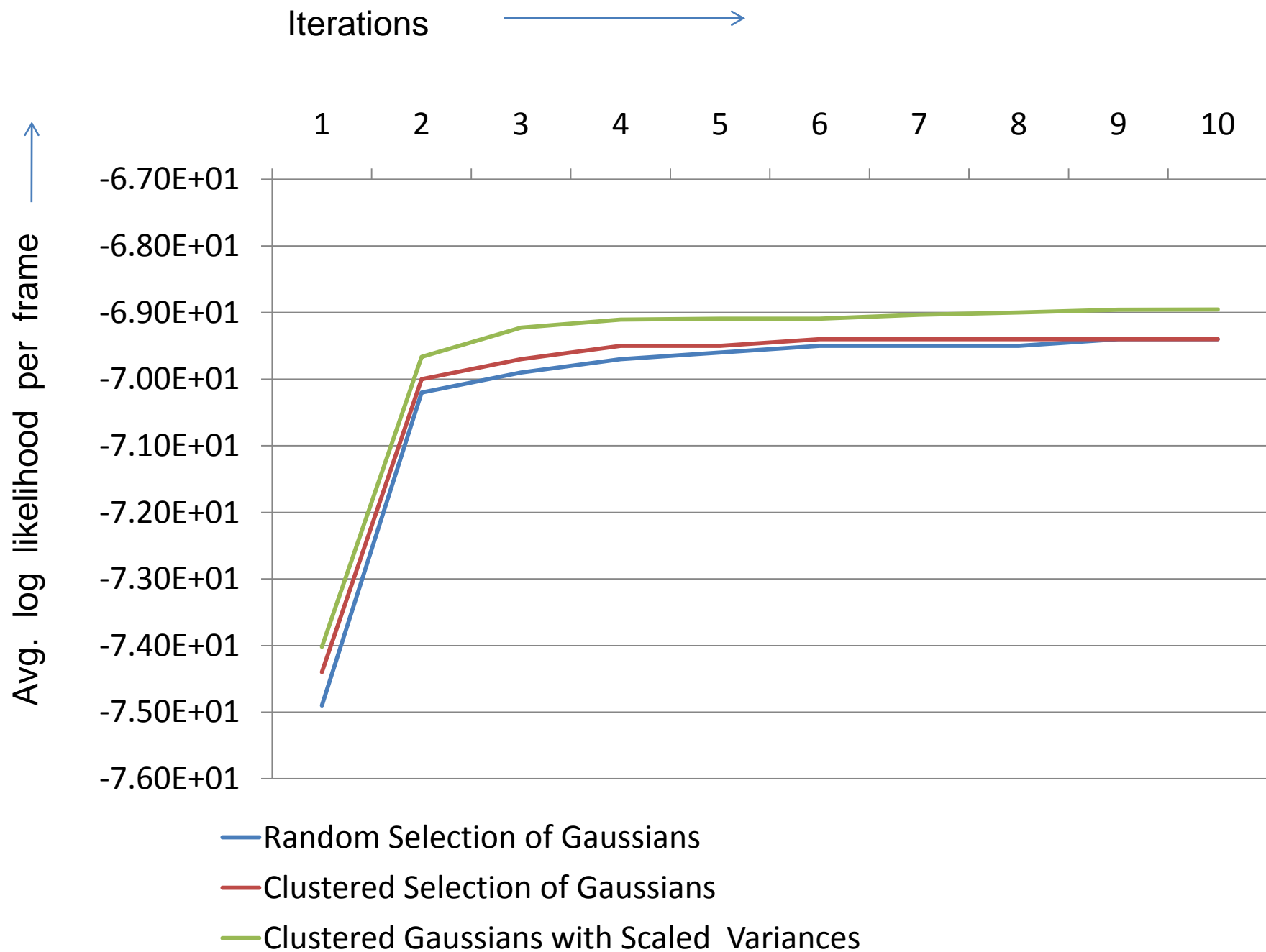


UBM Initialization

- The Universal Background model (“UBM”) is a full-covariance Gaussian Mixture Model that covers all speech states.
- It is trained on speech data without reference to classes.
- Before training, we typically initialize it from the trained Gaussians of a baseline system.
- I have investigated various ways of doing this.





Conclusion

- Proper initialization of variances is important.
- All initialization techniques had similar effect on likelihood.
- We must be careful when choosing likelihood as the measure of quality.
- Also, we need to evaluate this model on whole ASR system.

THANK YOU