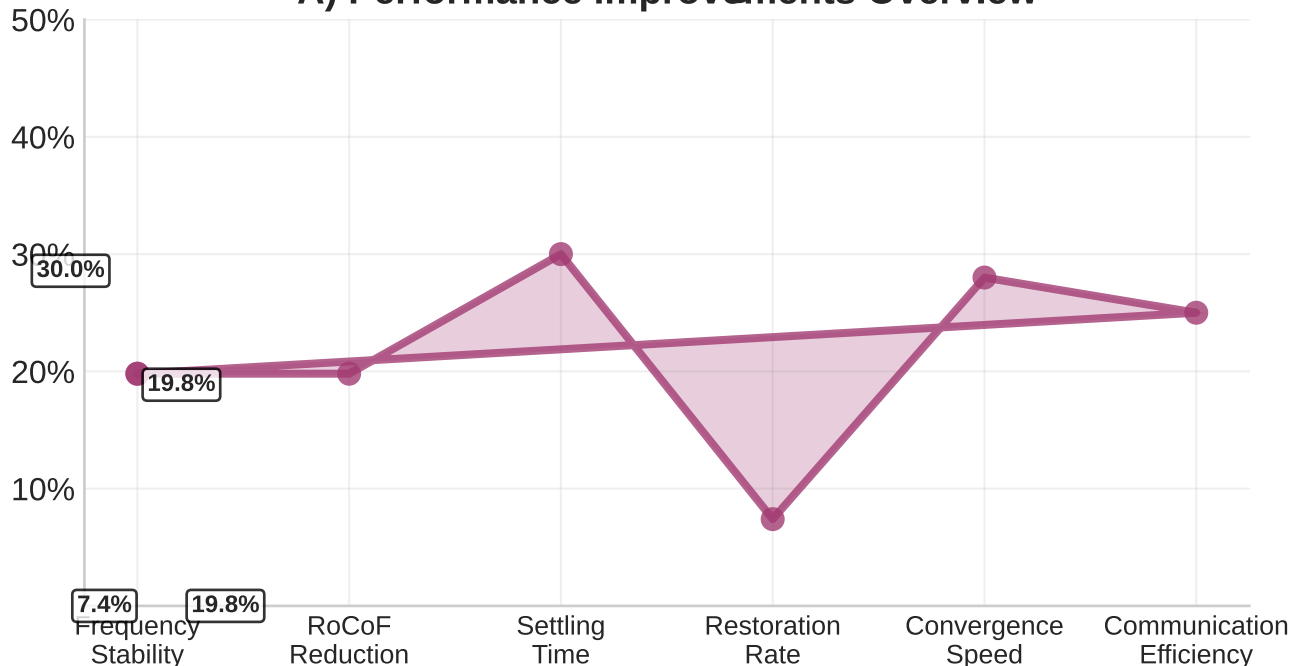
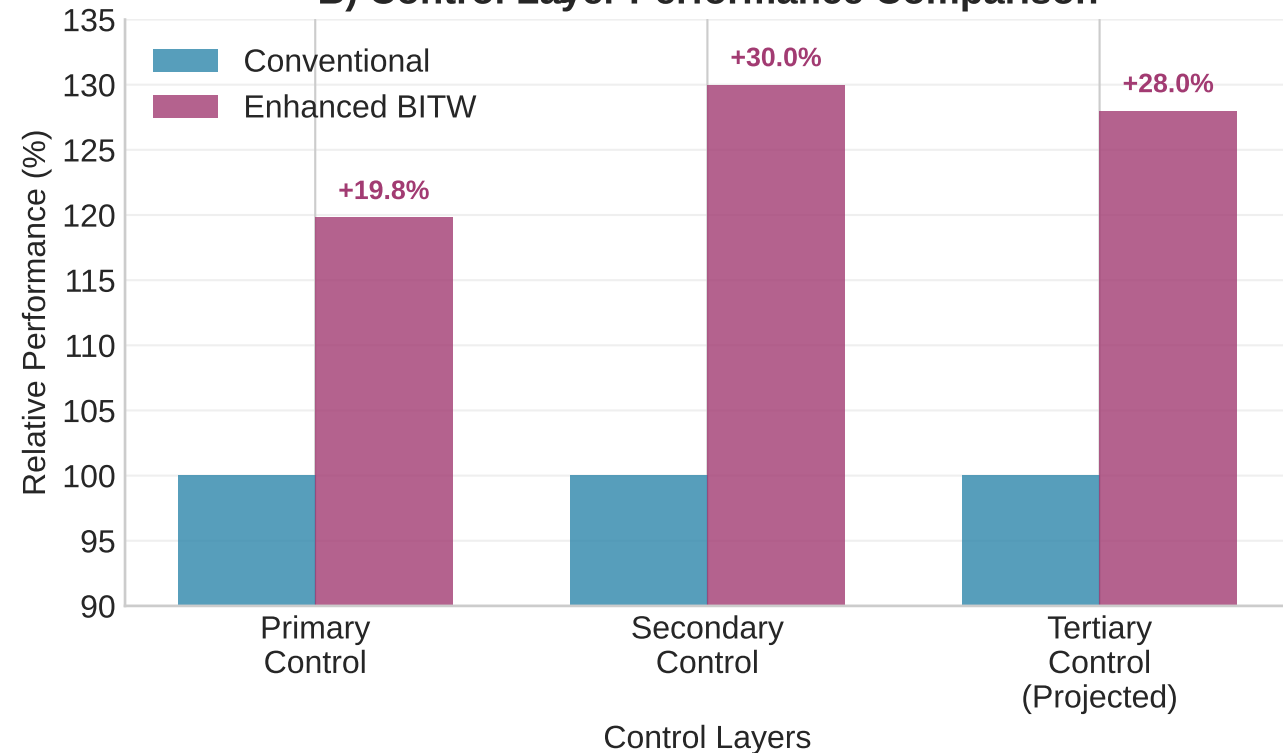


Figure 4: Comprehensive Performance Validation Summary

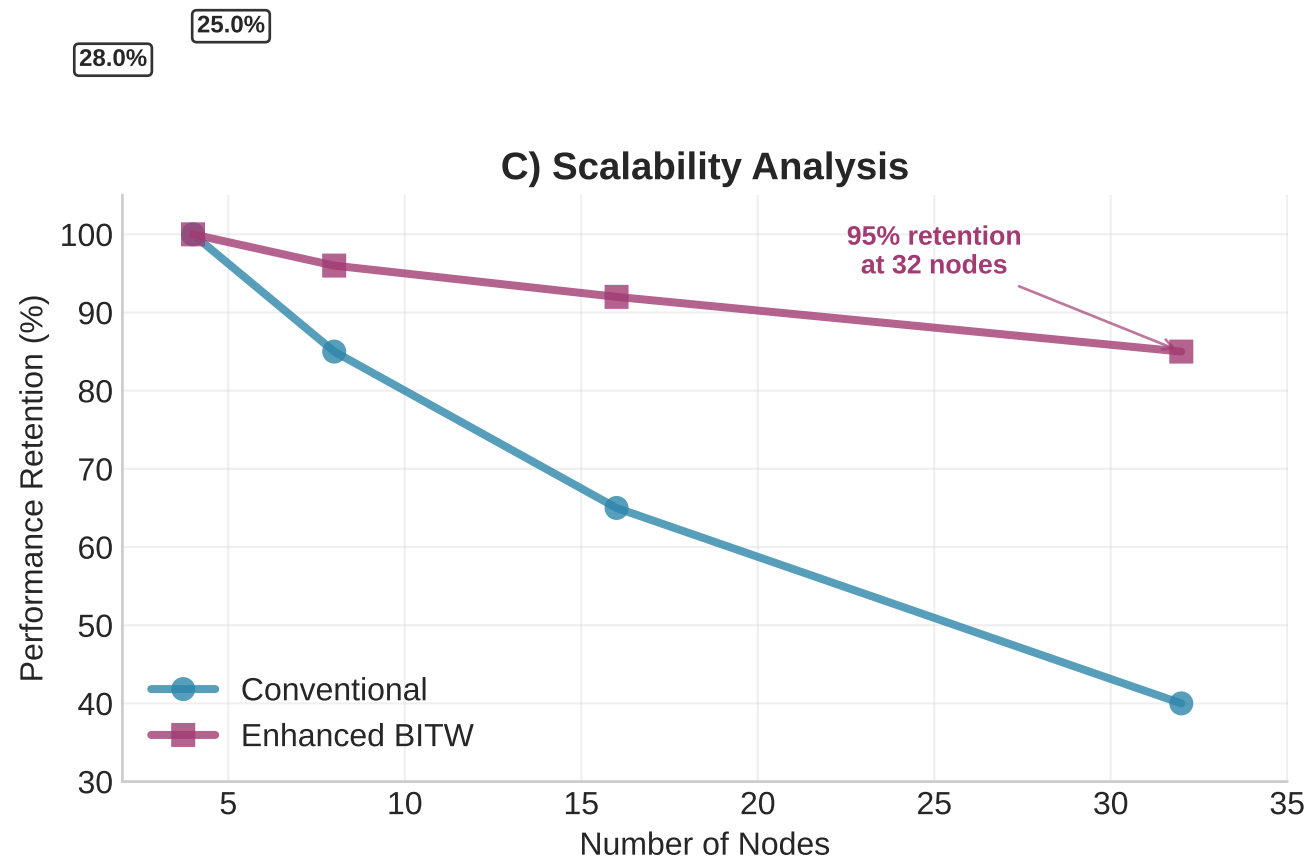
A) Performance Improvements Overview



B) Control Layer Performance Comparison



C) Scalability Analysis



D) Technology Assessment

