

The association rules are mined making use of the apriori algorithm.

The merge processes involved in the apriori algorithm are simpler to apply on big itemsets in large databases.

On the other hand the FP Growth tree is more complex to build than apriori, and could be expensive.

When the database is large, as in this case, the algorithm may not fit within the shared memory.

Furthermore every node needs the root in FP-Growth generation, while candidate generation is parallelizable in apriori.

At every level in apriori, the generated itemsets were further pruned. This ensured that unnecessary itemsets were not worked upon generating non-frequent itemsets in forthcoming levels, derived from the apriori property.

We also required a sufficient number of levels to generate association rules of appreciable cardinality. Yet to optimize the running time of the algorithm and ensure that it did not need to process too many levels, we chose a support value of 0.014, which terminated at level 4. This support value, determined via trial and error helped build towards an optimized running time for apriori.