

## ABSTRAK

Pengaturan tata letak barang dagangan pada setiap etalase toko sangat mempengaruhi minat konsumen pada berbelanja. Untuk menaikkan sasaran penjualan supermarket dibutuhkan cara selain promo harga barang, yaitu dengan mengatur tata letak barang pada rak dagangan secara sistematis. Metode yang dipergunakan sebagai implementasi tata letak barang merupakan penerapan data mining dengan membandingkan kinerja algoritma Apriori serta algoritma FP-Growth pada proses data mining memakai tools Rapidminer Studio Educational Version 9.10.011. Pengujian masing – masing prosedur pemecahan tersebut didalam penentuan tata letak barang dilakukan agar memperoleh penilaian hasil yang efektif sehingga menjadi saran terbaik pada penentuan tata letak barang pada rak-rak supermarket tersebut. Sampel data yang digunakan merupakan data penjualan di supermarket Mohare yang diuji sebagai pola asosiasi yang didapatkan oleh masing-masing metode. Sesuai hasil pengujian menggunakan minimum support 20% serta minimum confidence 70%, algoritma Apriori membentuk 10 rule menggunakan support sebanyak 0.32258605 dan tingkat akurasi 12.8%, sedangkan algoritma FP-Growth membentuk 78 rule menggunakan support sebanyak 2,51612903 dengan tingkat akurasi 780%. Ditinjau dari perhitungan tingkat akurasi antara ke 2 algoritma tersebut, hasil akurasi berasal algoritma FP-Growth lebih tinggi dibandingkan dengan algoritma Apriori. Dengan demikian, algoritma FP-Growth bisa dikatakan mempunyai tingkat akurasi yang tinggi dalam menghasilkan hukum asosiasi bila dibandingkan dengan algoritma Apriori.

**Kata Kunci:** Data Mining, Association Rule, Algoritma Apriori, Algoritma Fp-Growth.

## ***ABSTRACT***

Setting the layout of merchandise in every store window substantially impacts patron interest in buying. To grow the goal of grocery store income, a method apart from price selling is wanted, taken into consideration certainly one of this is to systematically set up the format of products at the products racks. The approach used to put into effect the format of goods is the utility of statistics mining by using the use of comparing the performance of the Apriori set of regulations and the Frequent Pattern Growth set of guidelines in the statistics mining procedure using the Rapidminer studio educational version 9.10.011 equipment. Finding out each of these algorithms in determining the format of products is done to advantage an accurate evaluation of the consequences just so it becomes the nice recommendation in figuring out the format of merchandise at the grocery shop cabinets. The statistics sample used is the income records on the Mohare grocery store which is tested to understand the association styles generated by means of approach of every method. Based totally at the test consequences with a minimal help of 20% and a minimum confidence of 70%, the Apriori set of policies produces 10 hints with a manual of 0.32258605 and an accuracy rate of 12.8%, on the identical time as the FP-increase set of rules produces 78 guidelines with a manual of 2.51612903 with an accuracy fee of 780%. Judging from the calculation of the level of accuracy among the 2 algorithms, the outcomes of the accuracy of the FP-Growth set of regulations are higher than the Apriori algorithm. Because of this, the Frequent Pattern Growth set of policies can be said to have a excessive degree of accuracy in producing association policies whilst as compared to the Apriori set of policies.

***Keywords:*** *Data Mining, Association Rule, Apriori Algorithm, FP-Growth Algorithm*