Message

From: Danielle Sherman

**Market Basket Analysis**

Hi, Blackwell Electronics' board of directors is considering acquiring Electronidex, a start-up electronics online retailer. The board of directors has asked us to help them better understand the clientele that Electronidex currently is serving and if it would be an optimal partnership. They need our help to identify purchasing patterns that will provide insight into Electronidex's clientele. Attached is a CSV file that contains one month’s (30 days’ worth) of Electronidexes online transactions and a file containing all the electronics that they currently sell. Due to their lack of funding, Electronidex is only able to pull data on the items that customers purchased per their transactions. I would like you to use R to conduct a market basket analysis. You will be discovering any interesting relationships (or associations) between customer’s transactions and the item(s) they’ve purchased. These associations can then be used to drive sales-oriented initiatives such as recommender systems like the ones used by Amazon and other eCommerce sites. To help Blackwell’s board of directors form a clearer picture of Electronidex's customer buying patterns, please consider the following questions while you’re performing your analysis:

* Are there any interesting patterns or item relationships within Electronidex's transactions?
* Would Blackwell benefit from selling any of Electronidex's items?
* In your opinion, should Blackwell acquire Electronidex?
* If Blackwell does acquire Electronidex, do you have any recommendations for Blackwell? (Ex: cross-selling items, sale promotions, should they remove items, etc.)

Once you've completed your market basket analysis, please put together a formal business report in Word. Thank you in advance!

Best,

Danielle Sherman

Chief Technology Officer

Blackwell Electronics

[www.blackwellelectronics.com](http://www.blackwellelectronics.com)

Attachments

POA Project Roadmap

Danielle has asked you to perform a market basket analysis to help Blackwell's board of directors to better understand the clientele that Electronidex is currently serving and if Electronidex would be an optimal acquisition.