

Electronidex acquisition Report

Market Basket Analysis(MBA) study

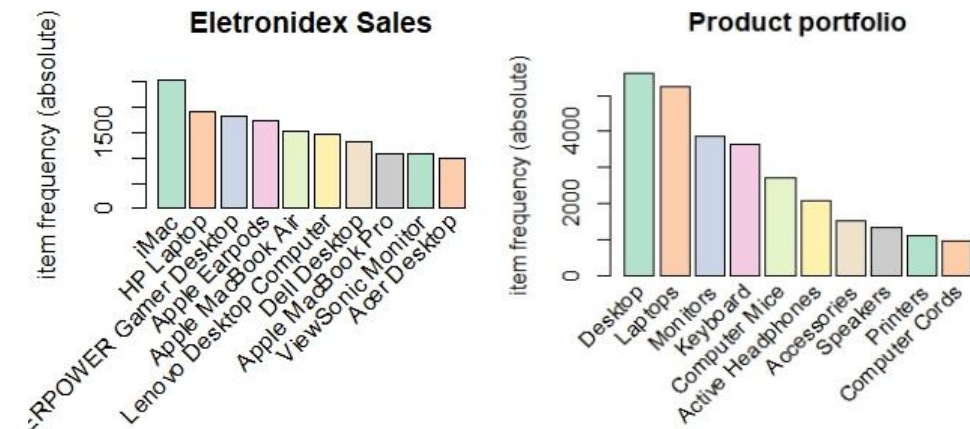
Hunter Wu. 20Nov. 2019

With help of MBA study, this report aim at answering below two questions:

- How can product sets of Electronidex compensate current Blackwell product sets?
- Whether or not should Blackwell acquire Eletronidex?

Electronidex Sales Characters – B2B sales with a complete portfolio, can be a premium Apple reseller.

1. First of all, 1 month of **9,835 transactions** is impressive for a startup online electronic retailer, we are not even looking at its revenue and profit margin yet. It could be a good unicorn can benefits (or otherwise compete) Blackwell sales a lot.
2. Its best sellers are Apple products (e.g.iMac, Earpods, MacBook Air); HP and other Desktops (e.g. CYBERPOWER, Lenovo, Dell, Acer) among other brands. When convert data into product types, it shows strong association between the bestsellers. Key products with highest volume are **Desktops, Laptops and monitors** seen in 30-50% of total transactions.
3. In most of the transactions, clients buy **3-5 items in one basket**. In the basket, sometimes 2PCs (Desktop+Laptop) mixed of brands and OS (iMac + HP), together with various accessories including keyboards and mice. From this observation we can make an assumption that Eletronidex's main customer is not individuals but **enterprises(B2B)** that might require more than 1pc per transaction.
4. Concluding from high volume of iMac and Gamer Desktop, it could be enterprises which requires strong graphic cards like **Design or IT companies**. Another evidence for this assumption is the sales on MS Office Home 2016 and other Smart home devices does not rank the top 10 sales.
5. Eletronidex has a rather **complete product portfolio** with a good selection of brands (premium e.g. Apple, basic e.g. Acer) per product category and accessories(eg. Keyboards, speakers, cords) catering to their main(top selling) products.
6. Plenty of ways to understand why iMac sales dominant this month. It can be a limited **marketing campaign or a stock clearance**. That would be a way to explain why many **Windows product sets associated with an additional iMac**.

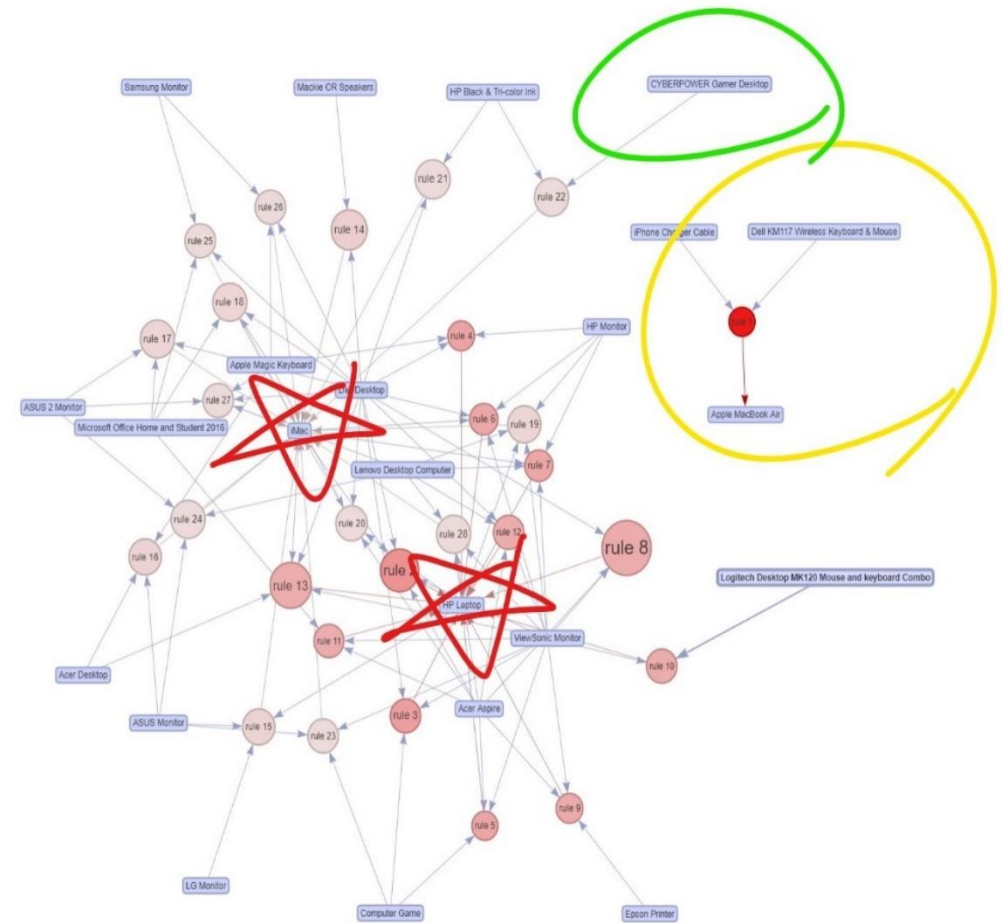
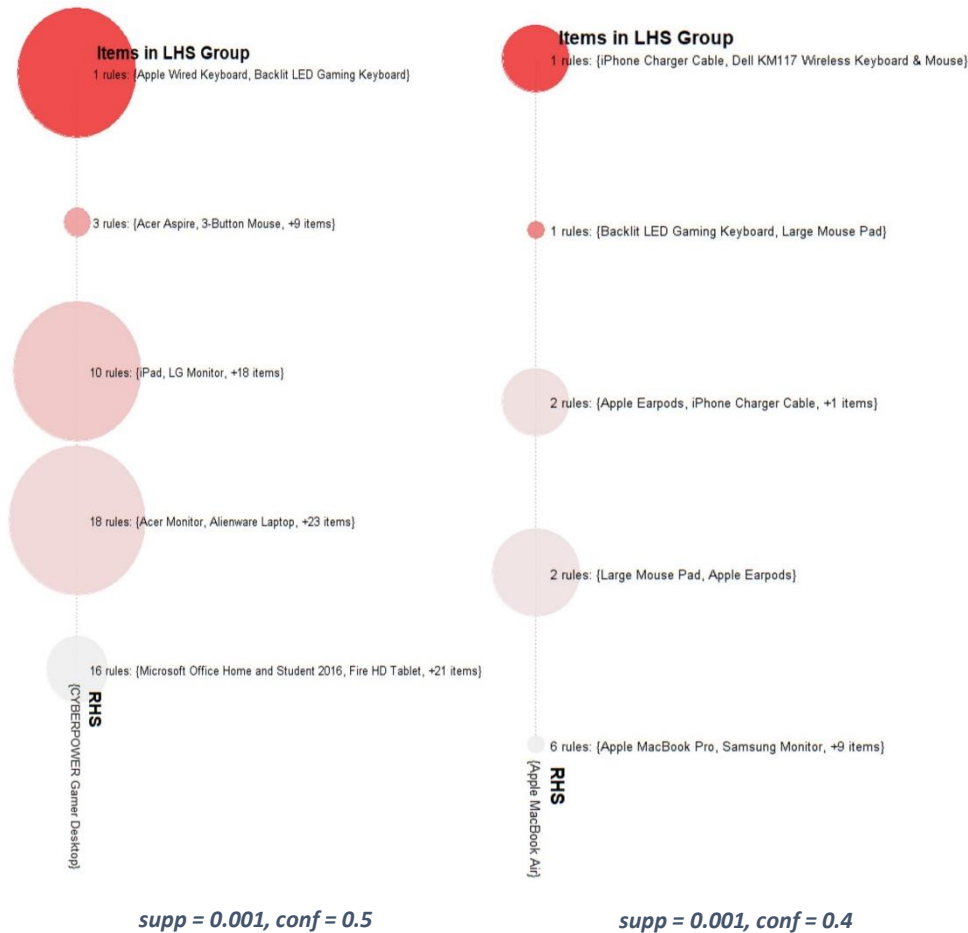


Sales.Rules<- apriori (Sales, parameter = list(supp = 0.002, conf = 0.8, lift = 3, minlen= 2)), Non-sorted

lhs	rhs
[1] {Logitech Desktop MK120 Mouse and keyboard combo, ViewSonic Monitor}	=> {HP Laptop}
[2] {Dell Desktop, Mackie CR speakers}	=> {iMac}
[3] {Dell KM117 Wireless Keyboard & Mouse, iPhone charger cable}	=> {Apple MacBook Air}
[4] {Dell Desktop, HP Black & Tri-color Ink}	=> {iMac}
[5] {CYBERPOWER Gamer Desktop, HP Black & Tri-color Ink}	=> {iMac}
[6] {ASUS Monitor, Computer Game, ViewSonic Monitor}	=> {iMac}
[7] {Acer Aspire, Computer Game, ViewSonic Monitor}	=> {HP Laptop}
[8] {Computer Game, Dell Desktop, ViewSonic Monitor}	=> {HP Laptop}

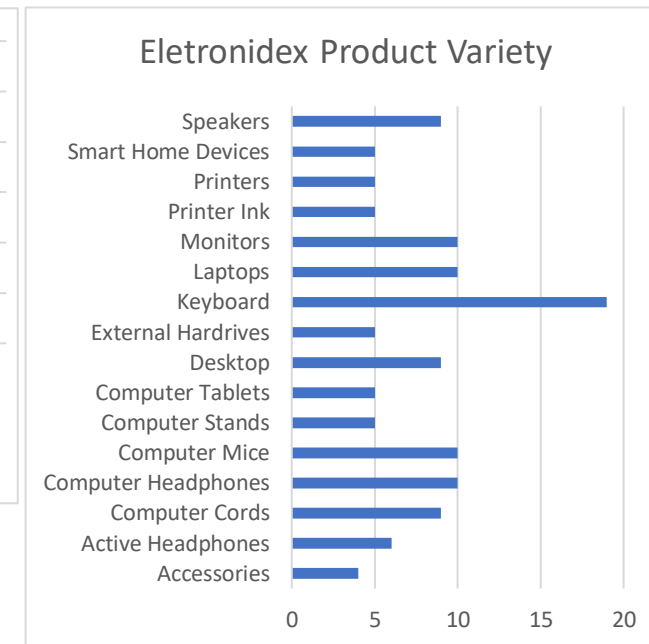
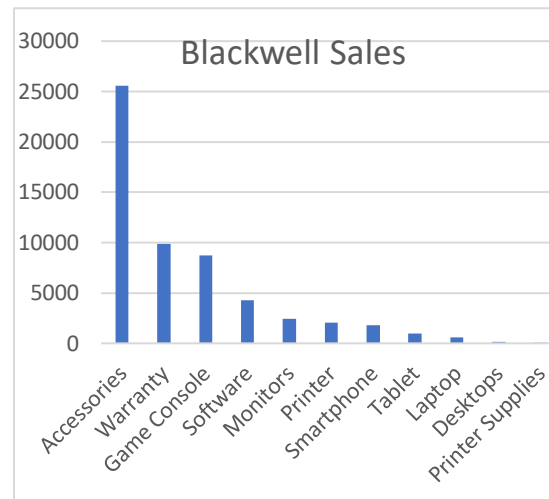
MBA Key observations (concluded from same rules):

- iMac and HP Laptop are at the center of the graph representing the top sellers. Volume impacts the rules greatly but iMac as dominant #rhs for Window product set could be marketing campaigns(e.g. get an iMac for 20% off with **minimum 3 items purchased**) or **enterprises consists of different OS users** (due to department requirements) and UI preference that would explain transactions with 2PCs and different OS.
- Apple users:** 1 rule is outlier that belongs to the true Apple users with a set of Apple products, different from those rules in association with iMac (in yellow).
- Gamers:** Cyberpower Gamer Desktop does not have sig. in any rules while being the top 3 top seller, it shows our gaming customer is not sensitive to (recommended) products or campaigns- they do not mix its basket with other PCs, thus might be **an individual client** (in green).



Electronidex Product Portfolio in comparison with Blackwell – top sellers compensate each other while others overlap

1. Blackwell just started its eCommerce platform, Electronidex on the other hand is experienced with online sales. It would be beneficial to create a stronger portfolio with diverse product and online exposure.
2. Main customer group is largely different. Blackwell sells most accessories(undefined in the dataset, can be a mix of equivalent keyboards, mice, headphones, etc., and we only starting to add more “breadwinners” that has higher profit margins like Tablets, PC and Laptops based on the profitability research on new products. Eletronidex product portfolio is definitely more focus on Desktop, Laptops and Monitors than us.
3. Each company currently lay emphasis on different product categories, it can definitely compensate each other. Eletronidex does not sell much Software, Warranty and Smartphones; while Blackwell does not sell Apple products and Smart Home Devices, but bear in mind that “accessories” in Blackwell data is not well-defined.



Eletronidex Acquisition assessment

Currently our client base and top-sellers are limited to low profitability products like accessories. Not so long ago Sales director starting to introduce more laptops, tablets and PCs to our product portfolio. It would be beneficial to acquire Electronidex due to below reasons:

1. It broaden our product portfolio with more breadwinners(Laptops, Desktops, etc.) and double our client base.
2. It scale up our Sales size to be able to negotiate a profitable purchase price from the manufacturer.
3. The eCommerce knowledge and experience from Electronidex could help Blackwell to reduce our investment in research.
4. Ecommerce is the trend at the market, we should acquire a unicorn while we can afford, but of course be careful with the competition law.

Future recommendation

We need to run MBA research further on Blackwell transactions to draw a better picture how our client base and baskets look like in comparison with the target company. Apart from commercial questions address so far, finance assessment is a crucial criteria for acquisition. We need more thorough research including how healthy is its finance, depending on the asking price and its debt load. As for negotiation, Blackwell's physical channels and extensive understanding of the local market with long partnership history could be a good bargaining power.

As for organization structure, it would be advised to separate B2C and B2B departments, due to different tax structure and CRM approach would also be very different.