JD.com Case Study Report

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Rise of JD.com

Background

JD.com is the largest retailer in China. Its online platform offers a huge range of products, and it has opened many stores through partnerships. JD's principles are to trade authentic products, expand their reach to every part of China, including rural areas, 'digitalize' the country's offline retail and be innovative. Recent innovations include an AR styling station and try-on app and drone delivery.

Marketing Tactics and Partnerships

JD GOAL is a data-driven marketing methodology, which is a process where the growth potential of a target group, customer value and loyalty is maximized. The likes of Unilever and Yili have seen substantial growth in customer engagement and sales after adopting this methodology.

JD continued forming strategic partnerships with notable brands like Tiffany & Co. And Decathlon.

The company's Singles Day promotional event saw recording breaking surges in transaction and order volume and customer engagement.

What Next?

According to (Lebow,2022), Alibaba, who are arguably JD's biggest e-commerce competitors, have more than double the gross merchandise value, a good metric for e-commerce performance, of JD in the worldwide online digital retail market, even though, according to EcommerceDB (n.d), the company is significantly larger than Alibaba in the Chinese ecommerce market. This suggests why, despite their dominance, JD's aim is to reassess its digital product retail marketing approach to meet an evolving market. The company have concluded that their current approach might be too generic and that they must be more unique in this regard.

Through a fresher approach, JD are hoping to achieve market penetration. This case study report analyzes a segmentation, targeting and positioning strategy to achieve this.

Segmentation

Survey

A thousand customers from a select number of Ivy League Varsities completed a questionnaire at a 5% response rate. The following data file was implemented into the survey from which the questionnaire was constructed.

Variables		Description			
Customer Demography	1.CusAgeYr	Customer's age measured in years			
	2. CusGen	Customer's gender (1= Female, 0= Male)			
	3. LevEdn	Customer's level of education (1 = Undergraduate degree, 2 = master's degree or higher, 3 = DBA/Ph.D.)			
	4. LevIncome	Customer's income level (1 = Below £50K, 2 = £51- £100K, 3 = £101K-£125K, 4 = £126K-£150K = Greater than £150K.)			
Customer Shopping Preference	5. CusChoice	Importance, to the customer, of online/digital shopping platform attributes (shopping from mobile, tablets and laptops). 7-point Likert-scale (1= "very unimportant", 2= "unimportant", 3= "somewhat unimportant", 4 = "neutral", 5= "somewhat important", 6= "important", 7 = "very important")			
	6. ConstUp	Importance, to the customer, in receiving up-to-date releases of new digital products (e.g. computers, consumer electronics and communication products). 7-point Likert-scale (1 = "very unimportant" to 7 = "very important")			
	7. ReplacReminder	Importance, to the customer, in receiving subtle reminders to replace their old digital products. Customers rated the importance of the product attribute on a 7-point Likert-scale, 1= "very unimportant" to 7 = "very important")			

	8. ProdReturn	Importance, to the customer, to be able to return products with their return/warranty policy. 7-point Likert-scale (1 = "very unimportant" to 7 = "very important")
	9. ProInsuCov	Importance, to a loyal customer, in having free product insurance cover to provide them with product security for lost and damaged digital products. 7-point Likert-scale (1 = "very unimportant" to 7 = "very important")
Customer Account Profile	10.CusAcct	Whether the customer is an account holder (1 = Yes, 0 = No.)

Cluster Analysis on R

The survey results were recorded, and a cluster analysis was done on R through the following steps.

• The mean and standard deviation for each column and all the variables were scaled. The results are analyzed later.

```
> m <- apply(JD, 2, mean)
     CusAgeYr
                  CusGen
                                LevEdn LevIncome
                                                        CusChoice
       35.515
                    0.566
                                 1.507
                                           3.292
                                                          4.690
                    eminder ProInsuCov
4.367 3.840
                                            CusAcct ProdReturn
      ConstUp ReplacReminder
       4.290
                                               0.564
                                                             3.814
> s <- apply(JD, 2, sd)</pre>
> z <- scale(JD, m, s)
                   CusGen Level 0.6560346
                                 LevEdn
                                         LevIncome
     CusAgeYr
                                                         CusChoice
    5.8672139 0.4958729
ConstUp ReplacReminder
                                          1.1242775
                                                         1.5691916
                              ProInsuCov
                                            CusAcct
                                                         ProdReturn
                 1.6318621
                              1.5693511 0.4961352
                                                         1.4824310
    1.5659988
```

• Finding the optimal number of clusters through Eigenvalues.

```
> library(factoextra)
> fviz_nbclust(JD, kmeans, method = "wss")
        Optimal number of clusters
  50000
  40000
Total Within Sum of Square
  30000
  20000
  10000
                         ż
                                                                                                                    10
                                     3
                                                4
                                                           5
                                                                       6
                                                                                             8
                                                         Number of clusters k
```

It can be determined that the optimal number of clusters is 3 as no significant amount of information is lost.

• Determining cluster size

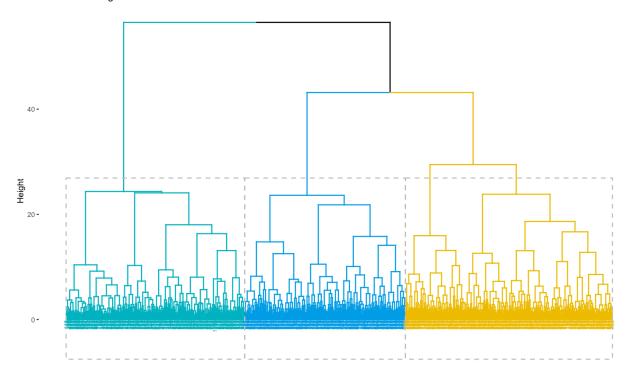
```
> fviz_nbclust(JD, kmeans, method = "wss")
> k <- kmeans(JD, centers = 3, nstart = 10)
> str(k)
List of 9
$ cluster
              : int [1:1000] 3 3 3 2 2 3 2 3 3 1 ...
              : num [1:3, 1:10] 26.786 34 40.758 0.7 0.555 ...
$ centers
  ..- attr(*, "dimnames")=List of 2
  .. ..$ : chr [1:3] "1" "2" "3"
  ....$ : chr [1:10] "CusAgeYr" "CusGen" "LevEdn" "LevIncome" ...
$ totss
              : num 48800
              : num [1:3] 3003 5226 8290
$ withinss
$ tot.withinss: num 16519
$ betweenss : num 32281
              : int [1:3] 220 321 459
$ size
$ iter
              : int 2
$ ifault
              : int 0
 - attr(*, "class")= chr "kmeans"
```

As seen here, clusters 1,2 and 3 have the sizes 220, 321 and 459 respectively.

• Generating a cluster dendrogram by calculating Euclidean distance

```
> distance <- dist(z, method = 'euclidean' )
> #Cluster Dendogram
> hc.a <- hclust(distance, method = 'ward.D2')
> plot(hc.a)
>
> plot(hc.a, cex = 0.6) # plot tree
> rect.hclust(hc.a, k = 3, border = 2:5)
> res <- hcut(JD, k = 3, stand = TRUE)
> fviz_dend(res, rect = TRUE, cex = 0.5,
+ k_colors = c("#00AFBB","#2E9FDF", "#E7B800", "#FC4E07"))
```

Cluster Dendrogram



The highlighted boxes show how the 3 clusters are separated out of the 1000 respondents.

• An output csv file is generated

```
> segment_means <- k$centers
> segment_means2 <- round(segment_means, digits = 2)
> cluster <- c(1: 3)
> Final <- data.frame(cluster, segment_means2)
> write.csv(Final, file = "/Users/amannamedjordan/Downloads/JD_Output3.csv")
```

4	Α	В	С	D	Е	F	G	Н	I	J	K	L
1		cluster	CusAgeYr	CusGen	LevEdn	LevIncome	CusChoice	ConstUp	ReplacReminder	ProInsuCov	CusAcct	ProdReturn
2	1	1	26.79	0.7	1.3	3.52	4.7	4.1	5.5	4.42	0.75	5.55
3	2	2	34	0.55	1.55	3.47	5.01	4.44	4.98	3.81	0.6	3.97
4	3	3	40.76	0.51	1.58	3.06	4.46	4.27	3.4	3.58	0.45	2.87

This output shows the means of individual of cluster, which is analyzed below.

Summarization

Following the cluster analysis, the characteristics of cluster can now be understood.

Variables		Mean (1 d.p)	Cluster 1, 2, 3 respectively (1 d.p)	Standard Deviation (1 d.p)		
Customer	CusAgeYr	35.5	26.8*	5.9		
Demography			34			
			40.8*	7		
	CusGen	0.6	0.7	0.5		
			0.55			
			0.5			
	LevEdn	1.5	1.3*	0.7		
			1.55			
			1.6	1		
	LevIncome	3.3	3.5	1.1		
			3.5	1		
			3*	7		
Customer	CusChoice	4.7	4.7	1.6		
Preferences			5*			
			4.5			
	ConstUp	4.3	4.1	1.6		
			4.4			
			4.3			
	ReplacReminder	4.4	5.5*	1.6		
			5			
			3.4*			
	ProInsuCov	3.8	4.4*	1.6		
			3.8			
			3.6			
	ProdReturn	3.8	5.6*	1.5		
			4			
			2.9*			
Customer Account	CusAcct	0.6	0.75*	0.5		
Profile			0.6			
			0.45*			

Where an Asterix (*) is provided indicates that these numbers are significant in determining the nature of each cluster.

Interpretation

Overall, all respondents are below the age of 41, are either master's or undergraduate students and earn below 150k GBP a year.

Cluster 1

- · Most are account holders
- Demography: Younger than average, mostly undergraduates
- Preferences: Most have a loyal scheme with the company and feel it is important to receive subtle reminders to replace their old digital products, have a free product insurance cover for product damages and lost products and have a return/warranty policy.

This segment can be called the 'Loyal tech-savvy undergraduate students' because of their attentive and more risk averse mentality when it comes to digital products, preferring to have up-to-date and reliable tech.

Cluster 2

- · Around half are account holders and have a loyalty scheme
- Demography: Slightly younger than average but mostly average in these metrics
- Preferences: Most feel it is important to shop online

This segment can be called 'The busy everyday shoppers' because it is relatively average but their heavier reliance on online shopping seems to indicate that they are relatively busier with jobs or difficult university work and simply don't have the time to pay major attention to updates on digital products or to travel to retail outlets.

Cluster 3

- · Most don't have an account and aren't loyal customers
- Demography: The average age is close to one standard deviation above the mean. This cluster represents a much older segment in comparison to cluster 1, with a mean age difference of 14, and most are master's students. Interestingly, this segment brings the average income level down and almost all earn between 101K to 125K GBP a year.

• Preferences: In contrast to cluster 1, Less respondents feel the need for a product insurance cover and significantly less think that it is not important to have old product replacement reminders and a return/warranty policy.

This segment can be called 'The independent, older customers' as they seem to overlook minor product details but still show interest in JD's products. Like cluster 2, they might not have the time to pay close attention, but the average age gap suggests that they're not accustomed to doing so.

With this knowledge, JD.com can focus on targeting their market efforts towards a particular cluster.

Targeting

The segment JD should target is the loyal tech-savvy undergraduate students. It is important for JD to first analyze its attractiveness for themselves and then for its partners and competitors, to predict the company's growth potential in the market, how competitors might target this segment and how existing partnerships can be leveraged to gain a competitive advantage. This is analyzed below. Attractiveness here, is measured by the segment's responsiveness/engagement to new product offerings, new marketing campaigns and changes to product attributes as well as their willingness and ability to buy products primarily measured by average means of the customer demography variable.

For JD

They should target this segment because of their relatively high engagement with the company. Segments 2 and 3 show good interest in the company's products but they would not be as responsive and, therefore, it would be difficult to significantly increase interest from the other 2 segments through marketing campaigns. Campaigns can be costly, and the costs may outweigh the benefits in these cases. Therefore, segment 1 is of higher value for the company in implementing a market penetration strategy.

For Partners

Two of JD's its main partners are considered here. For both a mutual benefit of this segment is that they are loyal, active and pay attention to product detail. Other benefits to them are mentioned below.

Tiffany & Co.

Although this company suits an older demographic more, there are many reasons why they will find this segment attractive.

- Ability: The income level of this segment ranges from 100-130K GBP, therefore they can afford to purchase luxury items.
- Willingness: The average age is around the time where people may consider getting married. In addition to this, there are more males in the segment and traditionally males spend more on wedding rings.

Decathlon

Being a global sport retailer, the company caters to many demographics.

- Considering the average age, a portion of this segment would show a keen interest in Decathlon's wide range of products, particularly with the increase in awareness of health and fitness among the younger generation.
- Considering the average income, this segment would purchase from the full price range, from running shoes to kayaks and camping gear.
- As this is a segment of mostly undergraduate students, some may need equipment for sports and societies.

Competitors, like Alibaba will find the segment attractive for the same reasons as JD. However, it can be leveraged better by JD due to their partners' growth potential achieved through targeting the segment, the competitive advantage that the partners can give and JD's ability to utilize their e-commerce platform to a much greater extent than Alibaba as they hold a significantly higher market share.

Positioning

The formulation of an optimal positioning strategy will take the following steps.

SWOT Analysis

Strengths	Weaknesses
Attractive partner because of the past success of its partners after forming a partnership.	• Less diverse than main competition (Ahern, 2021).

 Strong technological infrastructure and supply chain. Local ecommerce market share, according to EcommerceDB (n.d.). **Opportunities Threats** • JD pays close attention to product attribute Local threats: Alibaba (Digital retail market) details and believes in authenticity. More and more consumers believe that personalization of · Foreign threats: Amazon products is essential (Bretous, 2022). • More people feel that businesses should take an omnichannel approach, using many platforms such as social media, emails and TV advertising, to marketing (Bretous, 2022). JD are looking to improve their marketing approach.

Market Penetration

This strategy is derived from Ansoff's matrix, and it entails leveraging its opportunities and preferences of the target segment to improve/reposition their existing digital product offerings in the existing digital product retail market. Considering this, there are many options for JD.

- In addition to the current loyalty scheme offered, loyalty bonuses can be added such as a points system based on purchases, writing reviews, participating in surveys etc. that can be redeemed for discounts and rewards.
- Advertise; authenticity of products offered and an increased customer engagement approach through up-to-date releases of new digital products and replacement reminders and return/warranty policies. JD can also improve how closely they track and predict product quality, which can be included in the advertising campaign.
- · Redesign social media platforms and increase its monitoring and management.
- Offer customers personalization opportunities on the e-commerce site and encourage retailers to the same for digital products to be sold. This way JD are following a customer trend.

• Innovate and encourage innovation, among retailers to be able to diversify. A tech-savvy group will prefer new and upcoming tech, and this can be further advertised on social media for example.

These strategies should lay a foundation for JD.com to be more competitive in the online digital product retail market while also maintaining the company's core principles of being authentic and focusing on marketing to grow the company.

References

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