A3: Unsupervised Learning Exam App Download Behavior Analysis Idris Kavak

Problem Definition:

After the mobile phone Industry was disrupted & revolutionized by the introduction of Smartphones into the industry at 2007, millions of applications were developed and will be developed in the future. This apps are used for countless different purposes by countless different types of people. Therefore, it is apparent that we can create great value by analyzing the app download behavior of Users and develop respective targeting strategies in order to optimize our Marketing Efforts. My objective will be to identify one critical Principal Component with a crucial Segment which the Marketing Segment can focus in the future by understanding their behavior.

Insights:

After doing the Exploratory Data Analysis & Machine Learning I derived the following meaningful Insights:

- The outstanding Segment I have identified, is a group of Professionals Leaders who
 consider themselves as active and always on the go. They like to lead in decision making
 and refer to themselves as opinion leader. Furthermore, they enjoy being in control and
 are also risk takers.
- Moreover, they don't perceive their mobile phones as a source of entertainment. They
 hardly use social networking apps and gaming apps. Specific Publication News Apps are
 mostly prevalent in their app reservoir.
- They rarely visit Facebook; however, they frequently spend time on LinkedIn.

- They mostly are iPhone users and therefore, don't use Android Software.
- They really aren't looking for bargain or package deals.
- One of the most quintessential characteristics which is perfectly in tandem with the
 other information of this segment is that the amount of free download apps are really
 low. This translates, that they are willing to spend money in Applications which they
 perceive to be useful.

Recommendation:

Based on my Analysis, I recommend the marketing department to target Segment 2. The target channel should be LinkedIn. The app should be appealing and based on creating valuable knowledge for Leadership and overall development of Soft Skills.

Our target segment is affluent enough to buy apps which are perceived to be relevant for Business Professionals. Therefore, we should create a thorough pricing-strategy according to the Functionality of the App.

Furthermore, we should target IOS/IPhone users since the majority of our Segment are users of Apple products.

By targeting and converting these group of people, we would easily create a Guerilla Marketing Strategy, where these opinion Leaders would do a great job for us in terms of Raising Awareness by Word-of-mouth Marketing.

Appendix:

	Need_1	Need_2	Need_3	Need_4
0	-1.087	1.370	-0.418	0.191
1	-0.522	-0.438	1.044	-0.359
2	0.836	0.109	0.383	1.622
3	-0.054	-0.772	-0.808	0.056
4	0.900	0.413	0.061	-0.824