Understanding of how to manage relationships with customers has become an important topic for both academic and practitioners in recent years. The effectiveness of business can be greatly improved by identifying the drivers of the most profitable customers and using them to target the right customers. In this study we identify exchange characteristics such as amount of money spent per purchase, customer relationship duration with firm, ratio of cross-buying and demographic characteristics such as age and gender as important drivers of the most profitable customers. The results of the study have important implications for academicians in understanding what drives the most profitable customers in noncontractual settings as well as practitioners to help design more effective marketing strategies. Moreover, the results of knowledge discovery about customers by different data mining techniques also contribute to help researchers identifying feasibility of these methods.