Chapter. 01
데이터 분석이란?

| 비즈니스 데이터 분석의 이해

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데이터 분석 TOOLS - Python I

강사. 김용담

I 고객들의 거래 내역 정보

Id	Product_Info_1	Product_Info_2	Product_Info_3	Product_Info_4	Product_Info_5	Product_Info_6	Product_Info_7	Ins_Age	Ht	Wt	BMI	Employment_Info_1	Employment_Info_2	Employment_Info_3
2	1	D3	10	0.076923077	2	1	1	0.641791045	0.581818182	0.148535565	0.323007976	0.028	12	1
5	1	A1	26	0.076923077	2	3	1	0.059701493	0.6	0.131799163	0.272287744	0	1	3
6	1	E1	26	0.076923077	2	3	1	0.029850746	0.745454545	0.288702929	0.428780429	0.03	9	1
7	1	D4	10	0.487179487	2	3	1	0.164179104	0.672727273	0.205020921	0.352437744	0.042	9	1
8	1	D2	26	0.230769231	2	3	1	0.417910448	0.654545455	0.234309623	0.424045645	0.027	9	1
10	1	D2	26	0.230769231	3	1	1	0.507462687	0.836363636	0.29916318	0.364886708	0.325	15	1
11	1	A8	10	0.166193846	2	3	1	0.373134328	0.581818182	0.173640167	0.376586717	0.11	1	3
14	1	D2	26	0.076923077	2	3	1	0.611940299	0.781818182	0.40376569	0.571611506	0.12	12	1
15	1	D3	26	0.230769231	2	3	1	0.52238806	0.618181818	0.184100418	0.36264306	0.165	9	1
16	1	E1	21	0.076923077	2	3	1	0.552238806	0.6	0.284518828	0.587795766	0.025	1	3
17	1	D3	26	0.128205128	2	3	1	0.537313433	0.690909091	0.309623431	0.521668453	0.05	9	1
18	1	D4	26	0.230769231	2	3	1	0.298507463	0.690909091	0.271966527	0.455050111	0.09	3	1
19	1	A2	26	0.102564103	2	3	1	0.567164179	0.618181818	0.163179916	0.320783966	0.075	9	1
20	2	D1	26	0.487179487	2	3	1	0.223880597	0.781818182	0.361924686	0.507514769	0.1	9	1
22	1	D4	26	0.487179487	2	3	1	0.328358209	0.636363636	0.142259414	0.264648223	0.16	3	1
23	1	A7	26	0	2	3	1	0.626865672	0.672727273	0.330543933	0.58127899	0.075	9	1
24	2	D4	26	0.487179487	2	3	1	0.208955224	0.745454545	0.246861925	0.360968696	0.1	14	1
25	1	D3	26	0.384615385	2	3	1	0.268656716	0.636363636	0.228033473	0.430949212	0.0378	9	1
26	1	D3	26	0.076923077	2	3	1	0.388059701	0.781818182	0.309623431	0.427393846	0.08	9	1
27	1	D4	26	0.487179487	2	3	1	0.223880597	0.6	0.138075314	0.285253828	0.055	9	1
29	1	D2	26	0.435897436	2	3	1	0.388059701	0.745454545	0.246861925	0.360968696	0.083	9	1

Source : https://www.kaggle.com/c/prudential-life-insurance-assessment/data%9D

I 고객 유형 분석

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Life Changing Education

I 서비스 설문 데이터

Q1	Q2	Q3	Q4	Q5
What is your age (# years)?	What is your gender? - Selected Choice	In which country do you currently reside?	What is the highest level of formal education that you have attained or plan to attain within the next 2 years?	Select the title most similar to your current role
35-39	Man	Colombia	Doctoral degree	Student
30-34	Man	United States of America	Master's degree	Data Engineer
35-39	Man	Argentina	Bachelor's degree	Software Engineer
30-34	Man	United States of America	Master's degree	Data Scientist
30-34	Man	Japan	Master's degree	Software Engineer
30-34	Man	India	Bachelor's degree	Data Analyst
22-24	Man	Brazil	Bachelor's degree	Student
25-29	Woman	China	Master's degree	Student
35-39	Man	Germany	Doctoral degree	Data Scientist
22-24	Man	China	No formal education past high school	Student
18-21	Man	India	Bachelor's degree	Student
35-39	Man	United States of America	Doctoral degree	Research Scientist
22-24	Man	Indonesia	Bachelor's degree	Student
30-34	Man	Canada	Bachelor's degree	Data Engineer
30-34	Man	Switzerland	Bachelor's degree	Other
18-21	Woman	India	Bachelor's degree	Student
25-29	Woman	Other	Bachelor's degree	Currently not employed
22-24	Man	Singapore	Bachelor's degree	Student
22-24	Man	India	Bachelor's degree	Student
18-21	Man	India	Bachelor's degree	Student
22-24	Woman	India	Doctoral degree	Statistician
30-34	Man	Russia	Bachelor's degree	Data Scientist
55-59	Woman	Canada	Master's degree	Product/Project Manager
35-39	Man	South Africa	Some college/university study without earning a bachelor's degree	Data Analyst

Source :https://www.kaggle.com/c/kaggle-survey-2020/data

I 서비스 설문 데이터

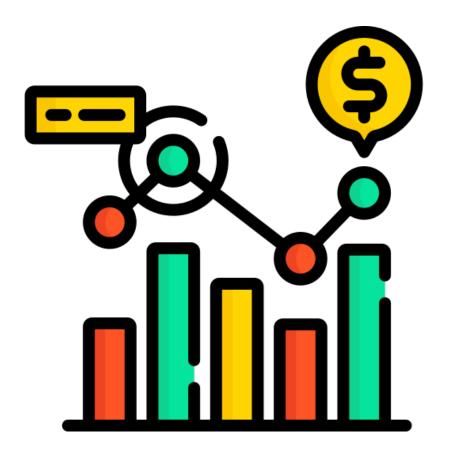| Q1	Q2	Q3	Q4	Q5
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30-34	Man	Japan	Master's degree	Software Engineer
30-34	Man	India	Bachelor's degree	Data Analyst
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22-24	Man	Indonesia	Bachelor's degree	Student
30-34	Man	Canada	Bachelor's degree	Data Engineer
30-34	Man	Switzerland	Bachelor's degree	Other
18-21	Woman	India	Bachelor's degree	Student
25-29	Woman	Other	Bachelor's degree	Currently not employed
22-24	Man	Singapore	Bachelor's degree	Student
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김용담 강사.

I 비즈니스 데이터 분석의 가치

- 수집한 데이터에서 어떤 가치를 뽑아내는가?
   -> 비슷한 고객들은 비슷한 의사 결정을 할까?

- 데이터를 분석하여 어떤 것을 얻어내고 싶은가?
   -> 고객들을 비슷한 유형들로 세분화

- 데이터를 통한 올바른 의사 결정을 할 수 있는가?
   -> 비슷한 고객들이 잘 세분화 되었다면, 새로운 고객에 대하여 유사한 집단을 파악하여 적용 가능

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김용담 강사.