



# Segmentacion RFM

## Conceptos básicos

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# Introducción- Herramientas Básicas

- A quien mandar un e-mail?
- Con que frecuencia?
- Preguntas fundamentales
- El segmento
- RFM para definir los segmentos
- Informes básicos





# Como se calcula RFM

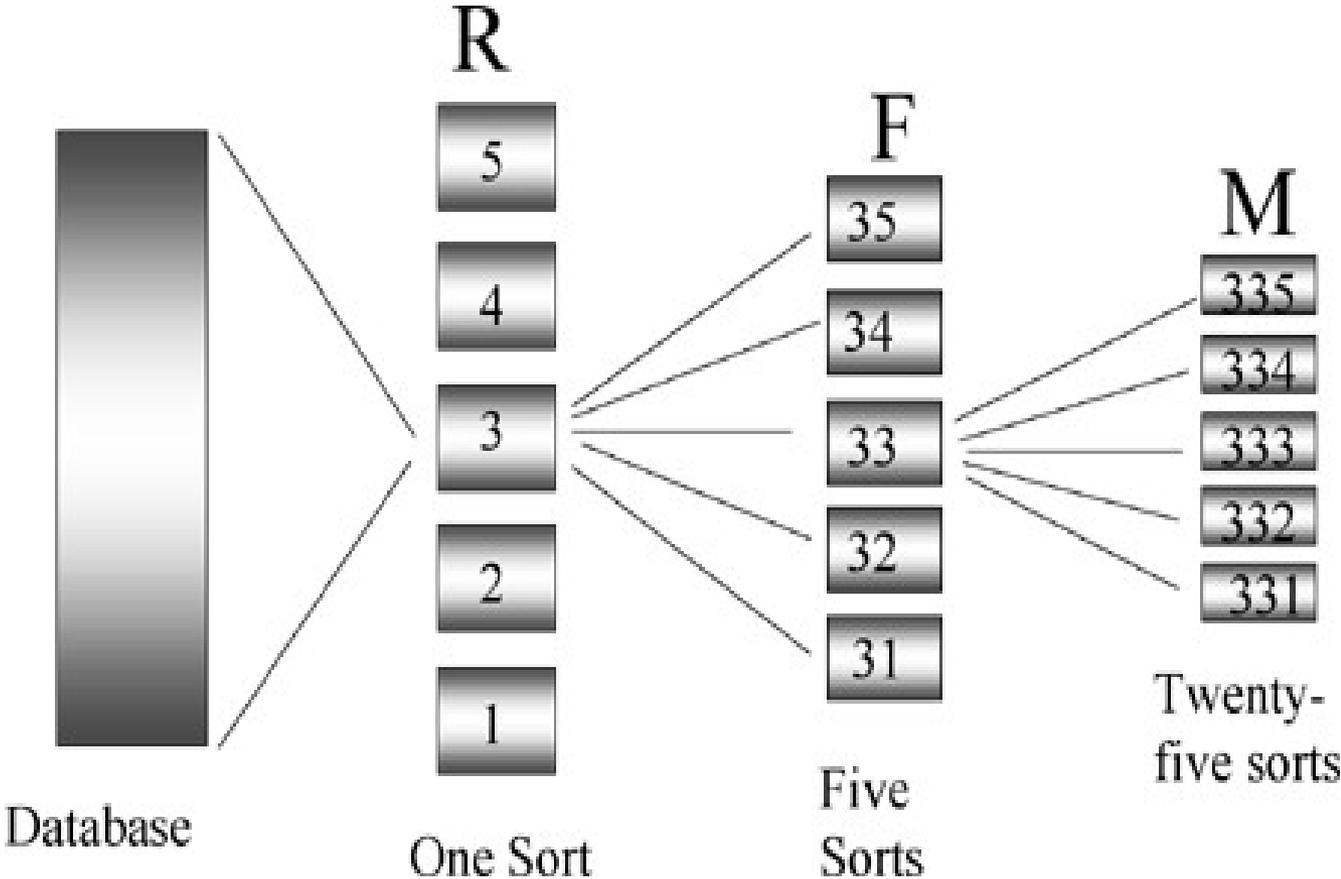
- 1) Se calcula en primer lugar el valor de las compras mas recientes, y se los clasifica en 5 grupos.
- 2) Para cada uno de los cinco grupos de compras recientes, se ordenan los registros de acuerdo al número de transacciones realizadas. Se crean entonces 25 grupos de frecuencias.
- 3) Para cada uno de los 25 grupos se ordena por cantidad de dinero gastada para crear así las 125 celdas de RFM finales .
- 4) Es recomendable almacenar el resultado de la valoración RFM para cada cliente para analizar cómo se están moviendo los clientes como resultado de los esfuerzos de marketing.

**Cuando se calcula correctamente el valor RFM, se obtienen intervalos del mismo tamaño.**





# Como se calcula RFM





# Rutinas de Cálculo

## *Get data frame:*

```
getDataFrame(df,startDate,endDate,tIDColName="ID",tDateColName="Date",tAmountColName="Amount")
```

## *Get Independent Score:*

```
getIndependentScore(df,r=5,f=5,m=5)
```

## *Scoring*

```
scoring(df,column,r=5)
```

## *Get Score with Breaks:*

```
getScoreWithBreaks(df,r,f,m)
```





# Rutinas de Cálculo

*Get data frame:*

```
getDataFrame(df,startDate,endDate,tIDColName="ID",tDateColName="Date",tAmountColName="Amount")
```

	IdOld	ID	Fecha	Cant	Importe	row.names	IdOld	ID	Fecha	Cant	Importe	Recency	Frequency	Monetary	
						1	4	4	1	1997-12-12	2	26.48	201	2	20.720000
						2	25	111	6	1998-06-20	3	55.47	11	10	67.390000
						3	30	113	8	1998-03-07	1	11.49	116	2	13.380000
1	4	1	19970101	2	29.33	4	35	114	9	1998-02-11	2	28.98	140	3	26.813333
2	4	1	19970118	2	29.73	5	43	133	11	1997-11-11	2	32.98	232	1	32.980000
3	4	1	19970802	1	14.96	6	52	166	13	1998-05-27	1	11.88	35	7	20.521429
4	4	1	19971212	2	26.48	7	68	228	17	1998-01-06	1	29.99	176	5	36.784000
5	21	2	19970101	3	63.34	8	76	226	19	1998-05-05	3	43.47	57	3	27.900000
6	21	2	19970113	1	11.77	9	85	312	25	1997-12-21	1	14.99	192	1	14.990000
7	50	3	19970101	1	6.79	10	91	341	28	1997-07-27	4	80.46	339	1	80.460000
8	71	4	19970101	1	13.97	11	101	429	35	1998-06-14	1	59.49	17	2	45.315000
9	86	5	19970101	2	23.94	12	107	502	39	1997-10-09	1	16.99	265	1	16.990000
						13	138	564	46	1998-05-31	1	12.99	31	17	25.702353
						14	145	656	51	1998-04-11	6	93.81	81	2	57.395000





# Rutinas de Cálculo

*Get Independent Score:*

`getIndependentScore(df,r=5,f=5,m=5)`

	row.names	IdOld	ID	Fecha	Cant	Importe	Recency	Frequency	Monetary	R_Score	F_Score	M_Score	Total_Score
1	4	4	1	1997-12-12	2	26.48	20	4	25.125000	5	5	3	553
2	6	21	2	1997-01-13	1	11.77	353	2	37.555000	1	4	4	144
3	7	50	3	1997-01-01	1	6.79	365	1	6.790000	1	3	1	131
4	8	71	4	1997-01-01	1	13.97	365	1	13.970000	1	3	1	131
5	9	86	5	1997-01-01	2	23.94	365	1	23.940000	1	3	3	133
6	19	111	6	1997-12-06	3	83.47	26	10	71.412000	5	5	5	555
7	27	112	7	1997-02-05	1	11.77	330	2	11.770000	2	4	1	241
8	28	113	8	1997-01-01	3	32.91	365	1	32.910000	1	3	4	134
9	33	114	9	1997-09-08	1	22.97	115	3	22.486667	5	5	3	553
10	36	131	10	1997-01-01	2	30.32	365	1	30.320000	1	3	4	134
11	43	133	11	1997-11-11	2	32.98	51	7	28.452857	5	5	3	553
12	44	151	12	1997-01-01	1	13.97	365	1	13.970000	1	3	1	131
13	49	166	13	1997-12-24	3	36.97	8	5	27.586000	5	5	3	553
14	53	181	14	1997-01-01	3	43.70	365	1	43.700000	1	3	5	135
15	54	198	15	1997-01-01	1	15.76	365	1	15.760000	1	3	2	132

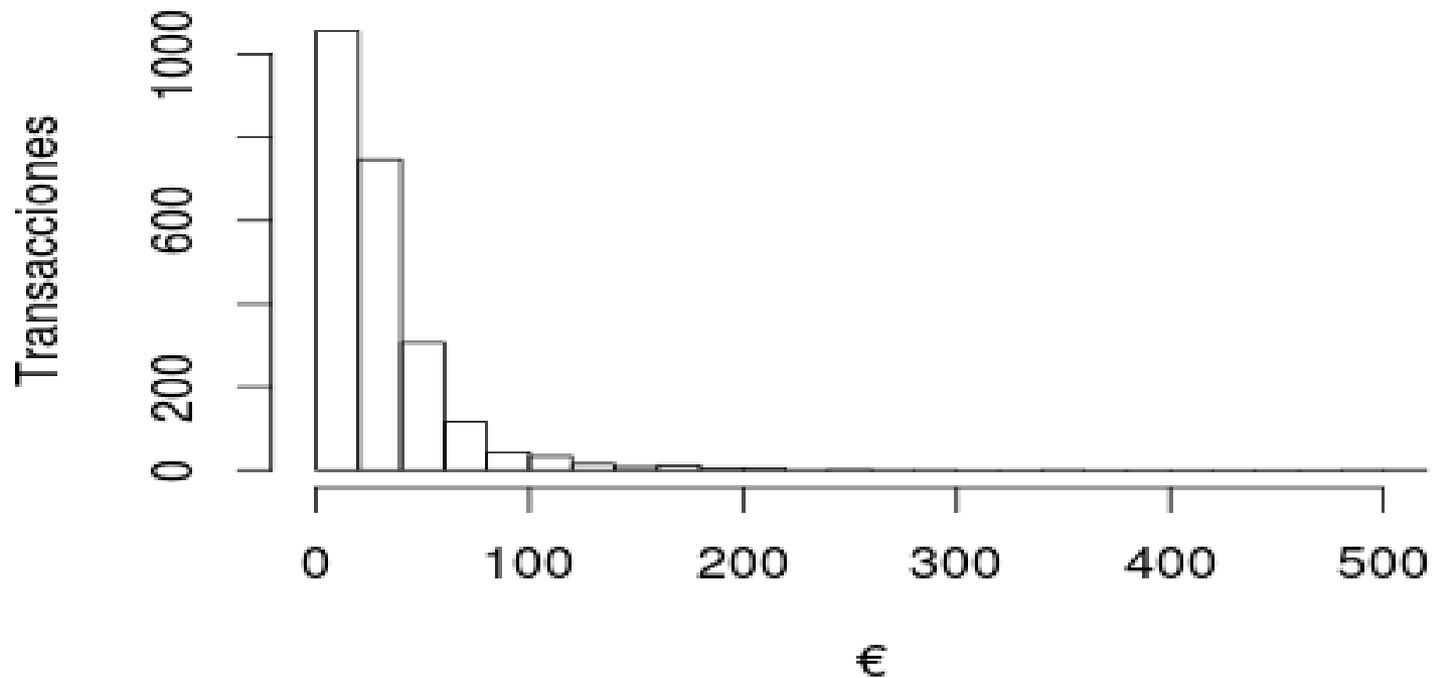






# Algunos Gráficos

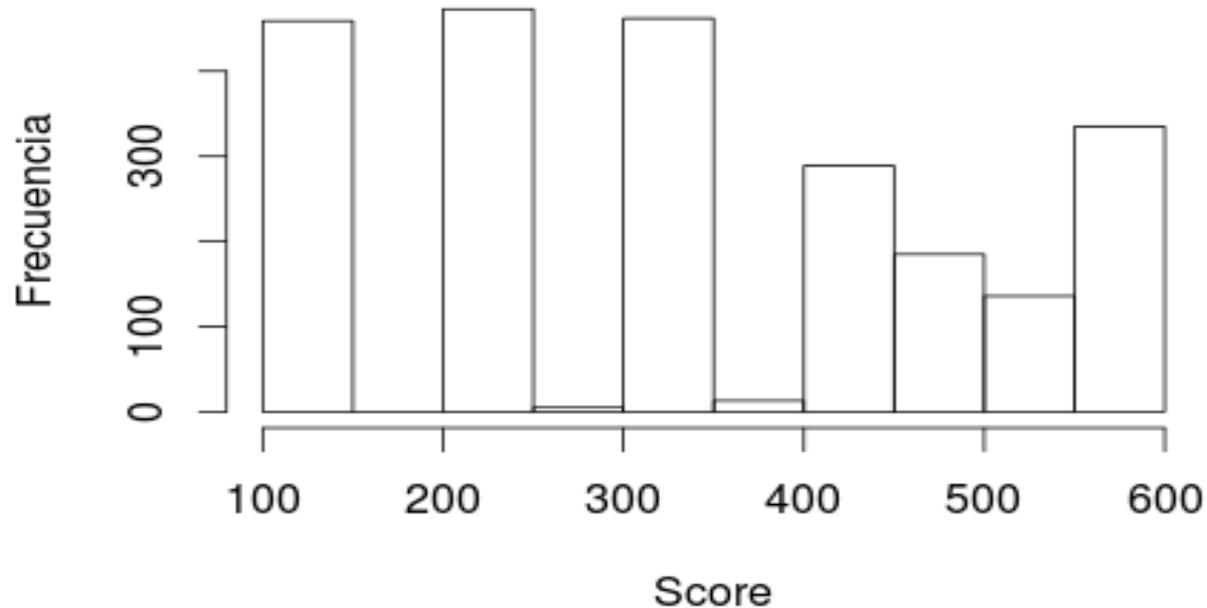
**Distribución importes de Compra  
€/compra**





# Algunos Gráficos

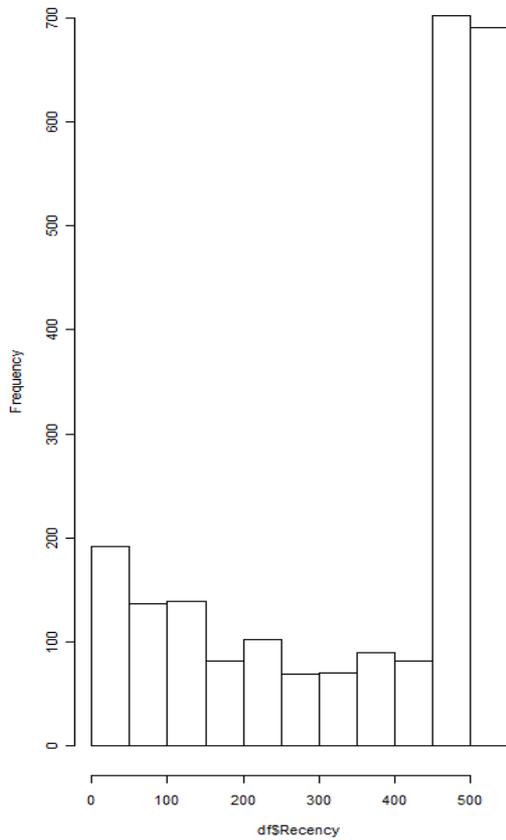
## Distribución de Score RFM



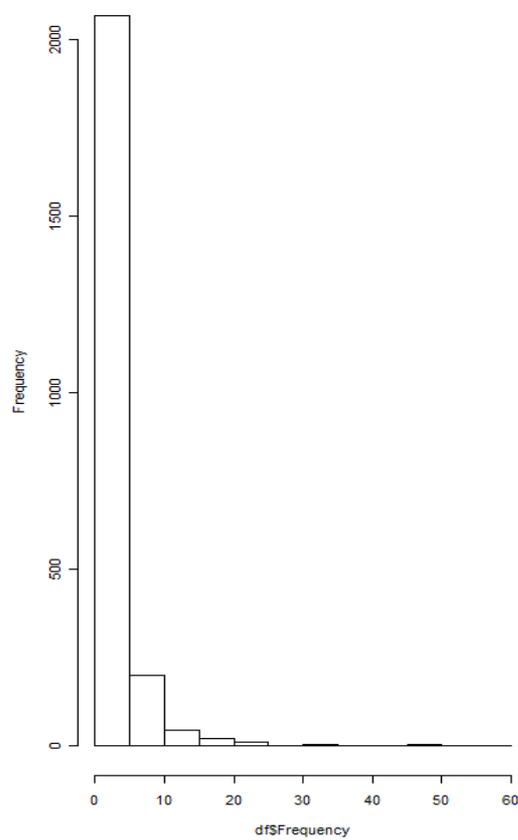


# Histogramas

Histogram of df\$Recency



Histogram of df\$Frequency

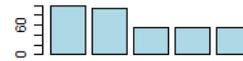
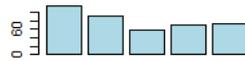
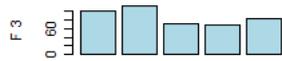
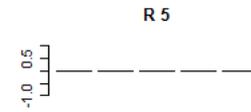
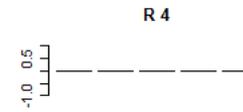
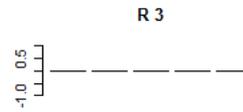
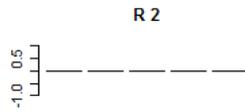
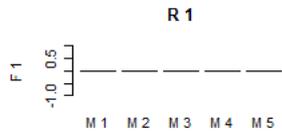


Histogram of df\$Monetary

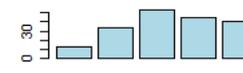
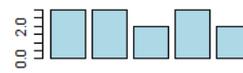
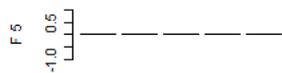
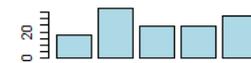
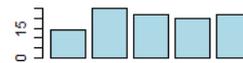
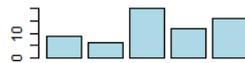




# Algunos Gráficos



<http://www.DataApple.Net>





# Otros análisis

## Evolución de clientes

ID	1	2	3
1	232	332	553
2	0	0	144
3	0	0	131
4	0	0	131
5	0	0	133
6	555	455	555
7	0	0	241
8	331	531	134
9	343	443	553
10	0	0	134
11	224	344	553
12	0	0	131
13	552	552	553
14	0	0	135
15	0	0	132





# Fuentes

## Artículos

RFM Customer Analysis with R Language

<http://www.dataapple.net/?p=84>

Doing RFM Analysis in R:

<http://decisionstats.com/2012/03/27/doing-rfm-analysis-in-r/>

RFM Migration Analysis

<http://www.dbmarketing.com/articles/Art123.htm>

## Dataset

CDNOW\_SAMPLE.txt

## Rutinas:

[http://www.dataapple.net/wp-content/uploads/2013/12/RFM\\_Analysis\\_R\\_Source\\_Codes\\_V1.3.txt](http://www.dataapple.net/wp-content/uploads/2013/12/RFM_Analysis_R_Source_Codes_V1.3.txt)





# Gracias!

Gracias por su amable atención!

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