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IVEY

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THE LONDON JETS

Joel Bycraft and Chad Hensler prepared this case under the supervision of Professor Michael R. Pearce solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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INTRODUCTION

Chris Harris was facing a crisis. Word had just been passed down from senior management that unless the London Jets hockey franchise could significantly increase revenues within the next season, the franchise would be sold, meaning that the city of 330,000 people would lose their major sports franchise. As the marketing manager of single-ticket sales (non-season tickets) for the team, Harris had been involved in a high-budget ad campaign that ran for most of the previous year. The results were mediocre at best. While the number of new customers and total sales had risen slightly, the increased revenues were largely offset by the costs of the ad campaign. Harris needed to determine quickly if there was a way to increase the return on his marketing investment.

Harris wondered if he knew the Jets' target market as well as he thought he did. He picked up the phone and called the information systems and administration manager, Kevin Markland: "I need to know who our customers are, very quickly!"

THE CUSTOMER DATABASE

While somewhat irritated by the demands, especially coming from the marketing department, Markland promised to have an answer to Harris in an hour. Harris was elated, but his enthusiasm disappeared quickly when he opened the file that appeared in his inbox. It was a list of all customers who had purchased a ticket with their credit card in the last three years. For an excerpt, see Exhibit 1.

A little confused, Harris immediately called Markland back, "How is this supposed to help me?"
Markland replied bluntly, "You asked who our customers are. I gave you the list. What more do you want?"

"Well, what did they buy? This doesn't tell me anything!"

After listening to Harris's situation Markland responded, "We can buy a lot of data on people. Let me know what you want to know about your customers, and I'll find it, but you need to be specific with what you want. Once we buy the data, we can append it to our existing database."

EXTERNAL DATA

Harris set out to develop a list of data fields that he would like to fill. The possibilities for data seemed endless. He developed a list of 20 fields and e-mailed them to Markland.

The phone rang almost instantly. "It's Kevin. How much time do you think I have on my hands? And really, do you think there's that much money in our budget? Narrow it down to seven and I'll see what I can do."

Harris narrowed the list of data fields down to seven:

- Income
- Age
- Sex
- Marital Status
- Magazine Subscriptions
- Vehicle Ownership
- Jets Fan Club Member

Harris also asked that the data from the transactional database be summarized and added to the customer list. He felt this information would give him a fairly clear picture of who his customers were, what they were buying and how to communicate with them.

Markland listened carefully. "No problem Chris, I'll get you the additional data by the end of the day."

CUSTOMER RETENTION

The additional information Harris wanted hadn't arrived by the time he was leaving the office, but Markland had provided a summary of customer retention over the past three years (see Exhibit 2). Harris was surprised that the Jets had such a low percentage of customers who were buying year after year.

The Jets' only current customer retention strategy was the London Jets Fan Club. Club membership consisted of mail and e-mail notices of upcoming games, and members-only promotions. Harris wondered if club membership had any effect on ticket revenues. Also, being the only large sports franchise in town, the Jets organization had tried to maintain a good relationship with the business community by offering a corporate-events program in the past. Harris realized that finding a way to keep the Jets' existing single-ticket and subscription customers coming back must be a priority if the team was to remain viable in London.

RECENCY, FREQUENCY AND MONETARY VALUE (RFM)

That night, Harris thought back to his days in marketing class, "There must be a way to increase our retention rate." He concluded that his best customers, and those most likely to purchase again, were

customers who had purchased tickets recently, purchased often and spent the most money. These were the customers to whom he should be directing his marketing efforts. But how to identify them?

Next morning, Harris received the data he had asked for (Exhibit 3). Markland had also attached a description of each of the fields (Exhibit 4). Harris decided he would need a recency, frequency and monetary (RFM) analysis on the database. RFM analysis typically adds a three-digit code to the customer database ranking the relative recency of purchase, frequency of purchases and total money spent for each customer. If customers are divided into quintiles, the most recent top 20 per cent of purchasers would have a recency score of 5, the next quintile a score of 4, and so on. The same applied for the frequency and monetary codes. Those customers most likely to respond to marketing efforts would have a RFM score of 5-5-5, while the least likely prospect would have a score of 1-1-1 (see Appendix A for more information on RFM.)

CUSTOMER SEGMENTATION

Harris decided that an RFM analysis should be followed by a segmentation analysis to determine which kinds of customers were most valuable to the Jets. He scrolled through the customer list for a few minutes trying to decide how he should segment the customers. Harris had learned how to do Pivot Tables in Excel and thought he'd try that technique for segmentation analysis (see Appendix B).

THE CHALLENGE

Harris felt he now knew what had to be done to develop an individualized marketing strategy for single-ticket customers and he has called you in, as his assistant, to do the actual work. He has also provided you with the Excel spreadsheets.

Exhibit 1

EXCERPT FROM CUSTOMER LIST

CustID	Name_First	Name_Last	Address	City	Postal	Phone
1	C	Dale	92 Concord Cres	London	N6G1X8	519471-1712
2	A	Gill	11 Kingspark Cres	London	N6A5B9	519858-4812
3	D	Rodriguez	300 Dundas St	London	N6J4Y5	519685-3997
4	R	Haider		London	N6J4J1	0
5		Undisclosed Company		London	N6G4T9	519641-8300
6	N	Millar	155 Kent ST	London	N6H1Z2	519438-6016
7	N	Al-azawi	1903 Avalon St	London	N6G3M6	519474-3326
8	C	Moubarak	1526 Mardell Pl	London	N5Z3G5	519681-8686
9	G	Glanville	1917 Standfield Rd	London	N6G4L1	519431-1317
10	D	Levite	26 Foxborough Grove	London	N5Y2Z8	519434-1886
11	A	Gristo		London	N6G1E2	0
12	S	Earle	35 Carfrae Cres	London	N6K1H4	519472-6367
13		Undisclosed Company		London	N5X2S1	519642-2046
14	J	Al-khateeb	1903 Avalon St	London	N6G3M6	519474-3326
15	R	Brook	130 Pond Mills Rd	London	N6H4K4	519473-3742
16	A	David	1188 St. Anthony St	London	N6H2E1	519642-4204
17	R	Patrick	250 Sydenham ST	London	N6H1H2	519434-1089
18	R	Allen	66 Whisperwood Cres	London	N6G2J2	519472-9670
19	J	Delanghe		London	N6A3A1	0
20	T	Yassine	222 Bowie St	London	N6E2L5	519663-9870
21	B	Spriet		London	N6A1A8	0
22	S	Romano	1299 Glenora Rd	London	N5X3N8	519850-0430
23		Rust	564 Salway Crt	London	N6H5J6	519473-7426
24	A	Navs	62 Alder Grove	London	N6K3G1	519471-5160
25	A	Nardachioni	3 Brunswick Ave	London	N6G3V4	519471-2465
26	A	Alsharif	1013 Wellington St N	London	N6J4T1	519686-8518
27	L	Hansen	364 Ridgewood Cres N	London	N6H3G5	519471-5025
28	A	Hill	164 Donna St	London	N6H4T1	519472-6306
29	G	Murdy	236 Hyman St	London	N6J3X7	519657-5185
30	G	Chahbar	102 Colonial Cres	London	N6G4P7	519642-1184
31	D	Flood	27 Blackthorne Cres	London	N6G1T9	519472-3717

Exhibit 2

CUSTOMER RETENTION RATE

Customer Retention Rate

	1998	1999	2000	2001
1998	100%	84.80%	65.20%	51.80%
1999		100%	85.70%	61.70%
2000			100%	69.80%
2001				100%

Exhibit 3

SAMPLE OF HARRIS' DATA TABLE

Cust Id	F Name	Last Name	Address	City	Postal	Phone	Type	# Gm	Avg Seats	Total Sales	Last tr year	Last tr month	Sex	Income	Mar St	Age	FanCl Mber	Auto	Subsc
1	C	Dale	92 Concord Cres	London	N6G1X8	519471-1712	P	3	3	630	2001	2	M	57,819	S	40	0	1	Free Press
2	A	Gill	11 Kingspark Cres	London	N6A5B9	519858-4812	P	1	2	140	2000	9	M	71,938	S	44	0	1	
3	D	Rodriguez	300 Dundas St	London	N6J4Y5	519685-3997	P	1	2	50	2001	10	M	23,891	M	24	0	1	
4	R	Haider		London	N6J4J1	0	P	1	3	75	2001	9	F	37,231	S	37	0	0	
5		Company		London	N6G4T9	519641-8300	B	3	4	660	1998	10	B						
6	N	Millar	155 Kent ST	London	N6H1Z2	519438-6016	P	2	2	220	2000	4	M	55,785	S	37	0	0	
7	N	Al-azawi	1903 Avalon St	London	N6G3M6	519474-3326	P	1	6	330	1998	2	F	41,259	M	35	0	1	
8	C	Moubarak	1526 Mardell Pl	London	N5Z3G5	519681-8686	P	7	2	560	1998	1	F	66,152	S	39	1	0	Macleans
9	G	Glanville	1917 Standfield Rd	London	N6G4L1	519431-1317	P	1	6	240	2000	11	M	37,486	S	30	0	1	
10	D	Levite	26 Foxborough Grove	London	N5Y2Z8	519434-1886	P	5	3	825	1998	4	F	50,080	S	28	0	0	Macleans
11	A	Gristo		London	N6G1E2	0	P	1	4	100	2000	7	M	69,509	M	38	0	1	
12	S	Earle	35 Carfrae Cres	London	N6K1H4	519472-6367	P	1	5	275	1999	6	F	70,736	S	38	0	1	Macleans
13		Company		London	N5X2S1	519642-2046	B	7	1	490	2000	3	B						
14	J	Al-khateeb	1903 Avalon St	London	N6G3M6	519474-3326	P	1	3	120	2001	8	M	35,776	M	36	0	1	Macleans
15	R	Brook	130 Pond Mills Rd	London	N6H4K4	519473-3742	P	5	3	375	2001	12	M	40,098	S	38	0	1	
16	A	David	1188 St. Anthony St	London	N6H2E1	519642-4204	P	3	4	840	1998	6	M	58,469	S	51	0	0	Hockey News
17	R	Patrick	250 Sydenham ST	London	N6H1H2	519434-1089	P	1	2	140	2000	2	M	78,788	M	51	0	1	
18	R	Allen	66 Whisperwood Cres	London	N6G2J2	519472-9670	P	7	2	350	2000	4	M	36,366	S	41	0	1	
19	J	Delanghe		London	N6A3A1	0	P	4	3	660	2001	7	F	68,950	S	49	0	1	Macleans
20	T	Yassine	222 Bowie St	London	N6E2L5	519663-9870	P	1	3	75	1998	6	M	19,242	S	33	0	1	
21	B	Spriet		London	N6A1A8	0	P	4	2	200	1999	11	M	53,330	S	41	0	1	Hockey News
22	S	Romano	1299 Glenora Rd	London	N5X3N8	519850-0430	P	5	2	250	2001	1	M	15,762	S	20	0	0	Hockey News
23		Rust	564 Salway Crt	London	N6H5J6	519473-7426	P	1	5	275	2001	10	F	46,144	M	37	0	1	Macleans
24	A	Navs	62 Alder Grove	London	N6K3G1	519471-5160	P	2	3	150	2000	1	M	23,625	M	34	0	1	
25	A	Nardachioni	3 Brunswick Ave	London	N6G3V4	519471-2465	P	2	6	660	1998	3	F	74,299	S	52	0	1	Macleans
26	A	Alsharif	1013 Wellington St N	London	N6J4T1	519686-8518	P	4	4	400	2000	1	M	44,275	M	35	0	1	
27	L	Hansen	364 Ridgewood Cres N	London	N6H3G5	519471-5025	P	4	5	500	2001	5	M	90,942	M	56	0	1	
28	A	Hill	164 Donna St	London	N6H4T1	519472-6306	P	3	2	150	2001	4	M	39,649	S	21	0	0	
29	G	Murdy	236 Hyman St	London	N6J3X7	519657-5185	P	5	2	250	2001	5	M	24,938	M	31	0	1	
30	G	Chahbar	102 Colonial Cres	London	N6G4P7	519642-1184	P	7	2	350	2000	7	F	54,202	S	45	1	1	Macleans

Exhibit 4

DESCRIPTION OF FIELDS

Field	Description
CustID	Unique customer identifier
Name_First	First name
Name_Last	Last name
Address	Address
City	City
Postal	Postal code
Phone	Phone number
Type	Customer Type (Business or Personal)
Num_Games	Average number of games per year (transactions)
Avg_Seats	Average number of seats purchased per game
Tot_Sales	Yearly sales per customer
LastTransYear	Last transaction year
LastTransMonth	Last transaction month
Sex	Sex (Male, Female, Business)
Income	Annual income
Marital Status	Marital Status (Married or Single)
Age	Age of customer
Fan Club Member	Fan club member (1=yes 0=no)
Automobile	Vehicle ownership (1=yes 0=no)
Subscription	Magazine/Newspaper Subscriptions

Appendix A

RFM ANALYSIS

A Quick Word on Databases

Modern databases are simply tables of information. For example, the London Jets' customer database contains an entry for each customer. Each entry is an entire row in the table that contains information on a particular customer such as an account number, name, address, etc. A database field is a defined category of information such as address, postal code, account number, etc.

Sorting

Sorting is a common database operation that arranges the data in a specific order. To sort data in Excel, the entire range of data to be sorted is selected. It is important to select all the columns containing data, as excel will sort only the selected columns. Sorting only a few columns will mangle the data. One can select as many or few rows of data to sort as wished. To proceed:

- Select the rows of data to sort.
- Under the Data menu, click Sort.
- Choose the fields to sort by, and the order for the entries to appear. If field names do not appear, make sure the Heading Rows radio button is selected.

Recency

Recency is a measure of how recently each customer has purchased from the organization. Some regard this as the best indicator of how receptive a customer will be to on-going marketing efforts. To create a recency code, one uses the date of the last transaction for each customer. Markland has provided this field in his summary table. To proceed:

- Sort the customer table by the last transaction year field, then by the last transaction month.
- Create a new field by adding a title to the top row of the table. Assign the first quintile of table a value of 5 for the recency field. The next quintile would receive a 4, and so on.

Frequency

Frequency is a measure of the number of transactions per year with a customer. Each hockey game a customer attends would be considered a transaction. Again, Markland has provided this information in his summary table. To proceed:

- In a similar fashion to the recency code, sort the table by the number of transactions, and assign each quintile a value from 5 to 1.

Appendix A (continued)

Monetary

Monetary is an indication of the total amount of money the customer has spent with the organization. The customers are given a ranking in the same method as for recency. To proceed:

- For the Jets, we recommend three groups (assigning 5, 4 and 3) instead of the usual five.

RFM in Practice

RFM sorting is usually more complicated than as described above. It usually requires 31 independent sorting operations instead of just three. To create RFM cells, the database is sorted once by recency, dividing the database into five equal parts, which are assigned a number from 5 to 1. Each of these quintiles is then sorted independently for frequency and divided into five groups. There are now 25 equally sized groups. Each of these 25 is then sorted independently for monetary, creating 125 groups of equal size. Using the method described above, the groups will be of different sizes, but for Harris's purposes, groupings of unequal sizes will suffice.

Appendix B

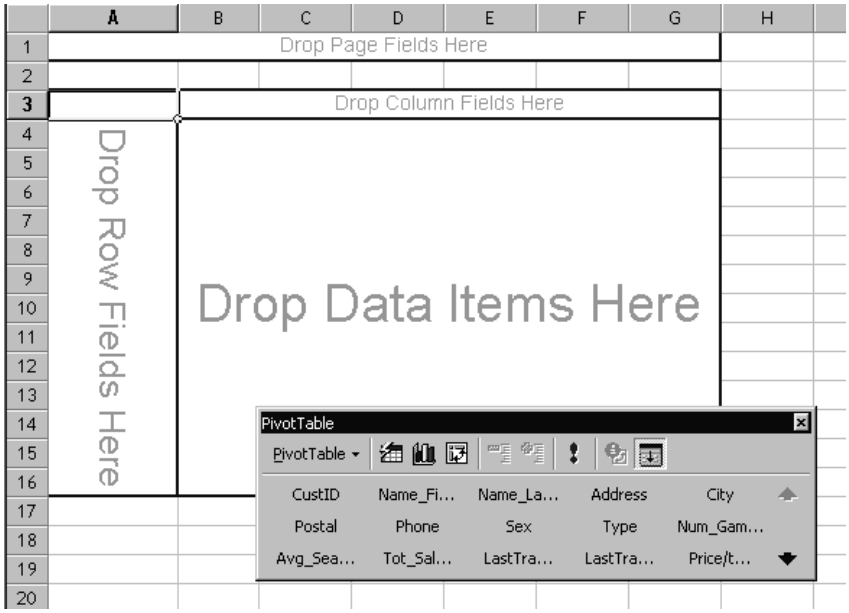
PIVOT TABLE REPORTS IN EXCEL

The Pivot Table feature in Excel is a powerful reporting tool used to summarize large quantities of data. It is an excellent tool for quick analysis.

To begin, it is usually a good idea to gain a rough idea of what characteristics one would like to compare. Harris has mentioned some places to start. The information needed to create Harris's comparisons already exists, with the exception of the average price paid per ticket. This can be calculated.

Once the data are set up, creating the pivot table is simple. First, select any cell in the customer table. Under the Excel Data menu, select Pivot Table and Pivot Chart Report. This brings up a three-step wizard. In step one, select Microsoft Excel List or Database, and Pivot Table. In step two, ensure the entire range of data is selected. In step three, let Excel place the PivotTable in a new worksheet. Click Finish.

Excel will create an empty PivotTable in a new worksheet. For our sample report, we would like Excel to count the number of customers who fall into the categories we select. This requires a field that contains an entry for every customer and is never blank. The CustID field is ideal for this task. On the PivotTable toolbar, drag the CustID field into the area of the chart labelled Drop Data Items Here.

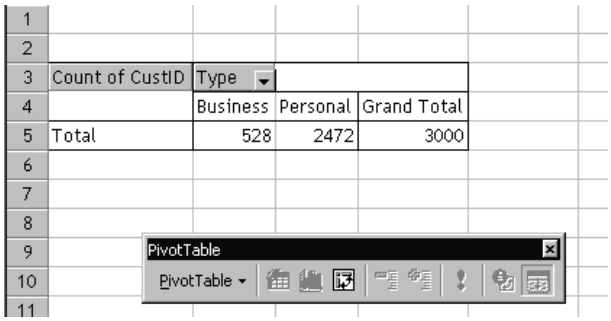


Excel then provides a chart with one entry: the sum of the CustID field. To tell Excel to count instead of sum the field, right-click on the sum cell, and select Field Settings. In the Summarize By box, select Count and click OK. Now the total number of customers will be listed.

Appendix B (continued)

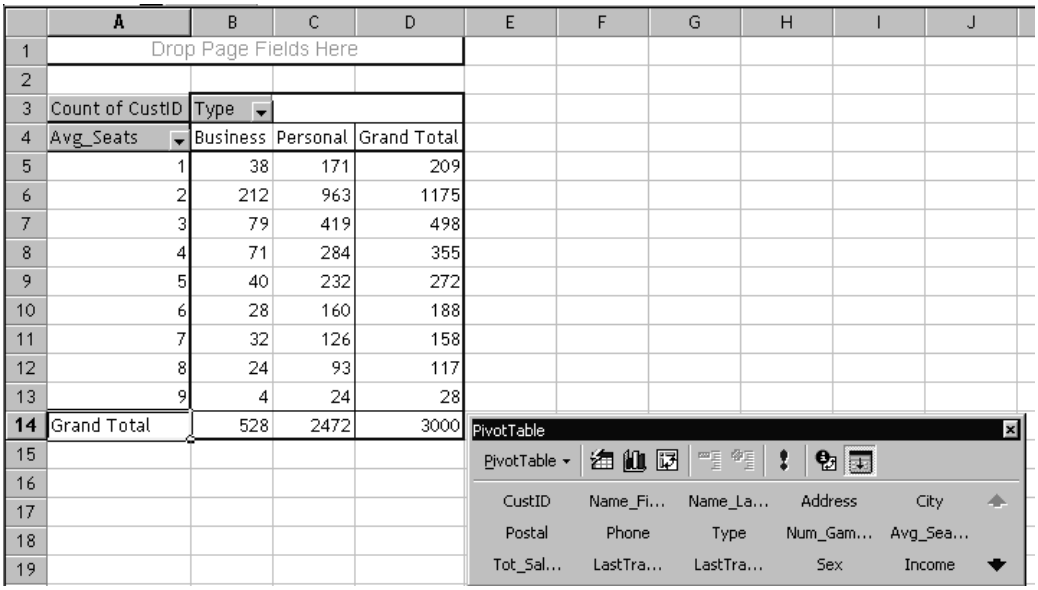
PIVOT TABLE REPORTS

To categorize the customers by type, drag the *Type field* onto the cell that is currently labelled *Total*. Customers will now be divided by type, as below:



3	Count of CustID	Type		
4		Business	Personal	Grand Total
5	Total	528	2472	3000

We can sub-group the customers by another field. On the PivotTable toolbar, drag the *Average_Seats* field to the Total cell, A5. Here is how it looks:

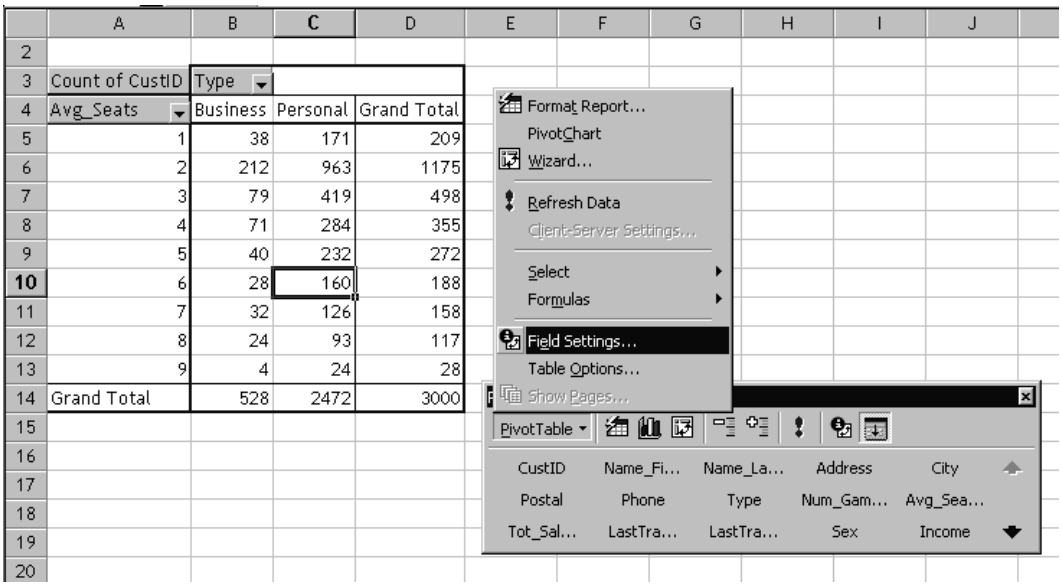


	A	B	C	D
1	Drop Page Fields Here			
3	Count of CustID	Type		
4	Avg_Seats	Business	Personal	Grand Total
5	1	38	171	209
6	2	212	963	1175
7	3	79	419	498
8	4	71	284	355
9	5	40	232	272
10	6	28	160	188
11	7	32	126	158
12	8	24	93	117
13	9	4	24	28
14	Grand Total	528	2472	3000

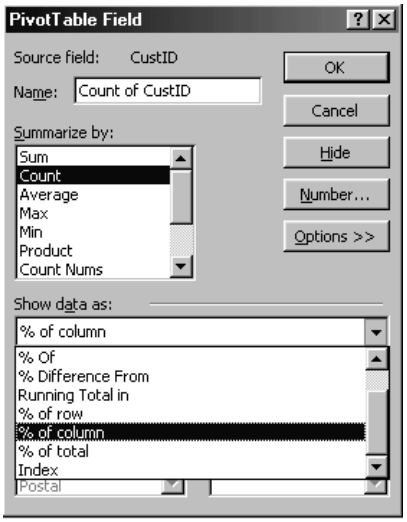
It might be useful to view the data as percentages of a total rather than as actual counts. To accomplish this, *select any cell in the data area* of the table and under the PivotTable button on the toolbar, select *Field Settings*.

Appendix B (continued)

PIVOT TABLE REPORTS



In the Pivot Table Field dialogue box, click the *Options* button to expand the window. Under Show data as make a selection. For this table, try *% of column*.



The table now summarizes the number of customers in each category as a percentage of the total number of business and personal customers.

To remove a field from the table, drag its title cell out of the table and back into the PivotTable toolbar. The customers can be grouped and regrouped by any combination of fields in this manner. By examining the patterns in the reports created, segments may become apparent.

NOTE: Feel free to experiment with the PivotTable, as this does not change the original data. If you make a mistake and can't recover, simply delete the worksheet and start over again.