

KaleiDiagram® for Excel

Users Manual

KaleiDiagram for Excel

V1.3



KaleiDiagram[®] for Excel

Data Filtering, Data Segmentation and Merging of Sheets

Rank B 2000 (754/40%)

Rank C 1998 (45/24%)

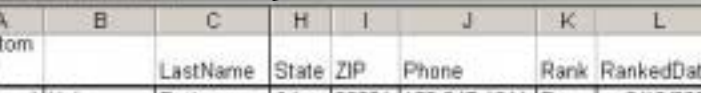
Rank A 2001 (297/14%)

213/34% 104/11% 104/11%

61/7%

181/31%

0/0%



The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	H	I	J	K	L	M
1	Custom								
2	erID		LastName	State	ZIP	Phone	Rank	RankedDate	
3	1	Helena	Butler	CA	90021	159-847-1911	B	3/10/2001	
4	2	Meryl	Nathan	CA	93557	516-980-8952	B	10/10/2001	
5	3	Christie	Feight	CA	91592	446-107-4702	C	10/10/2001	
6	4	Lucy	Hoffman	CA	92877	520-422-9912	B	12/10/2001	
7	5	Jordan	Glenwood	CA	95472	596-376-6854	B	3/10/2001	
8	6	Jasper	Paul	CA	94600	715-607-410	B	10/10/2001	
9	7	Wayne	Raymond	CA	94268	164-596-1487	A	11/10/2001	
10	8	Lucien	Campaigni	CA	92122	242-177-9068	B	12/10/2001	
11	9	Eunice	Berkin	CA	93095	394-846-6657	A	9/10/2001	

A red arrow points to the 'Sales' column header in the original image.

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KaleiDiagram for Excel

The word KaleiDiagram comes from Kaleidoscope, an optical device that creates limitless symmetrical designs and patterns caused by the reflections of colored glass objects. In a similar manner, KaleiDiagram for Excel enables users to view data that is stored in Excel format in various patterns and combinations. Users can reflect on their insight to arrive at meaningful conclusions regarding the data. KaleiDiagram releases users from the frustration associated in obtaining real information and knowledge from data.

KaleiDiagram gives a simple solution for all managers who receive tons of data daily in various forms at various times and from various sources. The system helps to filter data, segment data, and/or merge data by simple drag and drop operations.

KaleiDiagram is a Microsoft Excel add on software which is suited to beginners and power users alike, that need additional functions for manipulation and consolidation of Microsoft Excel data. The software's ease of use enables the users to operate efficiently without the need of any knowledge of Excel Macros or other sophisticated Excel commands.

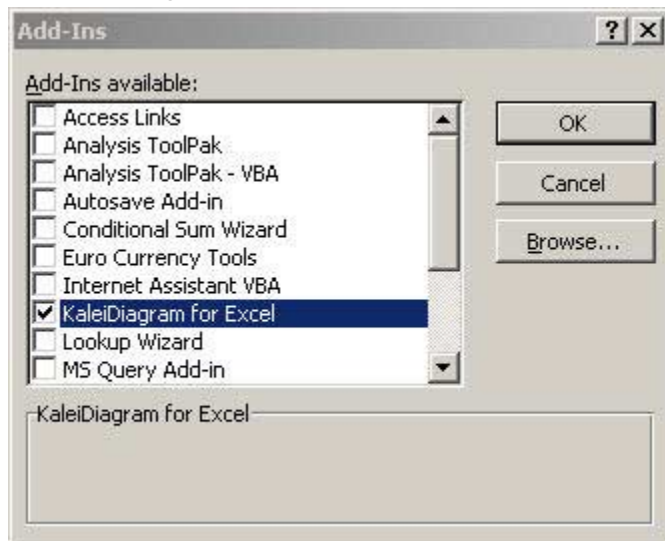
Users can work with Excel data in a much simpler manner, at the same time extending to capabilities beyond those provided by Excel commands such as "Filter". Users can retrieve data satisfying "AND", "OR", "NOT", "AND NOT" and many other criteria by simple drag and drop operations.

KaleiDiagram is based on the principles of Set Theory technology and makes it possible for users to discover unexpected results from their data. Cumbersome jobs of verification across multiple Excel Sheets or Excel Books are simplified for maximum benefit to all users.

KaleiDiagram has been developed to reduce users' dependence on the constantly reducing and overburdened corporate IT resources, but at the same time be able to handle all problems that are too local, personalized or ad-hoc in nature. It is also of great benefit to organizations served very little or not at all by any IT systems.

Install KaleiDiagram

To install, run the program “Kdsetup.exe” and follow the instructions. This process creates a KaleiDiagram Icon on the Desktop. KaleiDiagram Icon starts Excel with KaleiDiagram ready to use. If you want to start Excel directly or by clicking a “.xls file”, and use KaleiDiagram, then click “Tools” “Add-Ins” and make sure that “KaleiDiagram for Excel” has a check mark.



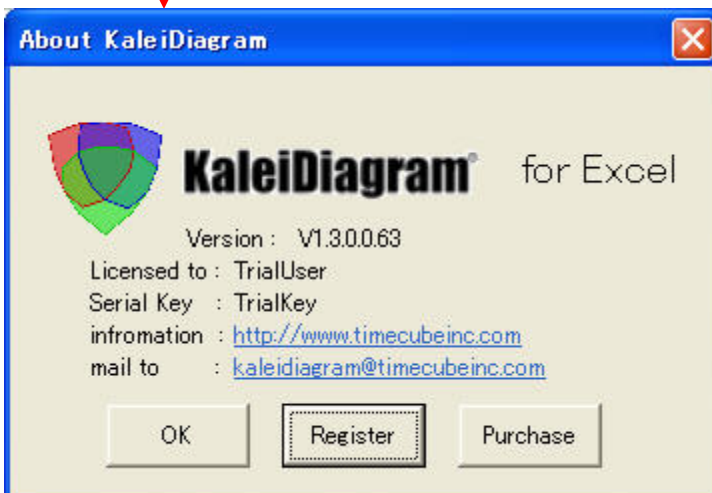
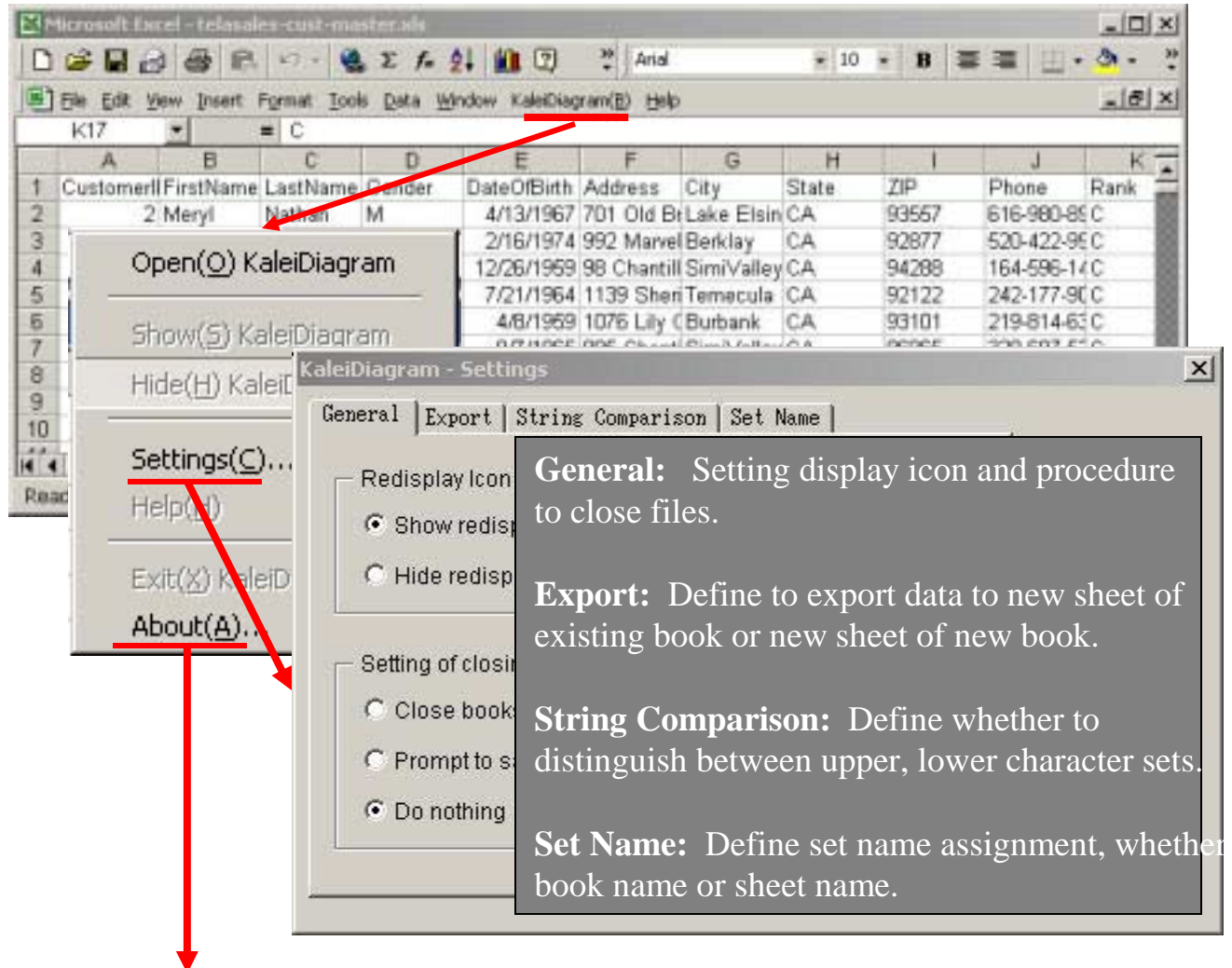
Once installed, do not change or rename of folder where KaleiDiagram systems are stored. This will cause an error.

In case you have moved or renamed, click “Browse” and find folder where the systems are now stored. Double click on the file named “KaleiDiagram.xla” and repeat instructions above.



Define KaleiDiagram

The KaleiDiagram environment setting dialog box is shown below. “Setting (C)” configures the KaleiDiagram operating environment.

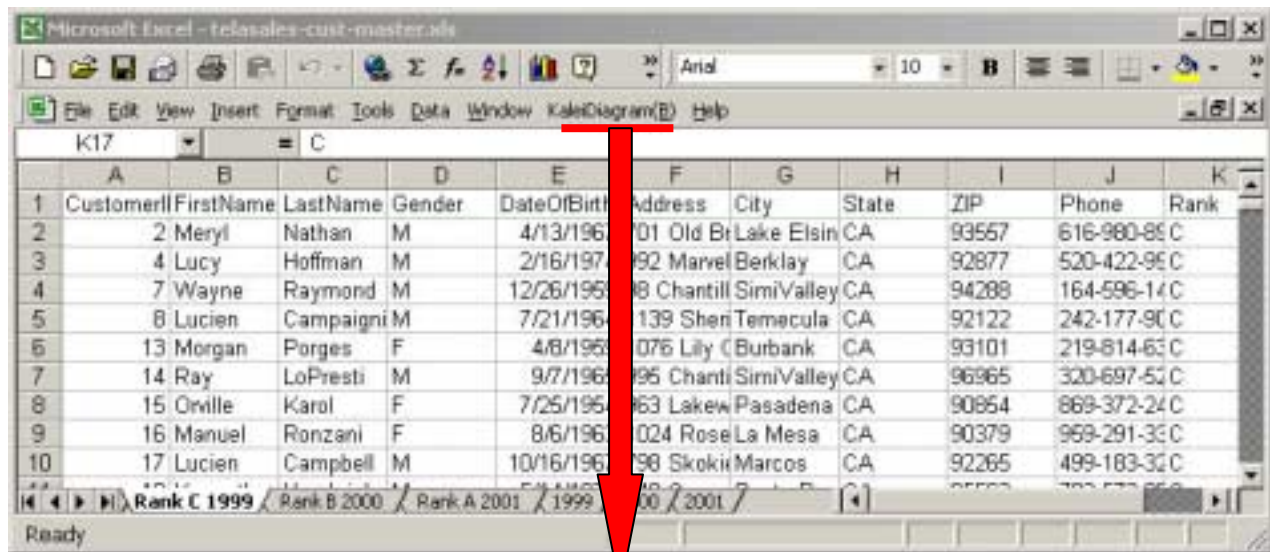


KaleiDiagram is initially installed with a trial key, effective for 30 days after installation.

For perpetual use, click “Purchase” and obtain a Serial Key.

Defining Sheets within KaleiDiagram

Book name, Sheet name, Key name and Selection area of sheet can be set as shown below. Click on the “KaleiDiagram” menu item and select “Open KaleiDiagram” from menu bar. The “KaleiDiagram for Excel” dialog box will appear. A maximum of three sheets can be defined. Each assignment is distinguished by the color at the bottom, RED, BLUE and GREEN. By pressing on each of the color button, a book, a sheet within the book, the key column within the sheet and the data area within the sheet can be set.



The following page shows the definition dialog box for the colored Set.



Defining Sheets within KaleiDiagram

Define Set name (data segment name). Default name is “RED”, “BLUE” or “GREEN”. You can use Book Name, Sheet Name or a user defined name.

Select Excel Book. Any Excel Book can be opened from here.

Select Excel Sheet

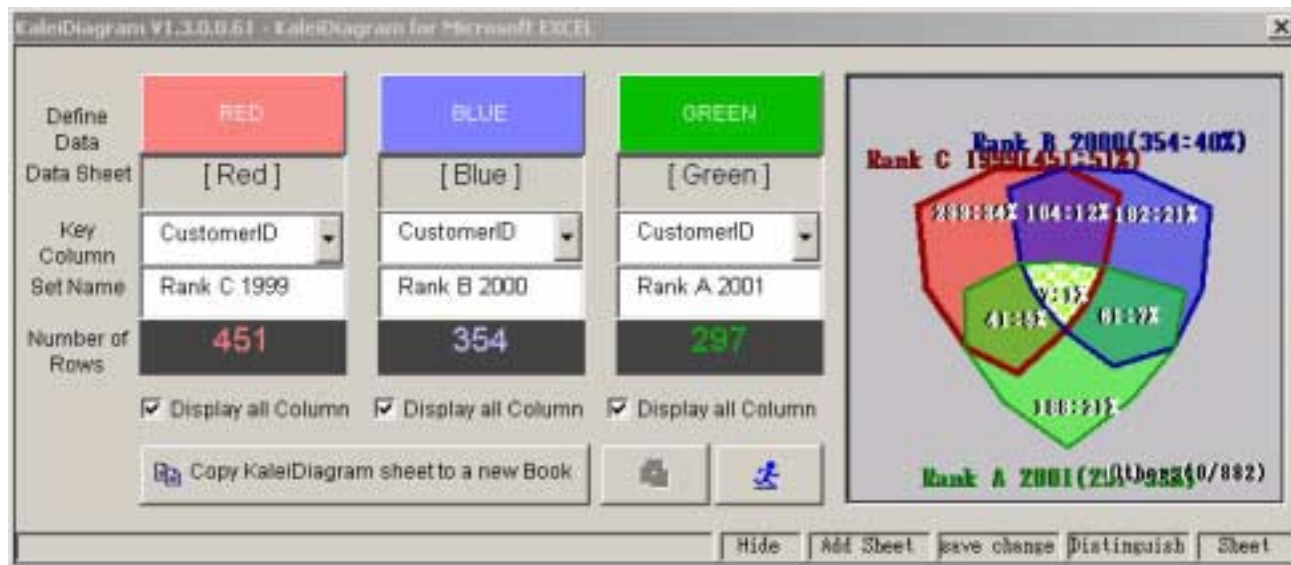
Define Unique Key Column. Any unique and non-blank field like name, phone number, e-mail address can be used.

Define all rows of sheet or selected row of sheet . For selected rows setting, only selected rows will be used in the operation..

When each sheet is defined, a segment of that data is shown on right side of dialog box as shape typically seen in a kaleidoscope. This represents the data segment you selected and the area size reflects the number of matching records for your selection. When two or more sheets are defined, the cross section of those respective segments will appear. This means that there exist common unique key on two or three sheets. Each cross section (or Segment) has a unique meaning, as shown next page.




Exporting selected data



Select one or more areas from the KaleiDiagram picture, and press ,

This will extract corresponding data from Excel Book.

Multiple areas can be selected at the same time

 Copy KaleiDiagram sheet to a new Book

Then press

to export extracted

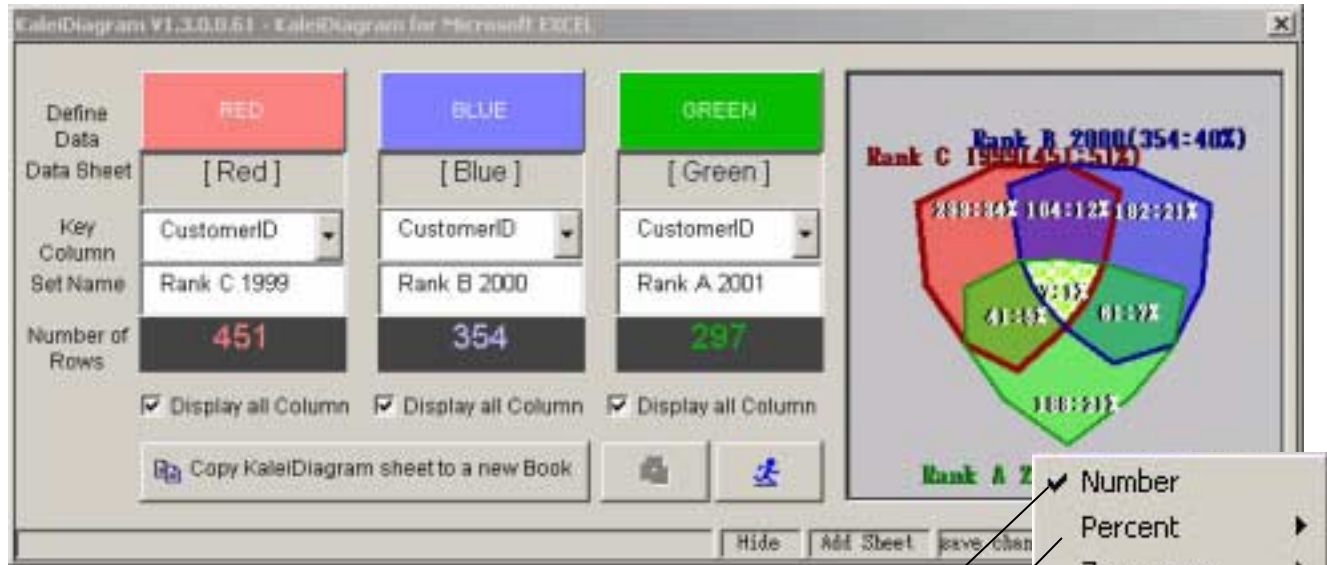
into new Sheet of the current Book or into a sheet of a New Book.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Matching	R	B	G	CustomerID	FirstName	LastName	Gender	DateOfBirth	Address	City	State	ZIP	Phone
2	254	Y	Y	Y	254	Kenneth	Ballin	F	20493	1247 Wood	Long Beach	CA	96134	865-706-550
3	398	Y	Y	Y	398	Kerry	Peters	F	19945	97 Maple	Oxnard	CA	93124	122-173-610
4	409	Y	Y	Y	409	Libby	Aronoff	M	23742	133 Parks	San Francisco	CA	94064	723-911-550
5	514	Y	Y	Y	514	Linda	Kowalski	F	22681	181 Hardin	La Mesa	CA	90635	819-685-530
6	596	Y	Y	Y	596	Leroy	Richmond	M	22791	287 Centre	Los Angeles	CA	94137	839-951-440
7	698	Y	Y	Y	698	Leroy	Williams	F	24860	902 Elmwood	Berkeley	CA	96227	569-323-140
8	825	Y	Y	Y	825	Lloyd	Cummings	F	23001	756 Judson	San Francisco	CA	94975	437-364-370
9														
10														
11														
12														
13														
14														
15														

The first 4 columns are used by the KaleiDiagram system. The top row of each column is painted in red, blue and green. This shows the sheet where the data originated.



Name and function of each component



Right button click shows pull down menu to control display screen.

Display number of records contained in each segment.	Number
Display percentage ratio of each segment.	Percent
Display polygon size in actual ratio or logarithmic ratio	Zoom area
Store history of displayed sets	History mode
Clear all sets	Clear window
Delete history	Reset history
View history of displayed sets	History viewer
Eliminate one set	Cut
Run operation	Execute
Save data of selected area to a sheet	Save



Sample Data Sheets

Consider three different lists a list of customers, a list of customers to whom campaign letters were sent, and a list of customer who actually bought furniture during the campaign.

Book 1 : Customer list

Book 2 : Invitation list

Book 3 : Sales record by customer

	A	B	C	D	E	F	G
1	CustomerID		LastName	Gender	DateOfBirth	Address	City
2	1	Helena	Butler	M	05/18/51	510 Vine	Chula Vista
3	2	Meryl	Nathan	M	04/13/67	701 Old Briar Lane #2	Lake Elsinore
4	3	Christie	Feight	M	06/28/71	977 Oakridge Ave.	Brea
5	4	Lucy	Hoffman	M	02/16/74	992 Marvel Way	Berklay
6	5	Jordan	Glenwood	F	04/28/59	633 Beech St.	Chula Vista
7	6	Jasper	Paul	F	04/28/66	1408 Ridgelee Rd	Chula Vista
8	7	Wayne	Raymond	M	12/26/59	98 Chantilly Ln.	SimiValley
9	8	Lucien	Campaigni	M	07/21/64	1139 Sheridan Rd.	Temecula
10	9	Eunice	Berkin	M	11/13/69	836 Trinity Ct.	San Mateo
11	10	Helena	McMillan	M	02/02/71	57 Sheridan	Chula Vista
12	11	Audrey	Diet	F	03/07/53	764 University Ave	Moraga

	A	B	C	D	E	F	G
1	CustomerID	FirstName	LastName	Gender	DateOfBirth	Address	City
2	6	Jasper	Paul	F	04/28/66	1408 Ridgelee Rd	Chula Vista
3	22	Clarissa	Jennings	M	12/24/68	1376 Marion Place Apt. 65C	Lake Elsinore
4	23	Nell	Morales	M	12/06/74	1027 Court Ave.	Irvine
5	34	Merlin	Lawerence	F	01/29/52	694 Exmoor Rd.	San Jose
6	46	Lloyd	Rave	M	02/03/58	833 Ashland Ave.	San Mateo
7	49	Edwin	Erwin	F	08/20/59	651 Stratford Rd.	Irvine
8	59	Johanna	Lipton	M	04/25/52	326 First St.	Tustine
9	62	Justin	Adler	F	04/04/52	1392 Court Ave.	Irvine
10	70	Dalton	Lauer	M	12/20/62	281 Harding Ave.	Costa Mesa
11	85	Hilary	Goldman	F	09/09/72	1060 St. Johns Ave.	Irvine
12	99	Susan	Carson	F	05/19/69	118 McCran	Irvine

	A	B	C	D	E	F	G	H	I	J
1	CustomerID	Value								
2	7	637								
3	13	4128								
4	15	4330								
5	16	415								
6	20	1335								
7	24	4502								
8	27	541								
9	46	1548								
10	47	4632								
11	48	6672								
12	52	1122								



Data Filtering

By assigning three lists to the colored buttons with KaleiDiagram, four uniquely meaningful segments are created and can be seen as the shapes in a Kaleidoscope.

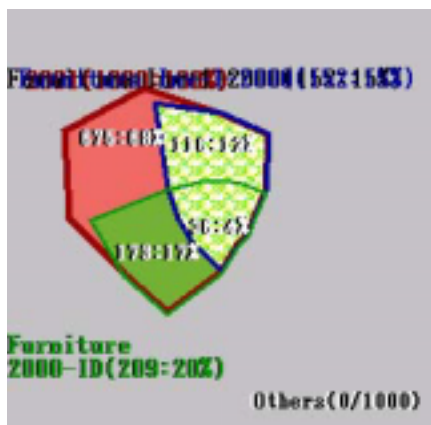


Figure 1

Figure 1

The highlighted area shows the segment of customers to whom invitations were sent.

Figure 2

The highlighted area shows the segment of customers who bought furniture during campaign.

Figure 3

The high lighted area shows the segment of customers who received invitation and bought furniture

Corresponding data can be exported to a new a BOOK

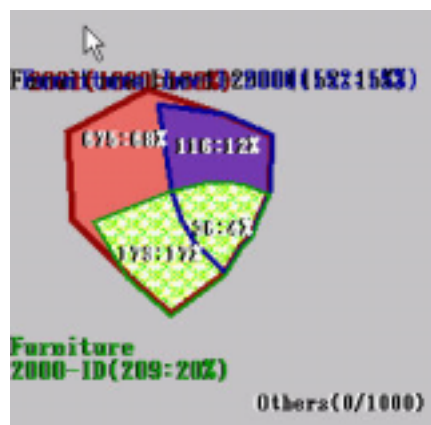


Figure 2

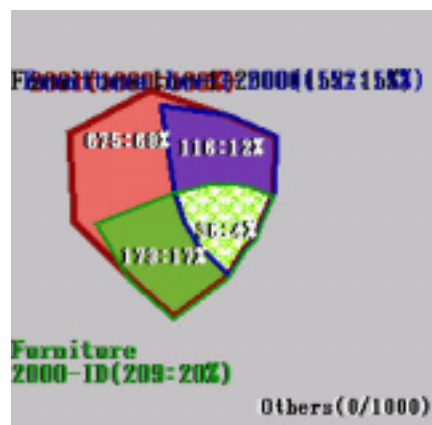


Figure 3

Data Segmentation

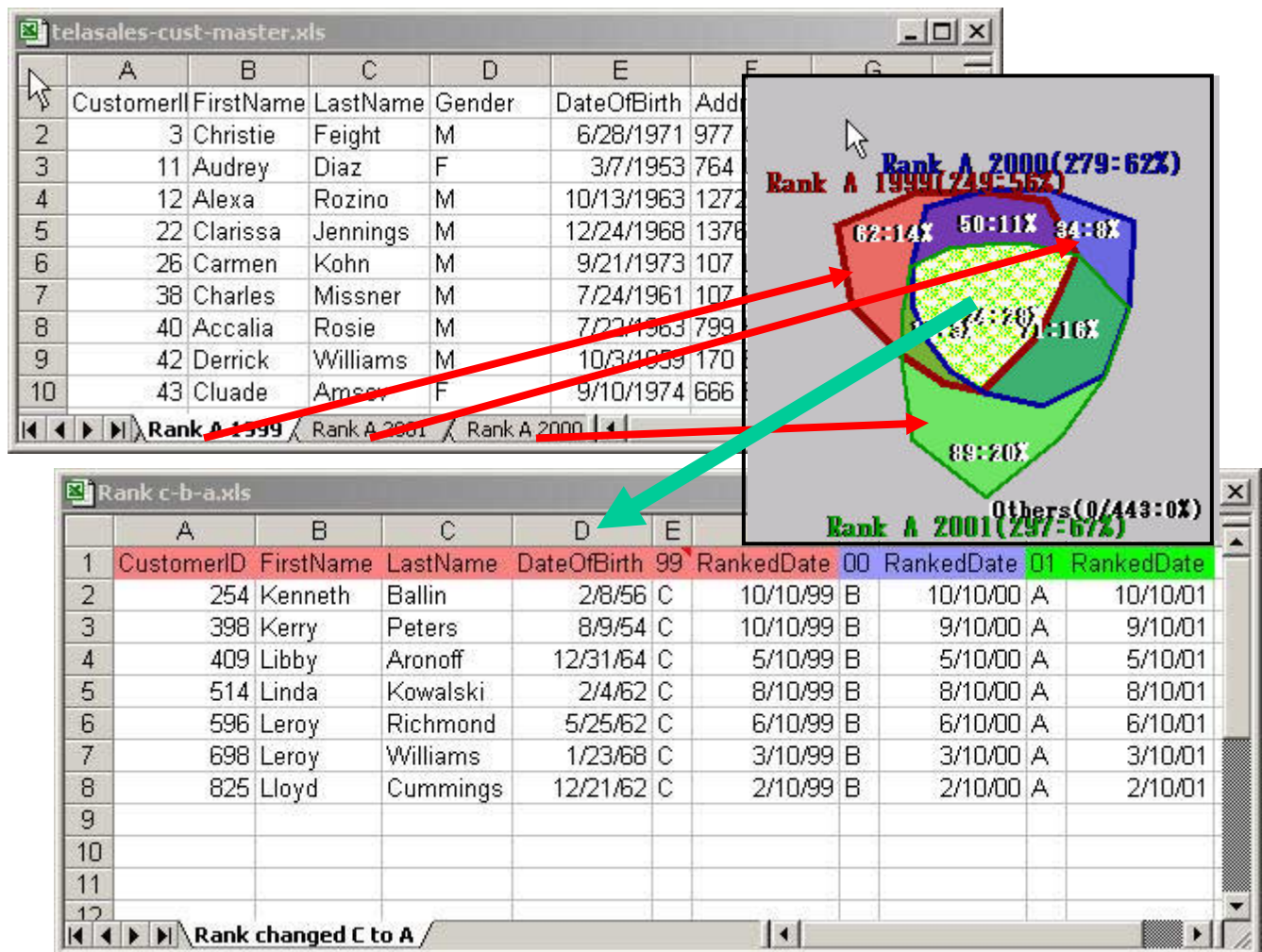
Consider three lists, each stored as a separate sheet within an Excel Book.

List 1: Customers with Rank A in 1999

List 2: Customers with Rank A in 2000

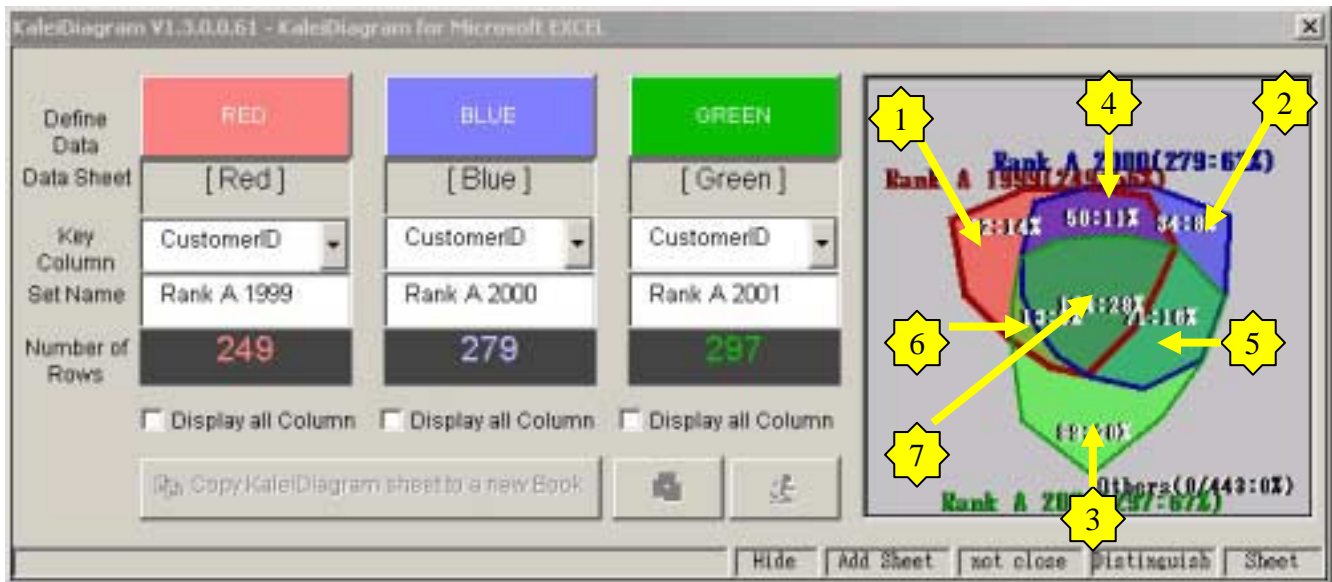
List 3: Customers with Rank A in 2001

By appropriately assigning the sheets to the three unique colored buttons, we can segment the customers as shown below. The highlighted area shown in the KaleiDiagram represents the customers who have consistently been ranked A. Each of the other areas have unique meanings and represent a different set of customers. These are explained on the following page.



Data Segmentation (contd.)

Meaning of each segment.



- 1** Customers who were Rank A in 1999, but not in 2000 and 2001
- 2** Customers who were Rank A in 2000, but not in 1999 and 2001
- 3** Customers who were Rank A in 2001, but not in 1999 and 2000
- 4** Customers who were Rank A in 1999 and 2000, but not in 2001
- 5** Customers who were Rank A in 2000 and 2001, but not in 1999
- 6** Customers who were Rank A in 1999 and 2001, but not in 2000
- 7** Customers who were Rank A continuously for these three years



Merging of Sheets

Consider there simple list of monthly sales record. The three lists are merged with KaleiDiagram by simply assigning SHEET name and Primary Key to the three different colored buttons.

	A	B	C	D	E	F	G	H	I	J
1	Employ Number	FirstName	LastName	January Sales						
2	7	Wayne	Raymond	2,100.00						
3	20	Elton	Rosebrook	1,800.00						
4	4	Lucy	Hoffman	3,100.00						
5	8	Lucien	Campaigni	5,800.00						
6	14	Ray	LoPresti	8,100.00						
7	29	Elaine	Nysted	2,900.00						
8	30	Hilary	Pagali	1,400.00						
9	3	Christie	Feight	8,000.00						
10	6	Jasper	Paul	2,000.00						
11	9	Eunice	Berkin	4,100.00						
12	10	Helena	McMillan	3,700.00						
13	27	Rex	Menaker	1,900.00						
14	17	Lucien	Campbell	8,700.00						
15	26	Carmen	Kohn	7,900.00						
16	12	Morgan	Porges	5,200.00						

Define Data

Data Sheet [Red] [Blue] [Green]

Key Column [Employ Number] [Employ Number] [Employ Number]

Set Name Jan Feb March

Number of Rows 30 30 30

☒ Display all Column ☒ Display all Column ☒ Display all Column

Hide Add Sheet not close Distinguish Sheet

	A	B	C	D	E	F	G	H	I	J	K
1	R	B	G	Employ Number	FirstName	LastName	January Sales	Febury Sales	March sales		
2	Y	Y	Y	1	Helena	Butler	9500	4000	4,100		
3	Y	Y	Y	10	Helena	McMillan	3700	1800	2,200		
4	Y	Y	Y	11	Audrey	Diaz	2900				
5	Y	Y	Y	12	Alexa	Rozino	1200				
6	Y	Y	Y	13	Morgan	Porges	5200				
7	Y	Y	Y	14	Ray	LoPresti	8100	9500	1,700		
8	Y	Y	Y	15	Orville	Karol	8600	8300	2,800		
9	Y	Y	Y	16	Manuel	Ronzani	2500	5100	2,700		
10	Y	Y	Y	17	Lucien	Campbell	8700	9800	4,700		
11	Y	Y	Y	18	Evan	Ginsburg	8600	9600	9,800		
12	Y	Y	Y	19	Kenneth	Hambrick	7600	1100	3,900		
13	Y	Y	Y	2	Meryl	Nathan	9600	7400	6,900		
14	Y	Y	Y	20	Elton	Rosebrook	1800	3600	9,700		
15	Y	Y	Y	21	Juliet	Rosenzweig	7900	1400	5,600		
16	Y	Y	Y	22	Clarissa	Ienninos	2100	7300	5,000		

Features

Deliver sophisticated and yet very simple technology to increase operability of Excel

- Visualize retrieved data in the graphic form, similar to a Kaleidoscope.
- Simple way to retrieve data that cannot be realized by SQL.
- Retrieved data can be store as a SET in a new Sheet for future using SET OPERATION
- Simple merging, handling and querying of any data stored in various locations.
- Users can enjoy powerful and simple query power by using embedded SET THEORY TECHNOLOGY
- The easiest way to merge multiple SHEETS within a BOOK or multiple SHEETS within multiple BOOKS without using Excel functions like "LOOKUP", "VLOOKUP", "MATCH", etc.

Who are the recommended users?

- Excel users who receive and need to handle many kinds of data obtained from various sources.
- Managers who want to do more than what corporate IT can provide as service.
- Managers who have to work with lots of data, where corporate IT is non-existent or delivers limited services.



Application Areas

- Medium or small size Direct Mail
- Human resource management
- Mortgage
- Insurance
- Marketing
- Sales management
- CRM
- Accounting
- Planning
- Leasing
- Others where Microsoft Excel is an important tool.

System Requirements

- Software
 - Windows XP, Windows NT, Windows 2000, Windows 98
 - Microsoft Excel 2000 or 2002
- Hardware
 - CPU 500MHz or higher recommended
 - Memory 64 MB
- Data
 - Can not exceed limit of Excel
 - 65,536 records per Sheet
 - 256 Sheets per Book
 - 256 Columns per sheet (column “IV” within Excel)
 - Every Sheet must have at least one UNIQUE KEY
 - Currently duplicate keys are not supported
 - Blanks are not permitted as unique key
 - Sheet name “RED”, “BLUE”, and GREEN” are reserved.