SMARTSHEET

by Ken Shiu

Smartsheet is a spreadsheet calculator which is extremely handy for financial forecasting, budgeting or any calculations that involve many variables. NOTE:- Due to its need for two buffers, Smartsheet will only work on a 32K cassette or 48K disk system as a minimum.

The on-screen worksheet is divided up into cells or grid co-ordinates, arranged 15 columns across (A-O) and 40 rows down. Examples are:- A1, O15, F32, etc. Due to the cell format (total of 600 cells) it is only possible to display a portion of the worksheet on the screen, so in order to view different areas of the worksheet, the screen acts as a scrolling window over the worksheet.

To attempt to explain how to operate a spreadsheet in a few pages is no easy task. Those already familiar with spreadsheets (e.g. VISICALC, SYNCALC), should feel at home since Smartsheet is basically styled after VISICALC. To newcomers, I hope the following will be enough to get you started.

When Smartsheet is run, the screen is divided into two sections. The upper blue screen is the input window, which displays different menus, input prompts, error messages and the current cell co-ordinate. Below, is the grey worksheet screen, the window to the rest of the sheet. The black inverse bar is the cursor and is controlled by the normal cursor control keys. Its initial position is cell, A1.

Smartsheet recognises three cell types: Labels, Values or Formulas. Since Smartsheet only involves itself with number calculations, labels are for the users' benefit, similar to REM's in BASIC. They are usually placed in the column left of a value, to identify it. e.g., SALES, COST, PROFIT, etc. Labels are exactly like the list of items on a shopping list. To enter a label, position the cursor and type in the label, if the label is too long, the cursor will automatically be forwarded to the next column.

Values are numbers, you input for the worksheet calculations to function properly. Values may take any form -positive, negative, decimal, etc. The use of values are similar to the prices next to items on a shopping list. Values are inputed by typing numbers directly into the cell. When the cursor is moved away, the value is moved to the right to allign the decimal places.

By pressing OPTION, formulas can by inputed into the current cell or answers to simple equations can be found. NOTE:- Values are necessary in a worksheet for formula to function at all. Smartsheet gathers its input from cells nominated within a formula and displays the result after all calculations are complete. After pressing OPTION, "Formula" appears on the status line and on the input line you are asked whether the first number in the formula is to be a cell location or a number. The power of formulas in Smartsheet, is its ability to access values from other cells. i.e., formula may calculate a PROFIT figure, and therefore will access the values you inputed for SALES and COST and subtract them.

Next the desired operation has to be inputed- addition, subtraction, multiplication, division or exponent (power of). Smartsheet is limited to one operation per formula. After entering the 2nd number as a cell or number the full equation will be seen on the sheet. If no cells have been accessed, the formulas will remain until they are calculated after pressing START.

A subset of the formula, is the SUM function, which is accessed by typing a colon (:). The SUM function allows you to total values between one cell and another in a particular row or column. After typing a colon, the input line asks "FROM CELL:?", here you should enter the cell where the totalling will begin. e.g. A1. Your input will be registeredin the brackets in the status line. Input the cell, where the totalling will end, when "TO CELL:?" appears. e.g. A9. The input line will be cleared, and when you move the cursor off the formula cell, your From and To cells will be shown. e.g. :A1:A9

Once you have finished structuring your worksheet, complete with labels, values and formulas, press START to calculate the worksheet. The message 'Calculating...' will appear while Smartsheet is computing answers. Calculating time depends on the number of formulas within the worksheet. When Smartsheet has finished, the screen will temporarily clear and the final worksheet will be seen with all formulas replaced with the results.

Smartsheet also has an optional menu for aid while developing a worksheet. The menu be accessed by pressing SELECT. The menu 'G L E S P H' will appear on the status line. Press the corresponding key to obtain these functions.

G - Global Format: Selects how values are to be formatted when inputed. Choose from Dollar, Normal and Integer formatting. Dollar will automatically change your inputed value to dollar and cent format. Normal will leave your value untouched, while Integer will round your input to the next whole number.

L - Load Worksheet: Loads a previously saved worksheet from a disk or cassette. Press D or C to select Disk or Cassette respectively. If using cassette follow the same procedure as loading BASIC programs. If using disk, you may either:-
1. Press the bar to cycle through the Smartsheet workfiles on your disk and press RETURN to load the file displayed in the input window.
2. Input a filename directly on the input line and press RETURN to load it.

S - Save Worksheet: Saves current worksheet in memory to either disk or cassette. Press D or C to select Disk or Cassette to save on respectively. NOTE:- Smartsheet saves the whole sheet, so cassette owners make sure you have about 50 counter spaces on the cassette and be prepared to wait during saving and loading times! Disk owners have two choices (same procedure as Load function):-
1. Press the space bar to cycle through the Smartsheet files on your disk and press RETURN to update or save over the file displayed in the input window.
2. Input a filename (8 letter limit) directly on the input line and press RETURN to save it. NOTE:- Smartsheet uses '.SS' as an extender on its saved worksheets to identify them.

E - Erase Worksheet: Clears the current worksheet from memory. The program will re-ask whether you wish to erase the current worksheet in memory. Type Y to erase, or any other key to return to the worksheet. If you type Y then the screen will temporarily clear and a clean worksheet will appear.

P - Print Worksheet: Prints the current worksheet to a printer. Make sure your printer is ON LINE!! First you will be asked to input the cell at the lower right corner of your worksheet (in order to define the bottom and rightmost column). After entering the cell co-ordinate, you may imbed printer control codes at the beginning of each row in the worksheet. Type Y to imbed control codes e.g. double width for headings. If you elect not to use printer codes, press RETURN to begin printing. If you type Y for printer codes input the row number to imbed the code. NOTE:- The program will send control code before printing the row. Next, type the code in and follow the same procedure to input more codes. When you have finished press RETURN to print the worksheet.

H - Home Cursor: Returns the cursor to cell A1. When you are moving around the far extremes of the worksheet it is handy to use this function instead of repeatedly using the cursor keys.

? - Help Screen: Calling up this screen lists all the main keys and functions of Smartsheet.

That about wraps up the features of Smartsheet. If you prefer to have the cursor move without having to use the CONTROL and arrow keys simultaneously, just change the value equal to K in the lines 65,70,75 and 80 to 61,45,43 and 42 respectively.

EXAMPLE WORKSHEET

An actual example would be better explain the basics behind a worksheet or 'template', ala the two sample screens. Screen 1 shows a template in its raw state with all formulas being uncalculated. All headings and item names are example of labels. NOTE:- Any character including numbers may be made into a label by typing an apostrophe before entering the label.e.g. the line of minus signs beneath the heading.

The price of the items are all values and have been Dollar formatted. The format has been changed to 'Normal' mid-way in creation to prevent quantity values to be in dollar and cent format.

In the D column, formulas are present. In cell D6, the value of cell B6 (price of chicken) will be multiplied by cell C6 (quantity of chicken). The result of this formula will be shown after calculation. The same applies to cell D10, where the item total (D15) is subtracted from the available cash (D3).

Cell D15 (item total) is using the SUM function. Upon calculation, Smartsheet will add all values from cell D6 to D13. NOTE:- Smartsheet calculates all formulas and sums from left to right, top to bottom on the worksheet.

When START is pressed, Smartsheet will pause to calculate and the result will appear as in Screen 2, where all formulas in the D column have been solved and replaced by a number. From here the user may experiment with different cash, price or quantity values to view the final outcome on Mrs Jones' purse. As can be seen in Screen 2, Mrs Jones will have trouble paying the bill with only thirty dollars.

Hopefully, I have made the versatility and applications of spreadsheet more appreciable. The spreadsheet is by far the greatest tool for financial planning. It can definitely save a lot of considerable time and effort. Smartsheet is by no means as powerful as commercial spreadsheets, but it does help to fill the business software gap that Atari owners have been crying out for. I hope that Smartsheet has shown just how much an Atari can help in paying itself

off, plus more. So to all you crash-hot (game?) programmers get cracking! INSIDE INFO would like to see you strut your stuff!

SCREEN 1

SCREEN 2