"Concatenating" data in the excel spreadsheet. Yes, when I heard this word for the first time, I too thought, "they are literally making words up for this stuff...."

For the layman, "concatenate" is a fancy term for combing multiple cells into a single cell. It differs from merging cells in the fact that you may insert additional formatting to the cells such as commas or dashes.

Imagine in our employee lists if I wish to see names formatted as: Kern, Scott as opposed to the first and last name residing in two separate cells.

II.	υ	110	r.em	ວບບແ	00/14/04	03/12/04	I∡
	9	112	Clear	Donald	12/31/02	03/31/03	06
	10	113	Wiley	Allen	02/04/79	05/05/79	30
	11	114	Thomlon	Floyd	04/01/65	06/30/65	09
Γ	12	115	Kern	Scott	11/26/00	02/24/01	05
	13	116	Makeuptax	Johnny	01/04/78	04/04/78	07
Γ	14	118	Seventeen	Seven			
	15	119	Detroit	NonResident			

Insert a new column into the spreadsheet to the right of the "first_name" column.

In the formula toolbar for cell D2, start typing: =concatenate(

		SUM 🔫	🗙 🗸 🏂 =concate	enate(
		A	Insert CONCA	Insert CONCATENATE(text1, [text2],)			F	
	1	employee_id	last_name	first_name		date_hired	3 month anniv	6 m
	2	1	Public	John	ncatenate(01/01/77	04/01/77	
	3	103	President	John		01/01/90	04/01/90	
	4	104	Secretary	Shelly		12/23/80	03/23/81	
	5	106	Engineer Prorated	Dennis		01/01/69	04/01/69	
	6	108	Redford	Jake		05/07/77	08/05/77	
	7	109	Kent	Dan		07/14/76	10/12/76	
	8	110	Kern	Scott		06/14/04	09/12/04	
1		440	<u></u>	D 11		100100	00 04 00	

At this point, click the *fx* button to the left of the formula toolbar. This will open up a dialog box that will assist in creating the desired data format.

Function Argum	ents 🛛 💽	3
CONCATENATE Text1 Text2	= text	
Joins several text s	= trings into one text string.	

The Function Arguments box will open, and ask what cell is to be used as the first part of the joined data.

Text1: Select the cell that contains the last name:

Text2: Enter a comma and a space

Text3: Select the cell that contains the first name

Function Arguments			? 🗙
CONCATENATE			
Text1	E2 🚺] =	"John"
Text2	","] =	", "
Text3	c2 🏼 💽] =	"Public"
Text4] =	text
Joins several text strings in	nto one text string. Text3: text1,text2, are 1 to and can be text string:	= 255 5, nu	"John, Public" 5 text strings to be joined into a single text string mbers, or single-cell references.
Formula result = John, Pu	ublic		
Help on this function			OK Cancel

Notice the preview of the Joined data on the right hand side of the screen. You can join up to 255 different text and field strings if you so desire. Previous version of Excel only allowed 30 strings to be joined.

After clicking the OK button to return the formula results in:

	C11 👻	<i>f</i> ∡ ⊦loyd								
	A	В	С	D	E	F	G	Н		J
1	employee_id	last_name	first_name		date_hired	3 month anniv	6 month anniv	1 year anniv		
2	1	Public	John	Public, John	01/01/77	04/01/77	06/30/77	01/01/78		
3	103	President	John		01/01/90	04/01/90	06/30/90	01/01/91		
4	104	Secretary	Shelly		12/23/80	03/23/81	06/21/81	12/23/81		
5	106	Engineer Prorated	Dennis		01/01/69	04/01/69	06/30/69	01/01/70		
6	108	Redford	Jake		05/07/77	08/05/77	11/03/77	05/07/78		
7	109	Kent	Dan		07/14/76	10/12/76	01/10/77	07/14/77		
8	110	Kern	Scott		06/14/04	09/12/04	12/11/04	06/14/05		
9	112	Clear	Donald		12/31/02	03/31/03	06/29/03	12/31/03		
10	113	Wiley	Allen		02/04/79	05/05/79	08/03/79	02/04/80		
11	114	Thomlon	Floyd]	04/01/65	06/30/65	09/28/65	04/01/66		
12	115	Kern	Scott		11/26/00	02/24/01	05/25/01	11/26/01		
13	116	Makeuptax	Johnny		01/04/78	04/04/78	07/03/78	01/04/79		

Excel will automatically copy the formula being down against all rows:

_															
	C11 🗸	∱×													
	A	B	С	D	E	F	G	Н	1	J	K	L	M	N	0 7
1	employee_id	last_name	first_name		date_hired	3 month anniv	6 month anniv	1 year anniv							
2	1	Public	John	Public, John	01/01/77	04/01/77	06/30/77	01/01/78							
3	103	President	John	President, John	01/01/90	04/01/90	06/30/90	01/01/91							
4	104	Secretary	Shelly	Secretary, Shelly	12/23/80	03/23/81	06/21/81	12/23/81							
5	106	Engineer Prorated	Dennis	Engineer Prorated, Dennis	01/01/69	04/01/69	06/30/69	01/01/70							
6	108	Redford	Jake	Redford, Jake	05/07/77	08/05/77	11/03/77	05/07/78							
7	109	Kent	Dan	Kent, Dan	07/14/76	10/12/76	01/10/77	07/14/77							
8	110	Kern	Scott	Kern, Scott	06/14/04	09/12/04	12/11/04	06/14/05							
9	112	Clear	Donald	Clear, Donald	12/31/02	03/31/03	06/29/03	12/31/03							
10	113	Wiley	Allen	Wiley, Allen	02/04/79	05/05/79	08/03/79	02/04/80							
11	114	Thomion	Floyd	Thomion, Floyd	04/01/65	06/30/65	09/28/65	04/01/66							
12	115	Kern	Scott	Kern, Scott	11/26/00	02/24/01	05/25/01	11/26/01							
13	116	Makeuptax	Johnny	Makeuptax, Johnny	01/04/78	04/04/78	07/03/78	01/04/79							

Hiding columns "B" and "C" make the form look less cluttered.

employee_id it 1 P 103 P 104 S 106 E 108 R 109 K 110 K 112 C 113 W 114 TI 115 K 116 S	last_name Public President Secretary Engineer Pror Redford Kent Kent	¥ 14 18	Cu <u>t</u> Copy Paste Paste Special	olic "John sident "John	date_hired 01/01/77 01/01/90	3 month anniv N4/N1/77	6 month anniv	1 year anniv		N.	L	191	14	0
1 P 1013 P 104 S 106 E 108 R 109 K 110 K 1112 C 113 W 1114 T 115 K 116 M 118 S	Public President Secretary Engineer Pror Redford Kent Kent		⊆opy Paste Paste Special	olic,John sident,John cretary Shelly	01/01/77	04/01/77	o monar anni							
103 P 104 S 106 E 108 R 109 K 110 K 112 C 113 W 114 T 115 K 116 M 118 S	President Secretary Engineer Pror Redford Kent Kern	43 2	Copy Paste Paste Special	sident,John cretary Shelly	01/01/90		06/30/77	01/01/78				-	-	-
104 S 106 E 108 R 109 K 110 K 112 C 113 W 114 TI 115 K 116 M 118 S	Secretary Engineer Pror Redford Kent Kern	2	Paste Paste Special	cretary Shelly		04/01/90	06/30/90	01/01/91						
106 E 108 R 109 K 110 K 112 C 113 W 114 T 115 K 116 M 118 S	Engineer Pror Redford Kent Kern		Paste Special		12/23/80	03/23/81	06/21/81	12/23/81						
108 R 109 K 110 K 112 C 113 V 114 T1 115 K 116 M 118 S	Redford Kent Kern			nineer Prorated Dennis	01/01/69	04/01/69	06/30/69	01/01/70						
109 K 110 K 112 C 113 W 114 TI 115 K 116 M 118 S	Kent Kern			dford Jake	05/07/77	08/05/77	11/03/77	05/07/78						
110 K 112 C 113 W 114 TI 115 K 116 M 118 S	Kern		Insert	nt.Dan	07/14/76	10/12/76	01/10/77	07/14/77						
112 C 113 W 114 TI 115 K 116 M 118 S	Class.		Delete	n.Scott	06/14/04	09/12/04	12/11/04	06/14/05						
113 W 114 TI 115 K 116 M 118 S	Clear		Clear Contents	ar.Donald	12/31/02	03/31/03	06/29/03	12/31/03						
114 TI 115 K 116 M 118 S	Wiley		cical concorto	ey Allen	02/04/79	05/05/79	08/03/79	02/04/80						
115 K 116 M 118 S	Thomion	star 1	Eormat Cells	mion Floyd	04/01/65	06/30/65	09/28/65	04/01/66						
116 M 118 S	Kern		Column Width	n,Scott	11/26/00	02/24/01	05/25/01	11/26/01						
118 S	Makeuptax		104-	keuptax Johnny	01/04/78	04/04/78	07/03/78	01/04/79						
	Seventeen	_	Dine	venteen Seven										
119 D	Detroit		Unhide	roit,NonResident										
120 Li	Lives Det Wor	ks	Other	Lives Det Works Other										
121 D	Davis		Bacon	Davis,Bacon										
122 🗸 🗸	Vacation		Accrual	Vacation Accrual	01/01/03	04/01/03	06/30/03	01/01/04						
123 P	Premiere		Caulking	Premiere Caulking										
124 H	Hernandez		Jim	Hernandez, Jim										
125 H	Hernandez		Cesar	Hernandez,Cesar										
126 H	Hernandez		Alvaro	Hernandez,Alvaro										
127 H	Hernandez		Miguel	Hernandez,Miguel	06/02/06	08/31/06	11/29/06	06/02/07						
128 0	0		Efran	o,Efran										
129 H	Hernandez		Jose	Hernandez,Jose										
130 C	Chambers		Environ	Chambers,Environ										
131 D	Detailer		California	Detailer,California	01/01/03	04/01/03	06/30/03	01/01/04						
132 B	Bi-Weekly		Prorate	Bi-Weekly, Prorate										
133 N	New York		Resident	New York,Resident										
134 E	Earnings		No Tax	Earnings,No Tax										
179 N	New York		Resident	New York Resident										

When the file is opened, and the data is refreshed, the hidden columns will remain hidden.

	17 🔹	fx									
	A	D	E	F	G	Н	- I	J	K	L	N
1	employee_id		date_hired	3 month anniv	6 month anniv	1 year anniv					
2	1	Public, John	01/01/77	04/01/77	06/30/77	01/01/78					
3	103	President, John	01/01/90	04/01/90	06/30/90	01/01/91					
4	104	Secretary, Shelly	12/23/80	03/23/81	06/21/81	12/23/81					
5	106	Engineer Prorated, Dennis	01/01/69	04/01/69	06/30/69	01/01/70					
6	108	Redford, Jake	05/07/77	08/05/77	11/03/77	05/07/78					
7	109	Kent, Dan	07/14/76	10/12/76	01/10/77	07/14/77					
8	110	Kern, Scott	06/14/04	09/12/04	12/11/04	06/14/05					
9	112	Clear, Donald	12/31/02	03/31/03	06/29/03	12/31/03					
10	113	Wiley, Allen	02/04/79	05/05/79	08/03/79	02/04/80					
11	114	Thomlon, Floyd	04/01/65	06/30/65	09/28/65	04/01/66					
12	115	Kern, Scott	11/26/00	02/24/01	05/25/01	11/26/01					
13	116	Makeuptax, Johnny	01/04/78	04/04/78	07/03/78	01/04/79					

Note : you may use the CONCATENATE function without using the word "Concatenate" in the formula. Here is an example of the same functionality using = and cell references in the formula toolbar.

	D2	▼ (* fs	=A2&", "&B2&"	"&C2
	А	В	С	D
1	last_name 🛛 💌	first_name 💌	middle_initial 💌	Column1 🗾
2	Public	John	Q	Public, John Q
3	President	John	E	President, John E
4	Secretary	Shelly		Secretary, Shelly
5	Engineer Prorated	Dennis	D	Engineer Prorated, Dennis D
6	Brennan	Carol	А	Brennan, Carol A

=A2&", "&B2&" "&C2

This formula shows the Value in A2 joined by the AMPERSAND (&) symbol.

Double quotes are used to bracket the text you wish to place in between the next cell reference. In the first example, we want a comma and a space, so the formula is written as follows:

&", "&

ampersand | Double Quote | Comma | Space | Double Quote | ampersand

We continue with the next cell reference (B2) and the next join of a space before the final cell reference (C2)

&" "&

ampersand | Double Quote | Space | Double Quote | ampersand

The only difference in these two joining formulas is what is between the Double Quotes. Whatever is between the double quotes will appear in the cell that the formula is written in. These values may be dashes, commas, asterisks, constant number values, anything you choose.

SURVEY QUESTION #1 HERE

Concatenating data (joining FIELDS) in MS Query

Now that you have learned how to concatenate cells within Excel, let's take time to explore options on combining and formatting data fields in the query mode. This way, data is returned in the desired format, and columns do not have to be hidden.

In the Query mode, with the employee table selected, we click on the first column header in the data preview area and type in the following:

last_name+', '+first_name

Just when you thought you were getting the hang of it.... Microsoft changes the game again. In the QUERY MODE, you do not use the ampersand and double quotes, you must use the PLUS (+) sign and a SINGLE quote to bracket the data / field names. Programmers – go figure.

Cuery from Cas_Sco	tt
employees * accrued_time_flag address_1 address_2 a_file_status az_perc_of_federal ca_add_allowances cell_phone_id cell_phone_no certified_payroll	
last_name+', '+first_name	<u>.</u>

Tab out of the field to view the results.



This is only the beginning.....

Combining text fields is one option, you can write rather complex calculations against numeric data from tables.

This is not recommended for the faint of heart, as the formula logic in Excel does not always relate to writing a formula in the Query mode.

A lot of trial and error will be needed in order to create the desired results. If you are better at writing formulas in Excel, by all means, return the data to Excel, perform the calculations on the spreadsheet and hide unneeded columns. (You may thank me later) You may run into issues when trying to join fields from multiple tables. You must be sure to define the table name and the field name within the query window.

Here is an example of the Job_history table, the jobs table and the cost_codes table. You will notice that the jobs table and the cost_codes table both have the field "description" within their data set.



If I try to perform a shortcut, and type in the desired concatenated field, I receive an error.

uery from Cas_Scott			
iob_history	jobs customer_order_no date_of_letting davis_bacon_payrate default_income_cost_code default_income_phase_id default_income_phase_id default_income_phase_no default_income_phase_no default_tax_type dept_id dept_no description description_of_services district employment_status equipment_status equipment_service_repair <u>est_completion_date</u>	~	cost_codes cost_code_group_no cost_code_id cost_code_no default_phase_id default_phase_no dept_id dept_id dept_id dept_id dept_id dept_id dept_id dept_id dept_no description equipment_service_repair gl_expense ignore_home_job ovhd_rate production_method record_status row_modified_by
job_id	description job	id+' - '+description	Statement(s) could not be prepared.
1005	OLD		
1005	ULD		ОК <u>Н</u> еІр
1005			

Ambiguous column name..... which means the query tool cannot figure out which table to pull the "job_id" and "description" fields from.

One way to overcome this is to "cheat". Add the fields to the query manually, then double click on the column heading to see what table.field_name exists. In this example, it shows jobs.description, which means it is the description from the jobs table. If it were the description from the cost_codes table, it would read cost_codes.description.

•	Query from Cas_Scott		
	job_history * account_cr account_wip ar_invoice_id ar_invoice_no cash_trx_id cash_trx_no comments company_id company_no cost cost_class_id cost_class_no cost_code_id cost_code_no date_booked	jobs customer_order_no date_of_letting davis_bacon_payrate default_income_cost_code default_income_phase_id default_income_phase_no default_price_level default_tax_type dept_id dept_no description description_of_services district employment_status equipment_service_repair est_completion_date	cost_codes cost_code_group_no cost_code_id cost_code_no default_phase_id default_phase_no dept_id dept_no description equipment_service_repair gl_expense ignore_home_job ovhd_rate Edit Column Field: OK Cancel
	job_id	description	Column heading:
▶	1005	OLD	
-	1005		Total:
-	1005	OLD	
_	1005	OLD	
	1005	010	

To concatenate the Job ID and Description, copy the text "jobs.description" from the Field box in the Edit Column window. Click OK and double click on the job_id column heading and type in the manually entered text separated by the PLUS sign and a SINGLE QUOTE.

You should see : job_history.job_id+' - '+

Field: OK icb_history.jcb_id+'•'+ Column heading: Total:	Edit Column	×
	Field: job_history.job_id+' - '+ Column heading: Total:	OK Cancel

At the end of this text, right click and paste the previously copied text.

You should now see:

Edit Column	×
Field: <u> ory.job_id+' · '+jobs.description</u> Column heading:	OK Cancel
Tota:	

job_history.job_id+' - '+jobs.description

Change the Column heading to JOB, and click OK.

Edit Column	×
Field: job_history.job_id+' - '+jobs.de: Column heading: JOB Total:	OK Cancel

Duery from Cas_Scott job_history cost_codes jobs ٠ cost_code_group_no ۸ customer_order_no ٠ cost_code_id account_cr date_of_letting Ξ account_wip cost_code_no davis_bacon_payrate default_phase_id ar_invoice_id default_income_cost_code ar invoice no default_phase_no default_income_phase_id dept_id cash_trx_id default_income_phase_no dept_no cash_trx_no default price level description comments default_tax_type equipment_service_repair company_id dept_id gl_expense company_no dept_no Ξ cost ignore_home_job description ovhd rate cost_class_id description_of_services cost_class_no production_method district record_status cost_code_id employment_status row_modified_by cost_code_method equipment_service_repair cost_code_no row_modified_on est completion date row unique id date booked JOB description 201 - HOME / AWAY 2 HOME / AWAY 2 202 - Home / Away 2 Home / Away 2 Home / Away Job 100 - Home / Away Job Unit Price Billing Job UPB - Unit Price Billing Job UPB - Unit Price Billing Job Unit Price Billing Job Unit Price Billing Job UPB - Unit Price Billing Job Unit Price Billing Job UPB - Unit Price Billing Job UPB - Unit Price Billing Job Unit Price Billing Job UPB - Unit Price Billing Job Unit Price Billing Job

You may now delete the description field from the query, as it was simply used as a reference (or a crutch). With a bit of practice, you will be able to master manually typing the table and field names within the queries.

cost_class_no cost_code_id cost_code_method cost_code_no	district employment_status equipment_service_repair est_completion_date	Tow	duction_method ord_status _modified_by _modified_on unique_id
JOB			
99100 - Office Overhead			
99100 - Office Overhead			
1000 - Strongsville Schools			
1000 - Strongsville Schools			
1004 - Bagley Road Resurface			
1004 - Bagley Road Resurface			
99100 - Office Overhead			
99100 - Office Overhead			
	i		

Invalid table references : this is what happens when you simply misspell a table or field name.

Since there is no field name "job_ids", you will get the following error :

🖳 Query from Cas_Scott	
job_history * account_cr account_wip ar_invoice_id ar_invoice_no cash_trx_id cash_trx_no comments company_id cost_class_id cost_class_no cost_code_id cost_code_no date_booked	iobs cost_codes customer_order_no cost_code_group_no date_of_letting cost_code_group_no davis_bacon_payrate cost_code_mo default_income_cost_code default_phase_id default_income_phase Microsoft Query default_price_level default_price_level default_tax_type dept_id dept_id for womodified_by description_of_service row_modified_by description_date row_modified_on ow_modified_on ow_unique id
JOB	liob ids
1005 · OLD	
1005 - OLD	
1005 - OLD	
1005 - OLD	

Ambiguous Reference = field names that exist in multiple tables. Invalid Column Name errors are due to poor judgement, or poor typing skills.

SURVEY QUESTION #2

Stacking Data in Excel

JOB INFORMATION	CONTRACT INFORMATION	CUSTOMER INFORMATION
5	Original Contract : \$43,332.00	1002
Test New Budget This is the Job Address Pulls from JOB record Cleveland, OH 44111	Start Date : 01/00/00	Mateway Building Co. 5393 Chippewa Rd. Customer Address Medina, OH 44256 (330) 220-8383
10	Original Contract : \$0.00	10
T&M Job JOB ADDRESS ON THE A/R TAB A/R TAB FOR P/Os ????? YES , IN DEED	Start Date : 01/00/00	T&M Client CUSTOMER REC 123 Rockwood Drive Cleveland, OH 44444 (330) 220-8383
51	Original Contract : \$0.00	116
Here is the Auto Refresh 115 Test Road Testville, TX 90989	Start Date : 01/00/00	Test Customer 115 Test Road Testville, TX 90989 (888) 888-8888
52	Original Contract : \$0.00	116

When returning data from a query, the table structure limits the data to a very linear format. Using the concatenate function in conjunction with the CHAR(10) formula will allow data to be "stacked" horizontally in a single column. Create a query accessing the customers and jobs table.



Pull in the fields listed below in order:

jobs.job_id

jobs.description

jobs.address_1

jobs.address_2

jobs.city

jobs.state

jobs.zip_code

jobs.original_contract

jobs.job_start_date

jobs.customer_id

costomers.name

customers.address_1

customers.address_2

customers.city

customers.state

customers.zip_code

customers.phone_voice

The Edit View Format Table Criteria	Records Window Help T=∑ ⊉↓X↓ !(!) ?	
customers jobs address_1 address_1 address_2 address_2 billing_cycle_id ap_tax_exempl billing_cycle_n ap_tax_exempl	<mark>Edit Criteria</mark> Total: Field: job_status	OK Cancel
Criteria Field: job_status	Operator: equals Value: A	Values

In the Criteria Field, select jobs.job_status and choose Operator – equals / Value A. This will return only active jobs to our spreadsheet. Decide which data you wish to appear in a single column and insert a column after the last row in that range. In this example, we will put the job number, name and address information all in one cell.

0	👔 🚰 🖬 🚺 🥙 🗸 🖓 🦈 🖾 🖓 🖃 🖅 🗧 🔻 🛛 Book1 Microsoft Excel 💦 Table Tool:											-	■ x
	Home Insert Pag	je Layout 🛛 Fo	rmulas	Data Rev	view Viev	View Developer Add-Ins Design				 — 			
Pa	Calibri v 1: B Z U v H	• <u>A</u> A		≡ ≫·· ≡ i≢ i≢	Gene	eral % Cali	1 - % *.08 Formating + as Table + Style Calibri + 11 - A^* \$ - %			Cell vies *	Gells	∑ • Z → Bind & Sort & Find & Z • Filter • Select •	
	H1 •	<i>f</i> ∗ Colu	mn1			в	I≣	<u>ð</u> - <u>A</u> -	€.0 .00 mm	F	()(, ,	×
	D	E	F	G	Н	_		1	-		K	L	
1	address_2	city 🔽	state 💌	zip_code 💌	Column1	K Cut				te 🔻	customer_id	address_12	
2		Cleveland	OH	44444		🗈 Сору					10	123 Rockwood Driv	/e
3		Cleveland OH 44444 🖺 Paste							10 123 Rockwood Drive				
4		Cleveland	ОН	44444			Paste Specia	l			10 123 Rockwood Driv		
5							Insert				10	123 Rockwood Driv	/e 💾
6		Cleveland	ОН	44444			Delete				10	123 Rockwood Driv	/e
7		Cleveland	ОН	44444			Class Contor				10	123 Rockwood Driv	/e
8	A/R TAB FOR P/Os ?????	YES	IN	DEED				its		-	10 123 Rockwood Dri		
9		Cleveland	ОН	44444			Format Cells				10	123 Rockwood Driv	
10		Lorain	ОН	44052			<u>C</u> olumn Width				101	1945 Root Road	
11		Lorain	ОН	44052			Hide				101	1945 Root Road	
12		Lorain	ОН	44052			Unhide				101	1945 Root Road	
13		Lorain	ОН	44052		_		0			101	1945 Root Road	

Char(10) is the ASCII code to start a NEW LINE within the cell.

In cell H2, enter the following equation:

=A2&CHAR(10)&CHAR(10)&B2

-or-

=concatenate(A2,char(10),char(10),B2)

Press enter, or click the check to validate the equation.

...not too special, it still looks like a cell that has been concatenated, without spacing to boot.

0	😱 🚰 🖬 🗋 🤊 – 🔍 🖓 🎒 🎝 🏟 🂝 🖃 💶 🔹 char10 - Microsoft Excel 🛛 Table Tools												_ = x					
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Right Click on the column heading and select Format Cells:

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Format Cells	On the Alignment Tab, set the following					
Number Alignment Font Border Fill	options:					
Text alignment Horizontal:	Text Alignment:					
Left (Indent)	Horizontal: Left (Indent)					
	Vertical: Top					
Justify distributed	Text Control:					
Text control	Check "Wrap Text"					
Wrap text						
Merge cells						

Click OK with these options selected and resize the column. The data from two individual cells is now "stacked" vertically.

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							158											
							158											

Continue writing the equation to include all columns A - G. Separate each cell reference with the char(10) code to produce a line feed between the cell references.

=A2&CHAR(10)&CHAR(10)&B2&CHAR(10)&C2&CHAR(10)&D2&CHA R(10)&E2&", "&F2&" "&G2

Pay attention to the change in cells E2, F2 and G2. This is the City, State and Zip Code information. These will not be separated by a line feed. These cells are separated by text designated/defined by the text in between double quotes.

Once the formula is written, press enter or validate the formula with the check mark to the left of the formula bar.

			D1 🔫 💿									
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_	4	addre	ða 🔽	city 🔽	state 💌	zip_code 🔽	Column1					
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4		the rows. You will	know when	to	44444	234		
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6		changes to	▲		44444	151		
7			†		44444	152		
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Your row height should now be resized to the largest value in a particular column (in this case, the data contained in column H.

	D	E	F	G	Н	I. I.	J	К	-
1	address_2 🗾 💌	city 🔽	state 💌	zip_code 💌	Column1 🗾	original_contract 💌	job_start_date 💌	customer_id 💌	address
					TESTIE test ret				
2		Clausiand	011		123 Rockwood Drive			10	122 0 1
2		Cleveland	UH	44444	Cleveland, OH 44444	U		10	123 ROCI
					COMCOST Committed Cost Job 123 Rockwood Drive				
3		Cleveland	OH	44444	Cleveland, OH 44444	10000		10	123 Rocl
					234 default 123 Rockwood Drive				
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3	co	мсс	OST Committed Cost Job		123 Rockwood	Drive					Cleveland	ОН	44444	Cleveland,	OF

You have now formatted some of the Job information into a single Column:

	н	I.	J	К	L	М	N	0
1	Column1 💌	original_contract 💌	job_start_date 💌	customer_id 💌	address_12 🛛 🔽	address_23 🛛 💌	city4 🔽	state5
	TESTIE							
	test ret							
	123 Rockwood Drive							
2	Cleveland, OH 44444	0		10	123 Rockwood Drive		Cleveland	OH
	COMCOST							
	Committed Cost Job							
	123 Rockwood Drive							
3	Cleveland, OH 44444	10000		10	123 Rockwood Drive		Cleveland	ОН

Insert a column after the Job Start Date:

Here we will "stack" the Original Contract Amount and the Job Start Date.... AND format the cells in the appropriate numeric and date format.

Start with some text that will precede the Contract Amount in Column I2.

="Original Contract: "&DOLLAR(I2)

The Dollar(*cell reference*)function will turn the unformatted value into a currency format. Continue the formula to include the CHAR(10) line feed options and include the following to format the Date value in cell J2.

TEXT(J2,"MM/DD/YY")

The complete formula is written as follows:

="Original Contract: "&DOLLAR(I2)&CHAR(10)&CHAR(10)&"Start Date: "&TEXT(J2,"MM/DD/YY") Format Column K in the same manner as Column H by selecting the appropriate settings in the Text Alignment and Text Control section of the Alignment tab.

Format Cells						?
Number Alignment	Font	Border	Fill	Prote	ection	
Text alignment					Orier	ntation
Horizontal:						•
Left (Indent)	~	Indent:				•
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Text control						•
🗹 <u>W</u> rap text					0	Degrees
Shrink to fit						<u>v</u> egrees

What happens when I want to format a phone number within a cell formula:

		R		S	
	phone	voic	e 💌	Column3	•
3302	2208383		(330) 220-8383	

This is the Formula to be written in Cell S2:

="("&LEFT(R2,3)&") "&MID(R2,4,3)&"-"&RIGHT(R2,4)

Looks complicated, but if you break down the individual components between the ampersands (&) – the logic becomes clear:

The first part of the equation is the left parenthesis preceding the area code:

="("

Then we use the leftmost three digits from cell R2. LEFT(Cell reference, number of characters)

LEFT(R2,3)

Complete the Area Code formatting with a right side parenthesis and a space.

")"

Next, to separate the middle characters in the 4th, 5th and 6th position, use the MID function. MID(cell reference, starting character, number of characters from the starting character)

MID(R2,4,3)

Add the Dash between the first three digits

"_"

....And the final 4 characters of the 7 digit phone number. RIGHT(Cell reference, number of characters)

RIGHT(R2,4)

Ultimately we will combine the phone number in a "stacked" column to return all the data for the Customer into a single column:

=L2&CHAR(10)&CHAR(10)&M2&CHAR(10)&N2&CHAR(10)&O2&", "&P2&" "&Q2&CHAR(10)&CHAR(10)&"("&LEFT(R2,3)&") "&MID(R2,4,3)&"-"&RIGHT(R2,4)

Hide the columns that are represented in the equation above and you will see the fruits of your labor:

Column1	Column 2	Column3
TESTIE	Original Contract: \$0.00	10
estret	Start Date: 01/00/00	123 Rockwood Drive
125 KOCKWOOD DIWE		Cleveland, OH 44444
leveland, OH 44444		
		(330) 220-8383
CONCOST	Original Contract: \$10,000.00	10
committed Cost Job	Start Date: 01/00/00	123 Rockwood Drive
123 Rockwood Drive		
		Cleveland, OH 44444
leveland, OH 44444		(220) 220-2222
234	Original Contract: \$0.00	10
	•	
iefault -	Start Date: 01/00/00	123 Rockwood Drive
123 Rockwood Drive		Cleveland, OH 44444
leveland, OH 44444		
		(330) 220-8383
158	Original Contract: \$60,000.00	10
SR AVCLAW	Start Date: 01/00/00	123 Rockwood Drive
		Cleveland, OH 44444
		(220) 220-0202
151	Original Contract: \$0.00	10
TEST FALLOUT	Start Date: 01/00/00	123 Rockwood Drive
125 NO DAVIDOD DAVE		Cleveland, OH 44444
leveland, OH 44444		
		(330) 220-8383
152	orginal contract: \$0.00	10
Remaining Committed	Start Date: 01/00/00	123 Rockwood Drive
123 Rockwood Drive		
leveland OH 44444		Cleveland, OH 44444
Lindenty, on eases		(330) 220-8383
10	Original Contract: \$0.00	10
OB ADDRESSION THE 4 /R T4R	start Date: 01/00/00	125 KOCKWOOD DRIVE
A/R TAB FOR P/Os ?????		Cleveland, OH 44444
ES, IN DEED		
		(330) 220-8383

From: http://www.techonthenet.com/ascii/chart.php

These are the ASCII decimal values and their related Character reference / functionality when entered in an excel formula.

DEC	Char	Description
0		null
1		start of heading
2		start of text
3		end of text
4		end of transmission
5		enquiry
6		acknowledge
7		bell
8		backspace
9		horizontal tab
<mark>10</mark>		new line
11		vertical tab
12		new page
13		carriage return
14		shift out
15		shift in
16		data link escape
17		device control 1
18		device control 2
19		device control 3
20		device control 4
21		negative acknowledge
22		synchronous idle
23		end of trans. block
24		cancel
25		end of medium
26		substitute
27		escape
28		file separator
29		group separator
30		record separator
31		unit separator
32		space
33	!	
34	n	
35	#	
36	\$	

SURVEY QUESTION #3

37	%		82	R
38	&		83	S
39	1	-	84	Т
40	(85	U
41)		86	V
42	*		87	W
43	+		88	Х
44	,		89	Y
45	-		90	Z
46			91	Γ
47	/		92	Ň
48	0	-	93	1
49	1		94	^
50	2		95	
51	3		96	`
52	4	-	97	а
53	5	-	98	b
54	6	-	99	С
55	7		100	d
56	8	-	101	е
57	9	-	102	f
58	:	-	103	g
59	•		104	h
60	<		105	i
61	=		106	j
62	>		107	k
63	?		108	I
64	@		109	m
65	A		110	n
66	В		111	0
67	С		112	р
68	D		113	q
69	E		114	r
70	F		115	S
71	G		116	t
72	Η		117	u
73	I		118	V
74	J		119	w
75	K		120	x
76	L		121	У
77	Μ		122	z
78	Ν		123	{
79	0		124	
80	Р		125	}