



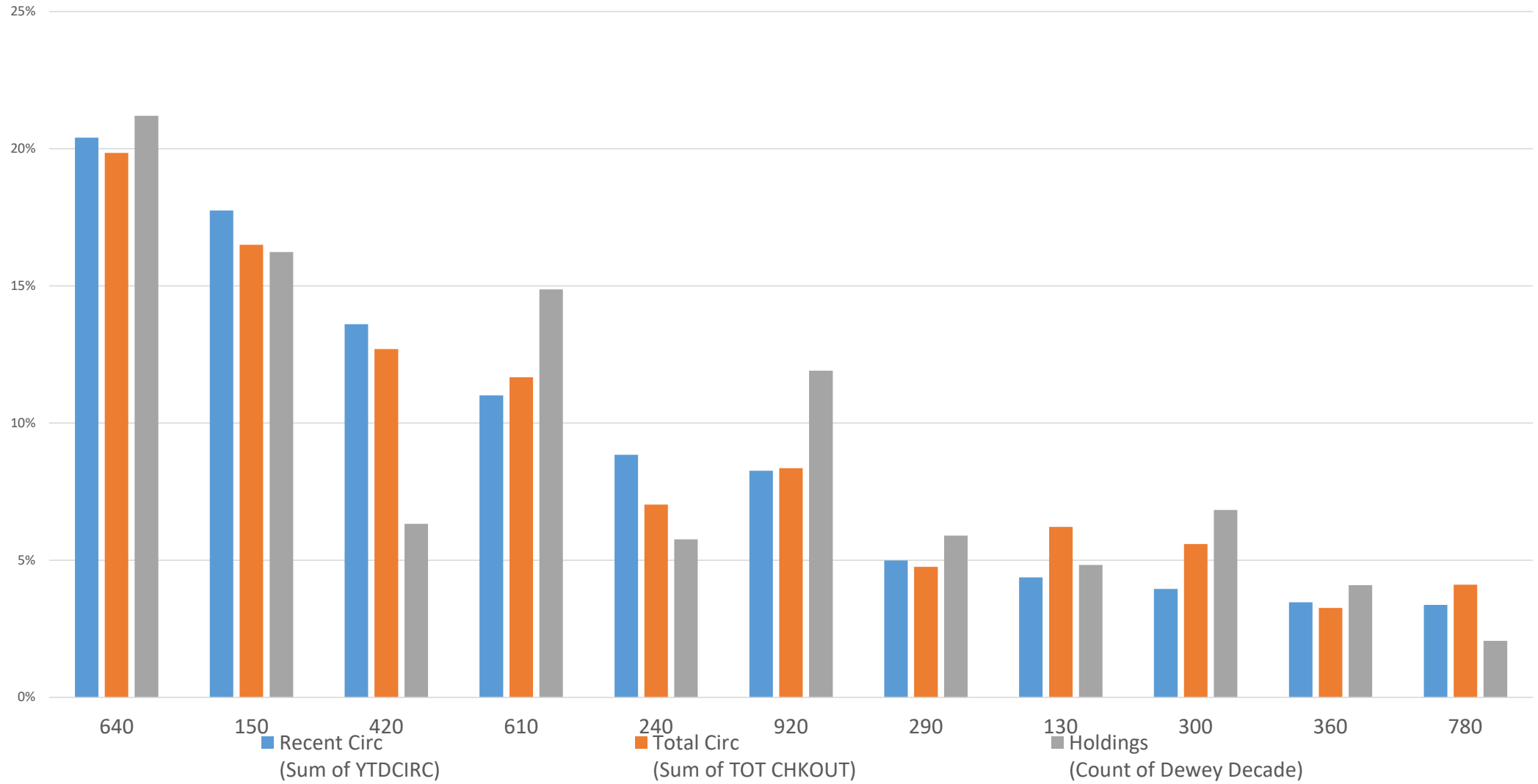
# Meaningful Metrics on a Budget

Be your own data scientist



**Kristina Johnston**  
**ILS Systems Administrator**  
**Gail Borden Public Library District**  
**[Kjohnston@gailborden.info](mailto:Kjohnston@gailborden.info)**

### Collection Analysis by Dewey Decade



## Gather Your Data



**What does  
my patron want?**

**Get the data  
out of the ILS.**

## Prepare Your Data

12345 

**Be creative with  
Find and Replace.**

**Format your data  
as a table.**

**Separate data into  
additional columns.**

## Analyze Your Data



**Pivot Tables.**

**Normalize for  
apples to apples.**

**Visualize!**

# Gather Your Data



What do my patrons want?

Selection  
Attributes



ILS Record Field

Genre

Location code

Author

Author

Dewey range

Call number

Translation

MARC 500

# Gather Your Data



Get the data out of the ILS.

Boolean Search

Review File Name: August adult

Store Record Type: ITEM i

Range: Start i10000008 Stop i20984595

Term	Operator	Type	Field	Condition	Value A	Value B
1		ITEM	LOCATION	not equal to	gahp	
2	A	ITEM	LOCATION	starts with	gah	

ITEM LOCATION not equal to "gahp" AND ITEM LOCATION starts with "gah"

Group  
Ungroup  
Insert Line  
Append Line  
Delete  
Clear All

Search Use Existing Search Retrieve Saved Query Save Save As Close

Export

August adult

Export ITEM Information

Fields to be exported

Line	Type	Field
1	i	LOCATION
2	BIBLIOGRAPHIC	TITLE
3	BIBLIOGRAPHIC	AUTHOR
4	ITEM	CALL #
5	ITEM	YTDCIRC
6	ITEM	LYRCIRC
7	ITEM	TOT CHKOUT
8	ITEM	TOT RENEW

Append  
Insert  
Delete

Field delimiter ,  
Text qualifier "  
Repeated field delimiter ;  
Maximum field length (0-1000) <none>

File: C:\Users\kjohnston\Desktop\Adult\_August.csv Browse

OK Apply Saved Export Save This Export Close

12345

# Prepare Your Data

Be creative with Find and Replace.

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C		I	J	K
1	TITLE	AUTHOR	260]b	264]b	TOT CHKOUT	TOT RENEW	C
2	Aprenda a decir "	McCullough, Mamie, 1939-	Grijalbo		0	31	0 15
3	Jardin de invierno	Neruda, Pablo, 1904-1973.	Seix Ba		0	54	0 86
4	Como trabajar o c	Newhouse, Dora.	Newhouse Press,		0	26	0 46
5	Te canto Navidad [music CD].		Capitol/EMI Latin,	[1991];'©1991"	2	117	3 R
6	Vox new college Spanish and English dictionary : Engli	National			0		0 46
7	New revised Vela: Velázquez de la Cadena, Mariano,	1 New Cen			0		0 42
8	Las peras del oliv	Paz, Octavio, 1914-1998.	Seix Bar		32		1 P
9	Marcelino pan y v	Sánchez-Silva, José María.	Fernand		49		3 S
10	Las Navidades : popular Christmas songs from Latin A	Scholasti			29		1 39
11	Las Navidades : popular Christmas songs from Latin A	Scholasti			5		0 394.268
12	No morira el amor [music CD].		Capitol/E		312		3 MA/NOMO/C44
13	Nicaragua / Jordi Soler Insa, Jordi.		Anaya,		1		0 972.85
14	El antiguo Islam / Stewart, Desmond, 1924-1981.		Time-Lif		21		0 910
15	Elogio de la madr	Vargas Llosa, Mario, 1936-	Tusquets		63		2 Varg
16	Tesoro de poesia juvenil = A Treasure of poetry for yc	Alegria Hispana Publications,		[1990];'©1990"	0		0 861
17	La Santa Biblia : Antiguo y Nuevo Testamentos : antig	Holman Bible Publishers,		[1989];'©1989"	0		0 220.5
18	Areito [music CD] Guerra, Juan Luis.		Licensed by Kare	1	179		6 MA/GUER/K46
19	40 y 20 [music CD] José José.		Ariola ;;"Distribute	3	2	320	1 MA/JOSE/A42
20	Poesia / Gabriela Mistral, Gabriela, 1889-1957		Mexicano Unide	1987	0		0 861

The Find and Replace dialog box is open with the following settings:

- Find what: [1991];'
- Replace with: @1991"
- Options: All
- Buttons: Replace All, Replace, Find All, Find Next, Close

12345

# Prepare Your Data

Format your data as a table.

The screenshot shows an Excel spreadsheet with a table of data. The table has the following columns: TITLE, AUTHOR, YTD CIRC, LYR CIRC, TOT CHKOUT, TOT RENEW, and CALL #. A context menu is open over the AUTHOR column, showing options like 'Sort Smallest to Largest', 'Sort Largest to Smallest', 'Sort by Color', 'Clear Filter From "264|c"', 'Filter by Color', and 'Number Filters'. The table data is as follows:

	TITLE	AUTHOR	YTD CIRC	LYR CIRC	TOT CHKOUT	TOT RENEW	CALL # (ITEM)
1	Apreda a decir	McCullough, Mamie, 1939-	0	0	31	0	158 Mccullough
2	Jardin de invierno	Neruda, Pablo, 1904-1973.	0	0	54	0	861 Neruda
3	Como trabajar o c	Newhouse, Dora.	0	0	26	0	468.3421 Newhou
4	Te canto Navidad [music CD].	Capitol/E	1	2	117	3	R/TECA/C14
5	Vox new college Spanish and English dictionary : Engli	National	0	0	0	0	463 Vox
6	New revised Vela:Velázquez de la Cadena, Mariano, 1	New Cen	0	0	0	0	428 Velazquez
7	Las peras del olm	Paz, Octavio, 1914-1998.	1	0	32	1	Paz
8	Marcelino pan y v	Sánchez-Silva, José María.	1	1	49	3	Sanchez Silva
9	Las Navidades : popular Christmas songs from Latin	A Scholasti	0	1	29	1	394.268 Navidade
10	Las Navidades : popular Christmas songs from Latin	A Scholasti	0	0	5	0	394.268 Navidade
11	No morira el amor [music CD].	Capitol/E	1	1	312	3	MA/NOMO/C44
12	Nicaragua / Jordi	Soler Insa, Jordi.	0	0	1	0	972.85 Soler Insa
13	El antiguo Islam /	Stewart, Desmond, 1924-1981.	0	0	21	0	910 Stewart
14	Elogio de la madr	Vargas Llosa, Mario, 1936-	1	0	63	2	Vargas Llosa
15	Tesoro de poesia juvenil = A Treasure of poetry for yc	Alegria H	0	0	49	0	861 Tesoro
16	La Santa Biblia : Antiguo y Nuevo Testamentos : anti	g Holman Bible Publishers,	1989	0	0	29	220.5 Santa
17	Areito [music CD]	Guerra, Juan Luis.	1	2	179	6	MA/GUER/K46





# Analyze Your Data



## Pivot Tables.

The screenshot shows the Microsoft Excel interface with a PivotTable. The PivotTable is located in the range A4:D9 and has 'Row Labels' in column A and 'Count of Dewey Decade' in column D. The data in the PivotTable is as follows:

Row Labels	Count of Dewey Decade
640	1
150	1
420	1
610	1
240	1
920	1
290	1
130	1
300	1
290	1
360	1
780	1
Grand Total	11

The 'PIVOTTABLE TOOLS' ribbon is active, and the 'Summarize Values By' context menu is open over the PivotTable. The menu options are:

- Copy
- Format Cells...
- Number Format...
- Refresh
- Sort
- Remove "Holdings(Count of Dewey Decade)"
- Summarize Values By** (highlighted)
  - Sum
  - Count
  - Average
  - Max
  - Min
  - Product
  - More Options...
- Show Values As
- Show Details
- Value Field Settings...
- PivotTable Options...
- Show Field List

# Analyze Your Data



Normalize for apples to apples.

Row Labels	Recent Circ (Sum of YTDCIRC)	Total Circ (Sum of TOT CHKOUT)	Holdings (Count of Dewey Decade)	
640	20.40%	19.84%	21.20%	
150	17.75%	16.50%	16.23%	
420	13.60%	12.69%	6.32%	
610	11.01%	11.67%	14.87%	
240	8.84%	7.03%	5.76%	
920	8.26%	8.35%	11.91%	
290	4.99%	4.76%	5.90%	
130	4.37%	6.22%	4.83%	
300	3.95%	5.59%	6.83%	
360	3.47%	3.26%	4.09%	
780	3.37%	4.10%	2.06%	
<b>Grand Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	

23	20C	1.11%	1.28%	% Running Total In...
24	22C	0.99%	1.20%	Rank <u>S</u> mallest to Largest...
25	74C	0.89%	0.56%	Rank <u>L</u> argest to Smallest...
26	39C			Index
27	32C	0.87%	0.34%	More Options...
28	34C			
29	51C	0.66%	0.58%	

sh\_adult\_final.csv

READY

### Top 25 Scifi Authors

