Collection Analysis with Tableau

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COLORADO ALLIANCE OF RESEARCH LIBRARIES
LIBRARY ASSESSMENT WORKSHOP
NOVEMBER 17, 2016

Collection Analysis-Challenges

- Collecting and combining various data sources
  - Integrated Library System (ILS)(.txt,.xls API, SQL)
    - Circulation statistics
    - Expenditures
    - fund codes
    - COUNTER usage reports (.xls)
    - Impact Factors (.xlsx)
      - Journal Citation Reports, Scimago (.txt, .xls)
  - Collections Budget (.xls)
  - INN-Reach data
  - Interlibrary Loan Data

- Presenting quantitative data in a format that is easily understood

- Publishing data and findings; making data and analyses more accessible

Collection Analysis in Excel

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | ACROBAT

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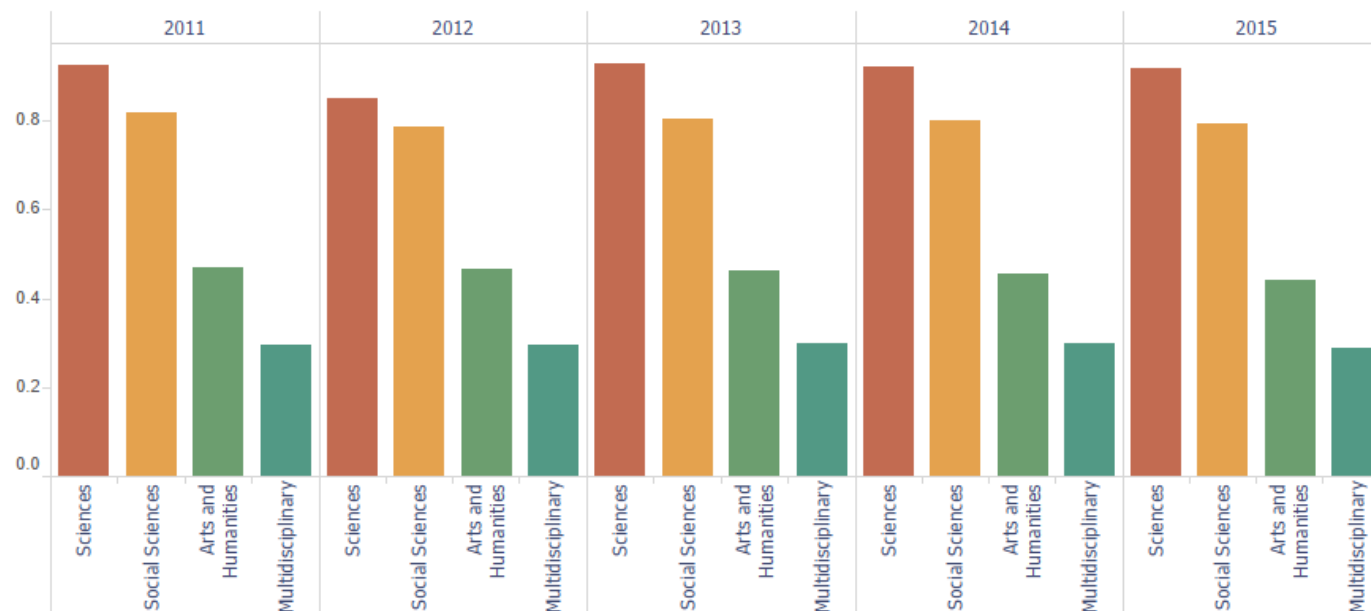|	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	T
1	Cancel?	FUND	TITLE *(blue lines = e-journals)	22	CALL #	LOCATION	FORMAT	ord type	RECORD #	VENDOR	Paid FY12	Sub per.	Paid FY13	Sub per.	LAST PAID	Search Chinook (by ISN, print & online)
2		antsu	A.S.A. monographs	0066-9679 0	Class Sep	lib	print	s.o.	o6927592	coutt	91.95	v.47	170.54	v.48,v.49	$ 170.54	Search Chinook
3		antsu	American antiquity	0002-7316	E51 .A52	per	print	sub	o6600529	sbuks	228.58	12 V 77	249.85	2013	$ 249.85	Search Chinook
4		antsu	Ancient Mesoamerica [electronic resource]	http://libra	F1434 .A56 Inte	web	e	s	o5890160	sbuks	$389.50	12 V 23	$408.98	13 V 24	$408.98	Search Chinook
5		antsu	Anthropologica	0003-5459	E78.C2 A53	per	print	sub	o6613408	sbuks	136.75	12 V 54	139.15	13 V 55	$ 139.15	Search Chinook
6		antsu	Anthrozoös [electronic	http://libra	QL85 .A57 Inter	web	e	s	o692170x	sbuks	$429.48	2012	$407.95	2013	$407.95	Search Chinook
7		antsu	Archaeology in Montana	0044-8591	CC21 .A82	per	print	sub	o4092260	sbuks	46.9	2012	46.9	2013	$ 46.90	Search Chinook
8		antsu	Archaeology in Oceania	0003-8121 0	DU1 .A72	per	print	sub	o6606209	sbuks	182.88	2012	194.5	2013	$ 194.50	Search Chinook
9		antsu	Arctic anthropology	0066-6939	GN1 .A7445	per	print	sub	o6258724	sbuks	250.5	2012	263.25	2013	$ 263.25	Search Chinook
10		antsu	Asian ethnology	1882-6865	GR330 .F6	per	print	sub	o464511x	sbuks	106.73	2011 V 70	106.85	12 V 71	$ 106.85	Search Chinook
11		antsu	Cambridge anthropology : a journal of the Department of Social Anthropology,	0305-7674	GN1 .C29	per	print	sub	o1075779	sbuks	209.5	2012	219.18	2013	$ 219.18	Search Chinook
12		antsu	Cambridge archaeological	0959-7743	CC1 .C35	per	print+internet	sub	o5890421	sbuks	349.93	12 V 22	378.05	2013 V 23	$ 378.05	Search Chinook
13		antsu	Collaborative			web	e	s	o7497660	sbuks	$98.15	2013			$98.15	Record
14		antsu	Collection Puruşärtha / Centre d'études de l'Inde et		GN635.S57 P8	nor	print	s.o.	o1106909	harra	50.56	v.29	53.12	v.30	$ 53.12	supressed
15		antsu	Contributions to Nepalese	0376-7574	DS493 .C68	per	print	sub	o1653623	sbuks	82.41	2012	82.78	011 V 38	$ 82.78	Search Chinook
16		antsu	Cultural survival quarterly	0740-3291	GN357 .C9	per	print	sub	o6623384	sbuks	85.5	2012	87.9	2013	$ 87.90	Search Chinook
17		antsu	Ethnology	0014-1828	GN1 .E85	per	print	sub	o6626270	sbuks	70.73	2011 V 50	82	2013 V 51	$ 82.00	Search Chinook
18		antsu	Expedition	0014-4738	CC21 .P557	per	print	sub	o6626476	sbuks	35.88	2012	35.88	2013	$ 35.88	Search Chinook
19		antsu	Idaho archaeologist	0893-2271	E61 .I3	per	print	sub	o6629374	sbuks	39.38	2012	41.78	2013	$ 41.78	Search Chinook
20		antsu	Journal of anthropological	0091-7710	GN1 .S64	per	print	sub	o6630650	sbuks	76.88	2012	76.88	2013	$ 76.88	Search Chinook
21		antsu	Journal of California and Great Basin anthropology	0191-3557	E78.C15 J62	per	print	sub	o6633547	sbuks	73.48	2011 V 31	86.17	12 V 32 # 1	$ 86.17	Search Chinook
22		antsu	Journal of ethnobiology	0278-0771	GN476.7 .J68	per	print	sub	o6616732	sbuks	94.3	2012	107.63	2013	$ 107.63	Search Chinook
23		antsu	Journal of Mediterranean archaeology [electronic	http://libra	DE1 .J69 Intern	web	e	s	o5335498	sbuks	$246.00	012 V 25	$246.00	13 V 26	$246.00	Search Chinook
24		antsu	Journal of Middle Atlantic	0883-9697	E78.M65 J68	nor	print	s.o.	o6931583	coutt		34	v.27 2011		$ 34.00	Search Chinook
25		antsu	Journal of South Asian and Middle Eastern studies	0149-1784	DS41 .J63	per	print	sub	o6636366	sbuks	35.88	2012	35.88	2013	$ 35.88	Search Chinook

What is Data Visualization?

◦ Visual representation of abstract data to help:

  ◦ Explore: Identify trends and patterns in data

  ◦ Explain: Understand complex data more easily
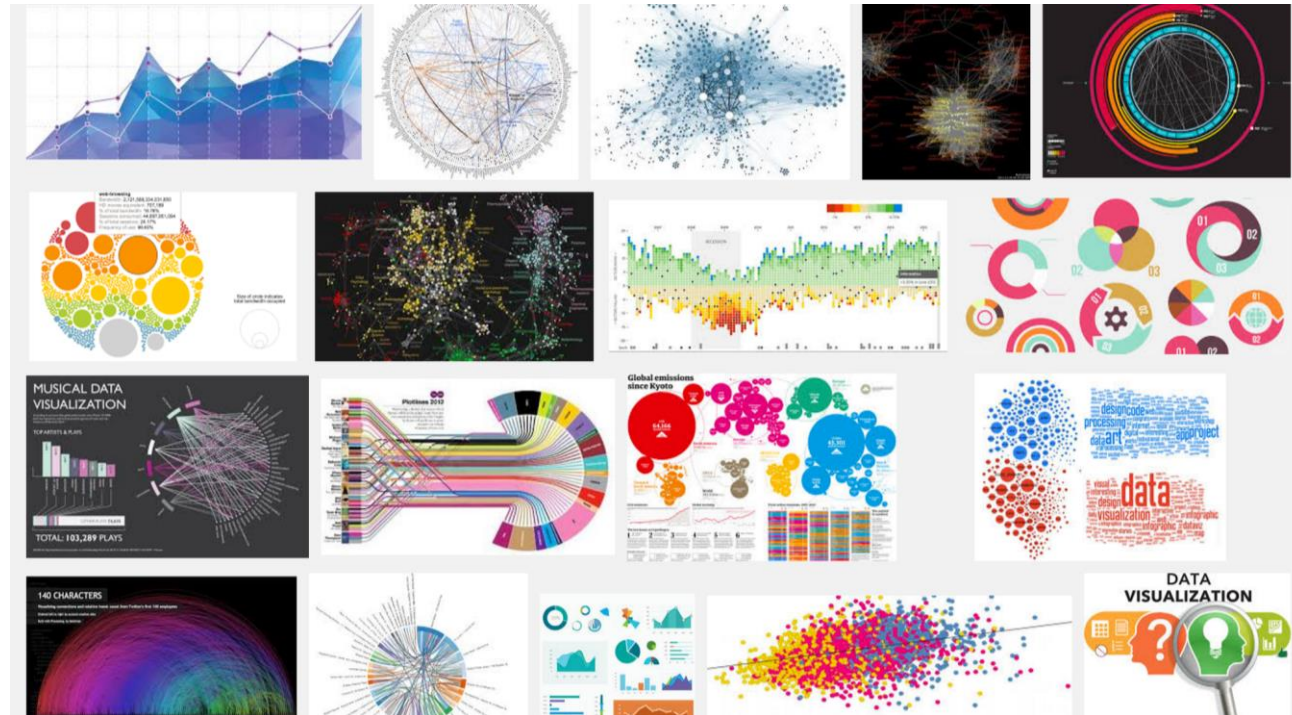
Tableau Software-Data Visualization
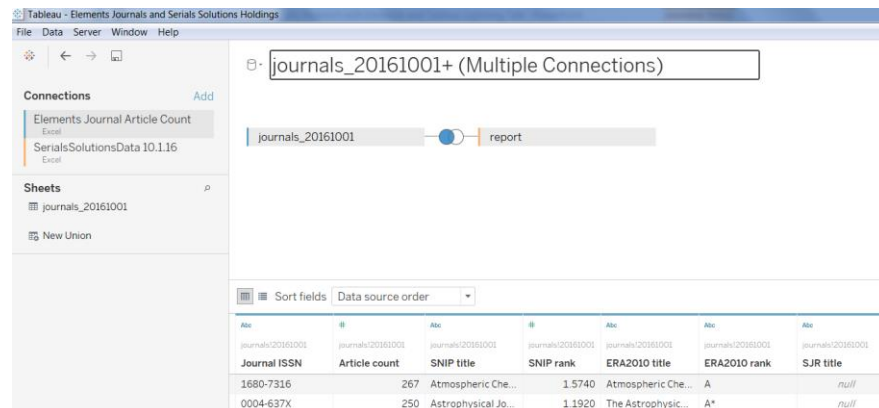
Excel v. Tableau?

	Excel	Tableau
Combine multiple data sets	Manually or using a formula like VLOOKUP	Link and create relationships between data sources
Updating data	New version needs to be manually uploaded	Data sources can be refreshed
Filters, Slicers, Sort	Yes	Yes
Graphs, charts	Yes	Yes
Publishing/Distribution	Static, interactive spreadsheets	Dynamic, interactive online dashboards

Tableau Software-Connecting Data
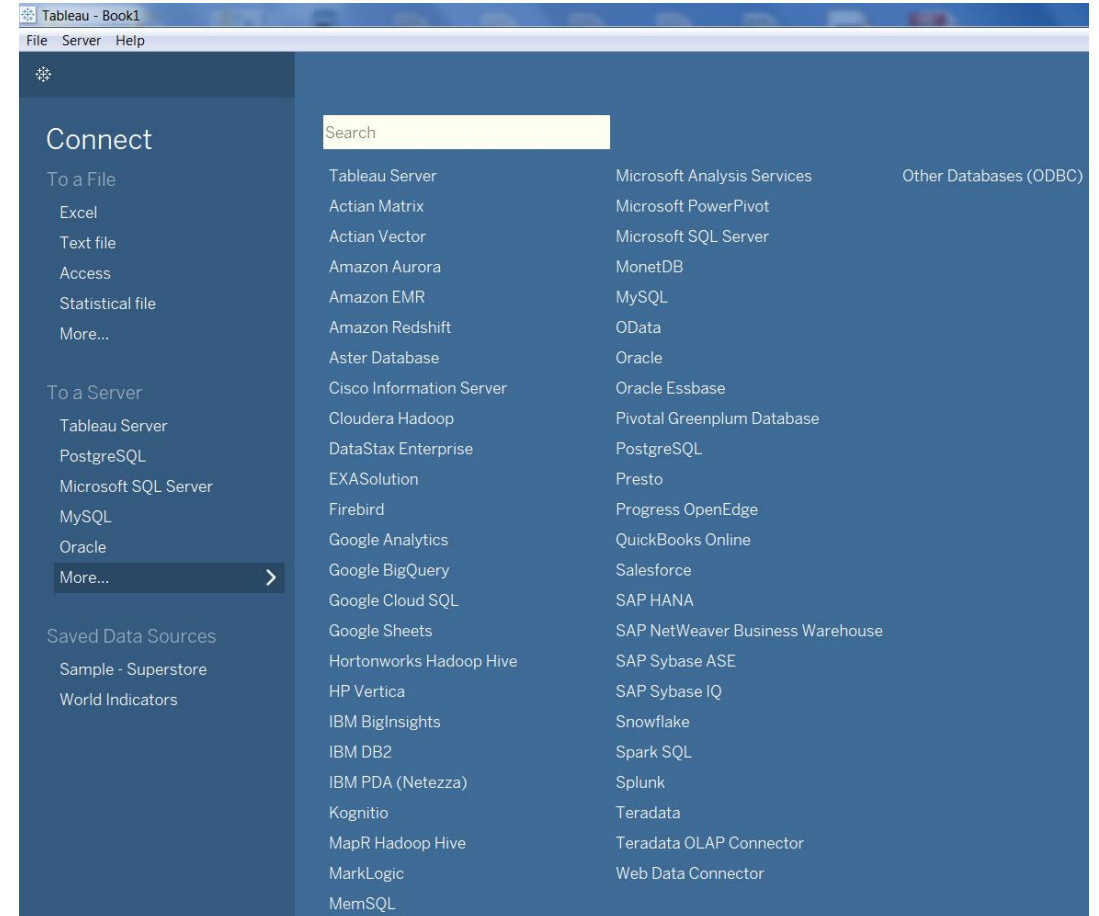
Integrate and analyze various data sources:

◦ Excel spreadsheets from Elements (faculty publication data)

◦ Excel spreadsheets containing library holdings (ILS data)

  ◦ Better yet, connect directly to ILS data using PostgreSQL database (Sierra DNA)

◦ Excel spreadsheets exported from citation databases such as Web of Science or Scopus

Tableau Dashboards for Collection Analysis

- Most Cited Journals by Journal Title

- Most Cited Journals by Department

- Journals with most articles by CU authors

- Top Publishers for books and journals

- Books by CU authors
  - Group by academic department
  - Group by subject librarian

- Journals with high use, zero use

- Circulation of approval v. firm ordered books

Tableau Dashboards for Collection Analysis

- Collections Budget
  - Track expenditures by fund, subject, format, resource type
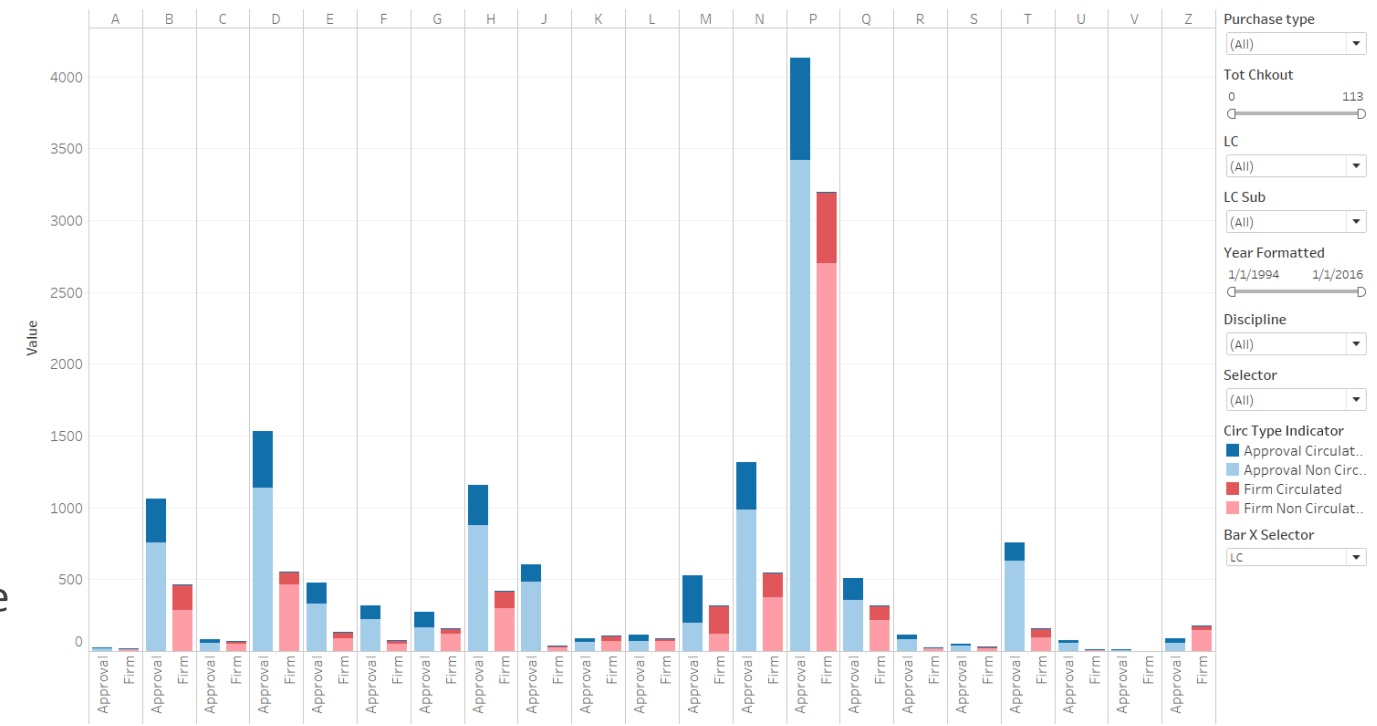
- Collection Statistics
  - Track collection growth
  - Analyze usage statistics
    - Rate the performance of books within LC ranges, by publisher, age
    - EXZ Proxy and COUNTER reports for e-resource usage

- INN-Reach and Interlibrary Loan Data
  - What are we borrowing?
  - In which areas are we borrowing more than we are purchasing?
  - Does this indicate a gap in our collection?

Next Steps-Measuring our Impact

- Combining collections data with different types of library data
  - Reference Questions
  - Gate Counts

Partnering and sharing data with others on campus:

- Faculty Affairs
  - access to faculty information system and Elements gives us a list of all of our faculty's publications, courses taught
- Institutional Research
  - Connect to demographic data about our users, particularly students to connect student success with use of library resources

Questions?

Thank you!

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