



Break It Down:

Data-Driven Analysis of Library Resources & Services



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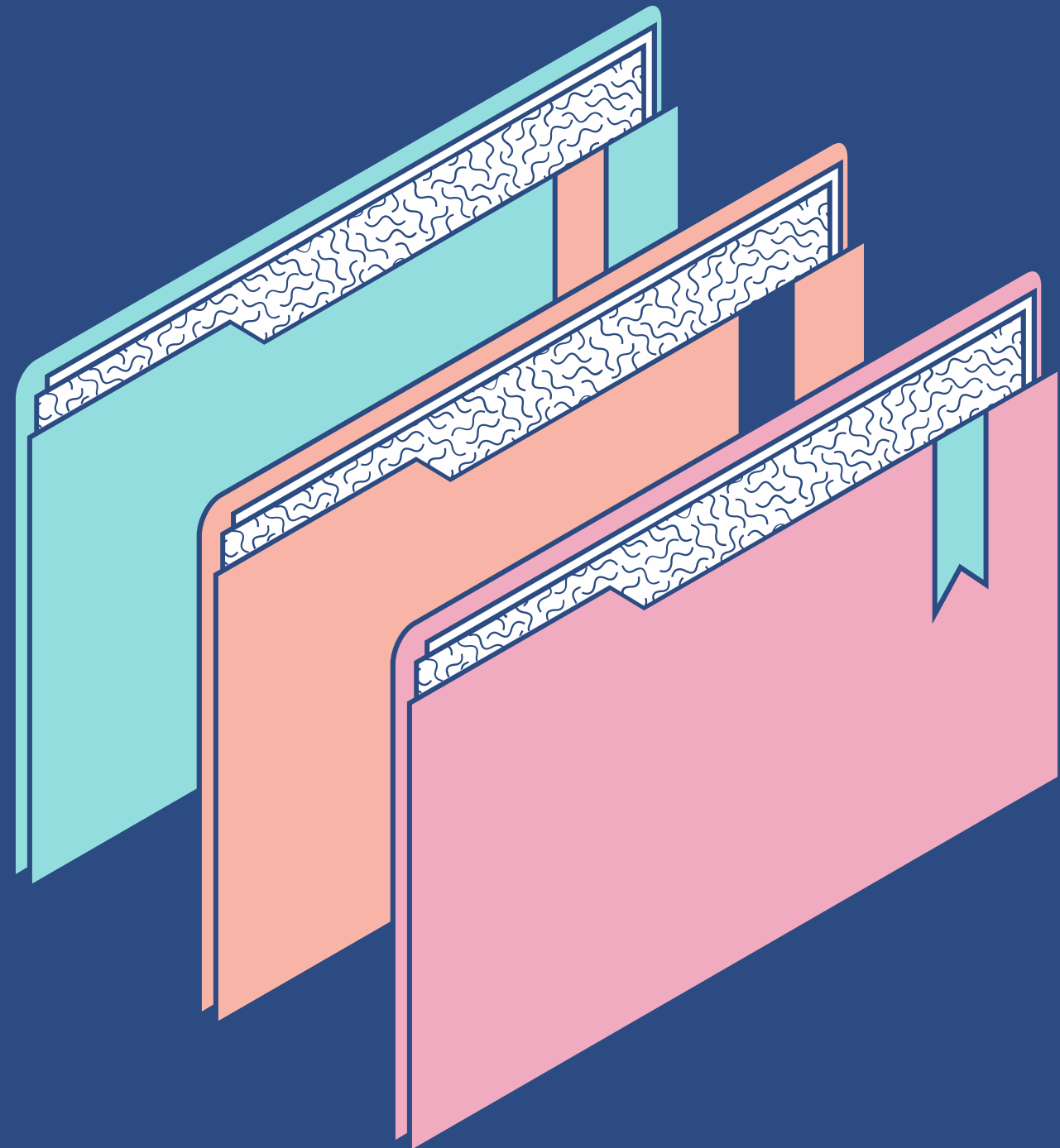


**manitowoc
public library**

**MANITOWOC
CALUMET
MCLS
LIBRARY SYSTEM**

DATA

SQUAD



Agenda

- Our "Metrics" Journey
- Electronic Resources Metrics
- Physical Collection Metrics
- Programming Metrics
- Metrics for the People - Visualizing Data for Non-Data People

Introduction

- What is data-driven decision-making and what does it look like in a library setting?
- The Great Irony



Introduction

- Where it all began at Manitowoc Public Library: Strategic Plan
- **Objective A:** Develop measurable assessment methods for resources, services, and programs.
- **Possible Activities:** Work with staff to create and complete assessment plans for the following service areas:
 - Programming
 - Electronic resources/collection
 - Physical resources/collection
 - Other in-house services and offerings
 - Outreach and partnerships

Electronic Resources Metrics

Identified Objectives

- Review research for measuring and analyzing databases – usage and cost
- Identify databases to measure (limited to those paid for by MPL or through MCLS consortium)
- Create listing of databases, their costs, and types of usage data provided by vendor
- Group databases by type (often by usage measurement)
- Set baseline usage expectations
- Collect retroactive data (2017 to present)
- Analyze data and make recommendations for following year's database subscriptions
- Implement recommendations based on data
- Rinse and repeat

MEASURES

Database Metrics				
Database	Measure 1	Measure 2	Measure 3	Measure 4
Tutor.com	Total Hours of service (convert down to minutes for comparison)	Usage = One to One sessions +SkillsCenter		
overdrive Advantage				checkouts (by MCLS)
overdrive/libby				Checkouts
Transparent Languages	total session time by minutes	searches		
Creativebug	hours viewed (convert down to minutes for comparison)	sessions	active users	
NewspaperArchive		recent saved searches	number of users	
Tumblebooks		Views		
RefUSA			log ins	
Ancestry		Searches		
mango languages	total minutes for all sessions	number of sessions		
Gale courses	total minutes in class		enrollments (users)	
RBDigital				checkouts
Beanstack		Total Days/Books Read	Active Readers	

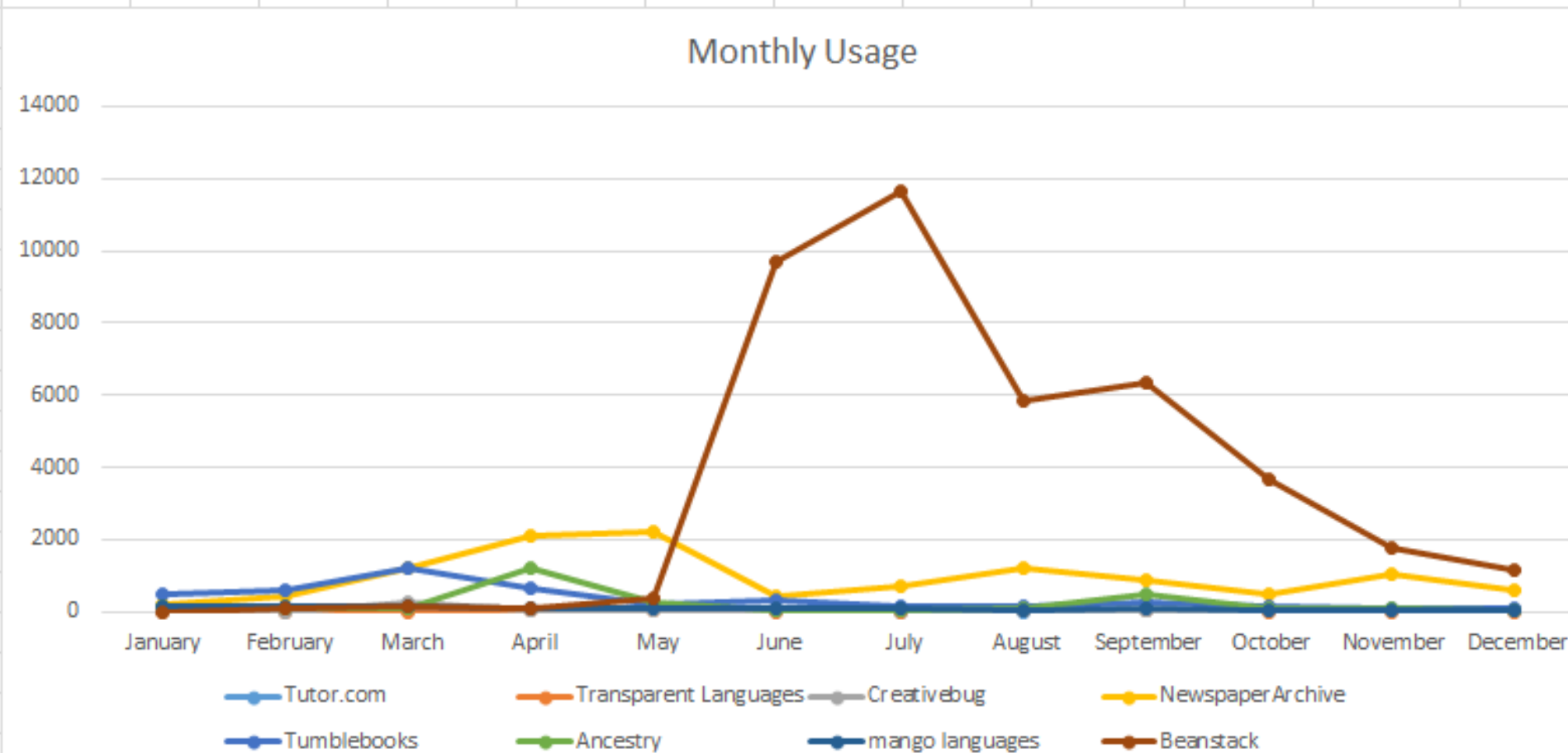
METRICS 2020



		January				February			
Database	<i>Annual Cost (updated 12.10.2020)</i>	January - Total Minutes Use per month	January - Monthly Usage (sessions/search es/views)	January - Monthly Users (enrollments/us ers/logins)	January - Checkouts	February - Total Minutes Use per month	February - Monthly Usage (sessions/search es/views)	February - Monthly Users (enrollments/us ers/logins)	February - Checkouts
Tutor.com	\$ 3,000.00	762	23			1315	40		
overdrive Advantage	\$ 7,401.66				2095				2048
overdrive/libby	\$ 11,047.86				1485				1375
Transparent Languages	\$ 325.85	4	2			0	0		
Creativebug	\$ 1,681.85	372	13	11		138	3	3	
NewspaperArchive	\$ 486.06		208	21			438	24	
Tumblebooks	\$ 1,200.00		481				580		
RefUSA	\$ 2,769.23			116				98	
Ancestry	\$ 3,210.48		170				77		
mango languages	\$ 3,479.23	1036	143			949	131		
Gale courses	\$ 4,458.00	7513		17		9576		13	
RBDigital	\$ 1,634.78				93				153
Beanstack	\$ 1,595.00		2	2			102	4	

SESSIONS/SEARCHES/VIEWS PER MONTH

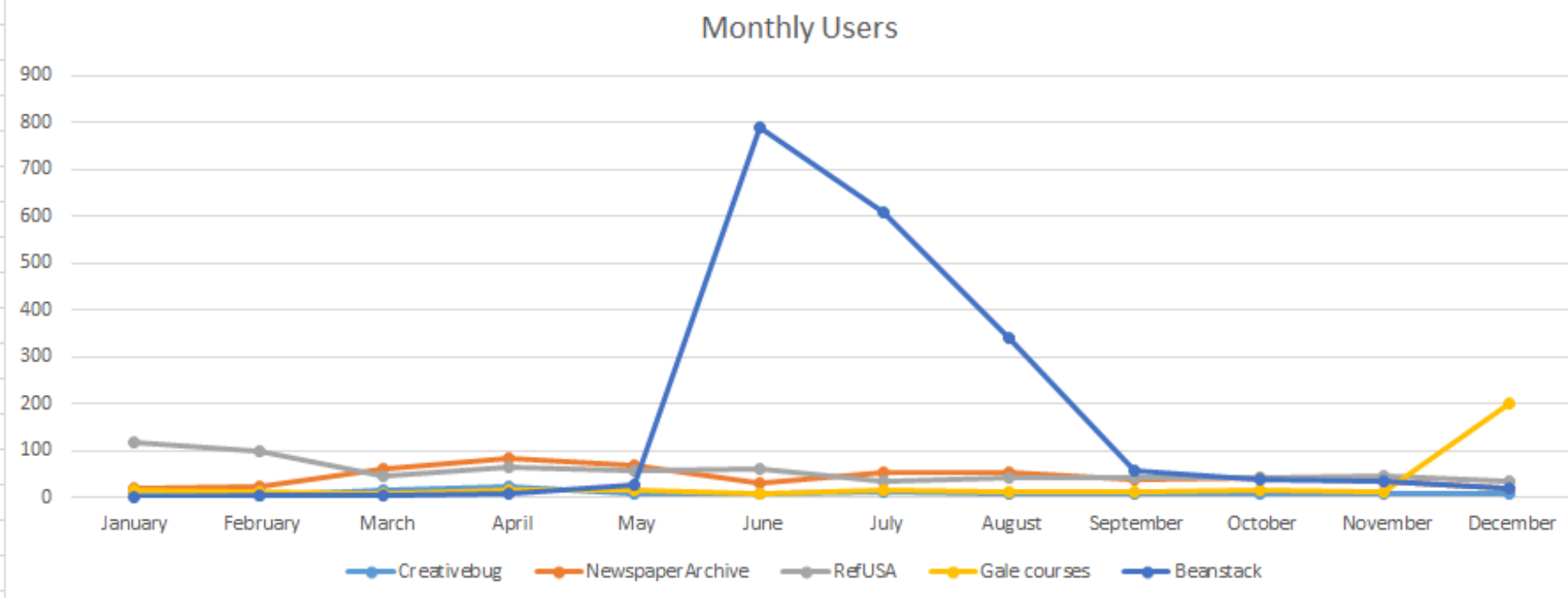
Database	January - Monthly Usage (sessions/searches/views)	February - Monthly Usage (sessions/searches/views)	March - Monthly Usage (sessions/searches/views)	April - Monthly Usage (sessions/searches/views)	May - Monthly Usage (sessions/searches/views)	June - Monthly Usage (sessions/searches/views)	July - Monthly Usage (sessions/searches/views)	August - Monthly Usage (sessions/searches/views)	September - Monthly Usage (sessions/searches/views)	October - Monthly Usage (sessions/searches/views)	November - Monthly Usage (sessions/searches/views)	December - Monthly Usage (sessions/searches/views)	Average Monthly Use	Baseline for Average Monthly use	Average Daily Use	Baseline for Average Daily use	Cost Per Sessions/Searches/Views - Annual	Baseline for cost per session/search/view annual
Tutor.com	23	40	22	97	81	31	1	0	24	31	32	24	41.556	30	1.37	1	7.389162562	<\$1 per session, etc.
Transparent Languages	2	0	0	6	7	0	1	7	6	1	0	0	2.5	30	0.0822	1	10.86166667	<\$1 per session, etc.
Creativebug	13	3	252	37	11	9	13	11	9	9	27	9	33.583	30	1.1041	1	4.173325062	<\$1 per session, etc.
NewspaperArchive	208	438	1209	2094	2185	448	696	1195	892	462	1017	601	953.75	30	31.356	1	0.042469201	<\$1 per session, etc.
Tumblebooks	481	580	1205	643	225	336	116	166	280	171	108	66	364.75	30	11.992	1	0.274160384	<\$1 per session, etc.
Ancestry	170	77	109	1230	260	54	45	78	464	62	82	6	219.75	30	7.2247	1	1.217474403	<\$1 per session, etc.
mango languages	143	131	117	83	75	67	76	48	65	50	27	31	76.083	30	2.5014	1	3.810766703	<\$1 per session, etc.
Beanstack	2	102	142	107	354	9718	11678	5854	6346	3645	1775	1124	3403.9	30	111.91	1	0.039048155	<\$1 per session, etc.



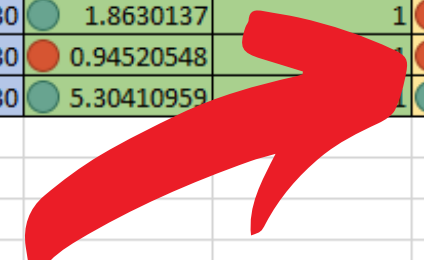
MONTHLY USERS



Database	January - Monthly Users (enrollments/users/logins)	February - Monthly Users (enrollments/users/logins)	March - Monthly Users (enrollments/users/logins)	April - Monthly Users (enrollments/users/logins)	May - Monthly Users (enrollments/users/logins)	June - Monthly Users (enrollments/users/logins)	July - Monthly Users (enrollments/users/logins)	August - Monthly Users (enrollments/users/logins)	September - Monthly Users (enrollments/users/logins)	October - Monthly Users (enrollments/users/logins)	November - Monthly Users (enrollments/users/logins)	December - Monthly Users (enrollments/users/logins)	Average Monthly Use	Baseline for Average Monthly use	Average Daily Use	Baseline for Average Daily use	Cost Per User - Annual	Baseline for cost per user annual
Creativebug	11	3	16	23	7	7	12	9	8	7	7	7	9.75	30	0.32054795	1	14.375	<\$1 per user
NewspaperArchive	21	24	59	82	69	31	55	54	37	42	34	20	44	30	1.44657534	1	0.9206	<\$1 per user
RefUSA	116	98	46	65	56	60	33	40	43	41	46	36	56.6666667	30	1.8630137	1	4.0724	<\$1 per user
Gale courses	17	13	9	15	15	9	17	11	10	14	13	202	28.75	30	0.94520548	1	12.922	<\$1 per user
Beanstack	2	4	5	7	28	790	609	340	57	39	34	21	161.3333333	30	5.30410959	1	0.8239	<\$1 per user

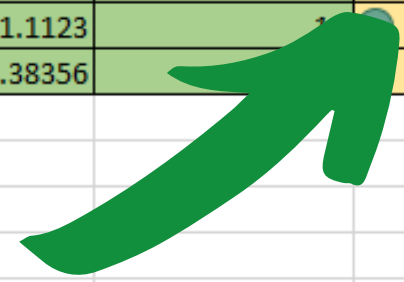


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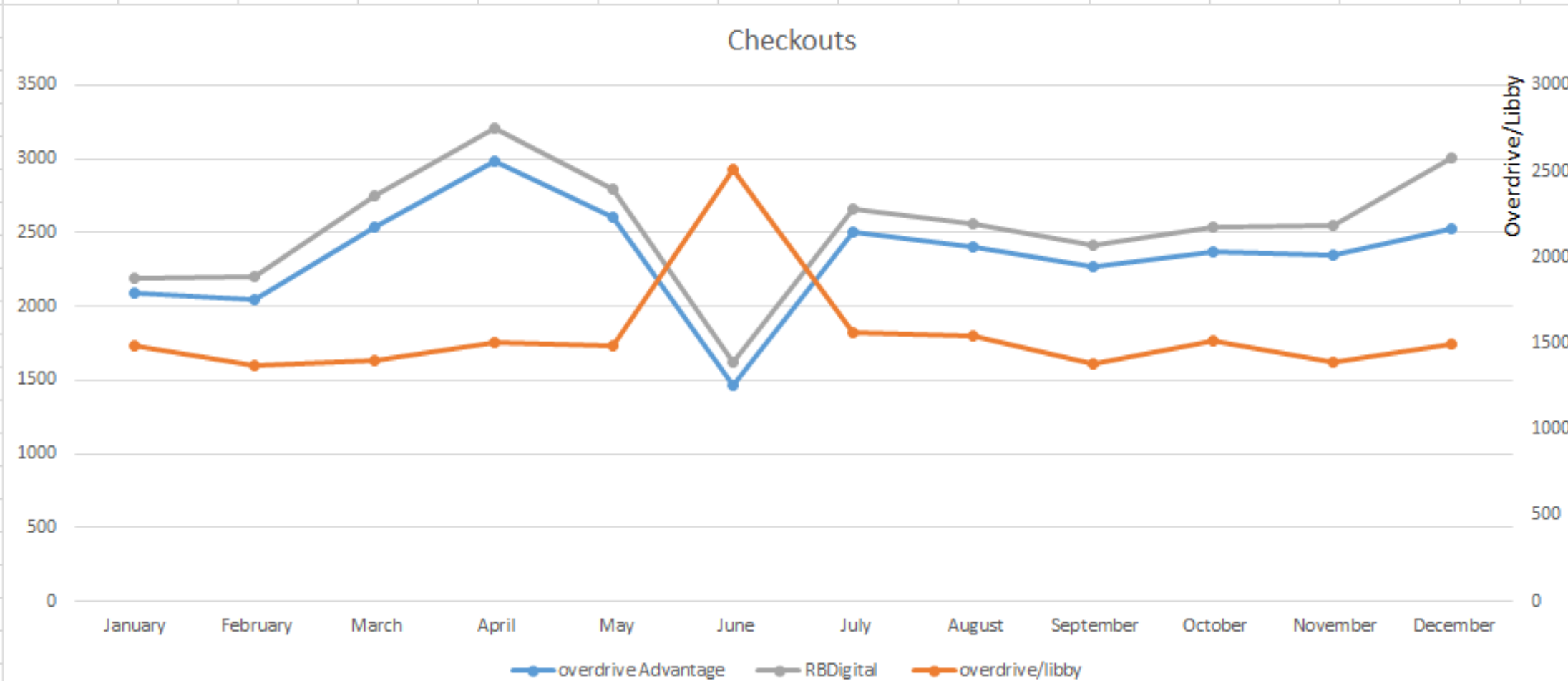


MONTHLY CHECKOUTS

Database	January - Checkouts	February - Checkouts	March - Checkouts	April - Checkouts	May - Checkouts	June - Checkouts	July - Checkouts	August - Checkouts	September - Checkouts	October - Checkouts	November - Checkouts	December - Checkouts	Average Monthly Use	Baseline for Average Monthly use	Average Daily Use	Baseline for Average Daily use	Cost Per Checkouts - Annual	Baseline for cost per c/o annual
overdrive Advantage	2095	2048	2541	2988	2601	1468	2507	2404	2267	2367	2351	2529	2347.17	30	77.1671	1	0.262787048	<\$1 per checkout
overdrive/libby	1485	1375	1396	1505	1490	2514	1567	1546	1381	1513	1393	1491	1554.67	300	51.1123	1	0.592188036	<\$5 per checkout
RBDigital	93	153	212	218	196	158	149	153	152	171	193	482	194.167	300	6.38356	1	0.701622318	<\$5 per checkout



\$.26/checkout



COMPARISON MATRIX

Comparison Matrix									
Database	Annual Cost (updated 12.10.2020)	Total Minutes Use per month	Monthly Usage (sessions /searches/views)	Monthly Users (enrollments/users/logins)	Checkouts	Recommend to RENEW or DELETE	Reasoning	Recommended Revisions to Metrics or Baselines	Future Database Recommendations
Tutor.com	\$ 3,000.00	PASS	PASS			Renew	It's an essential service, even if it's just meeting the baseline. We may need to promote it more.	Review baseline by March 2021	
overdrive Advantage	\$ 7,401.66					Continue Same Funding	It enhances the OverDrive collection through the statewide consortium and reduces wait times for high-interest titles.	Review baseline by March 2021	
overdrive/libby	\$ 11,047.86					Renew	High interest and high usage	Review baseline by March 2021	
Transparent Languages	\$ 325.85	FAIL	FAIL			Delete	Low use		
Creativebug	\$ 1,681.85	PASS	PASS	FAIL		Delete	Low use		
NewspaperArchive	\$ 486.06		PASS	PASS		Renew	Consistent usage and direct staff to patron benefit (part of core reference services)	Review baseline by March 2021	
Tumblebooks	\$ 1,200.00		PASS			Renew	High interest and high use	Review baseline by March 2021	
RefUSA	\$ 2,769.23			PASS		Renew	Consistent usage and significant quality for in-depth research	Review baseline by March 2021	
Ancestry	\$ 3,210.48		PASS			Renew	Usage is okay and expense is not insignificant, but it's a core reference resource that's unique.	Review baseline by March 2021	
mango languages	\$ 3,479.23	PASS	PASS				Usage adequate, user interface unparalleled compared to similar products.	Review baseline by March 2021	
Gale courses	\$ 4,458.00	PASS		FAIL		Delete	Low individual use, very individual cost, questionably relevant courses. Would only reconsider if content needs were addressed.		Vidcode (coding database) - Julia is looking into for possible addition in 2021. Will present recommendation in March 2021.
RBDigital	\$ 1,634.78				FAIL	Renew	Usage is okay, but perhaps a little low. Anticipate higher visibility and usage after Overdrive integration.	Review baseline by March 2021	
Beanstack	\$ 1,595.00		PASS	PASS		Renew	High use and enhances reading programs. Also supports easy stat harvest.	Review baseline by March 2021	

YOU CALL THE SHOTS

- Data is one element of your decision making
- Consider anecdotal evidence, alternative resources, and other explanations to support the data
- Not everyone is going to be satisfied with decisions you base on data, and that's okay
- Do something with the information



LARS Online Resources Committee

Meets once per year, typically in March. This committee meets to:

- View demos of products the member libraries are interested in adding during the next fiscal year.
- Review the data metrics / usage statistics for the products the libraries or library system currently subscribes to in order to determine the cost effectiveness of each to determine if the product should be continued or canceled.
- Based on the usage, cost, and interest in both current and prospective products, the committee makes purchase/subscription recommendations to be approved by the full LARS consortium.
- The recommendations are approved at a March LARS meeting, well before library budgets are forming for the next fiscal year.

Physical Collection Health Metrics

Key Performance Indicators (KPIs) to track?

- Collection Turnover
- Collection Balance
- Annual Comparisons- circulation vs. expenses
- Growth & Diversification

Gauge of Performance and Progress

- Snapshot of status monthly, quarterly, or annually
- Ability to inform collection ordering and shelf space



Physical Collection Health Analytics

Collection Analytics Generators

- Collection HQ- Baker & Taylor Publishing
- Bluecloud Analytics- SirsiDynix ILS

Started with CHQ in 2017

Switched to Bluecloud in 2021

Main reasons:

- Lack of confidence in CHQ reports-Data set/ reporting oddities
- End of trial subscription
- Opportunity to reallocate funding



Data-Driven Collection Development

Right-sizing the Collection

- Collection size & Forecast Growth vs. Annual Budget

Evidence-Based Acquisition practices

- Selection based on demand

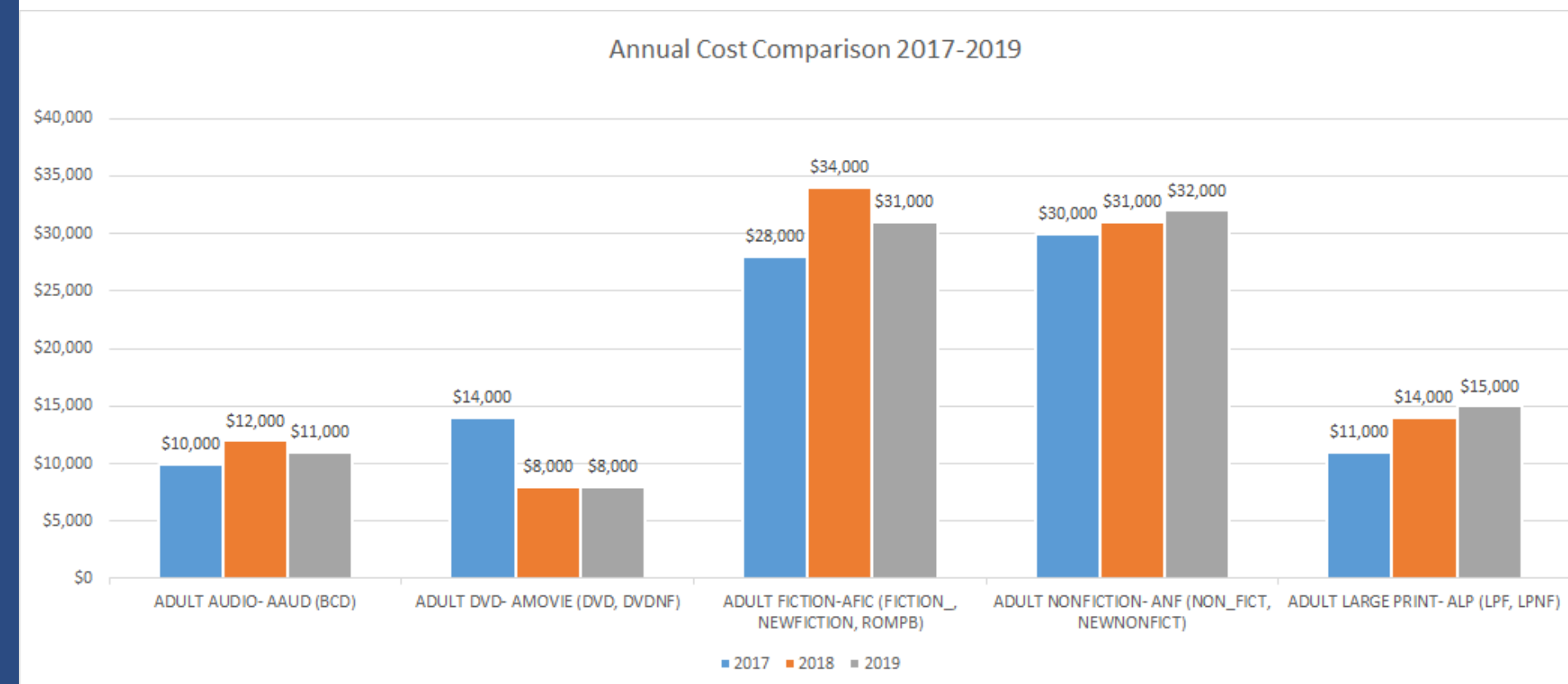
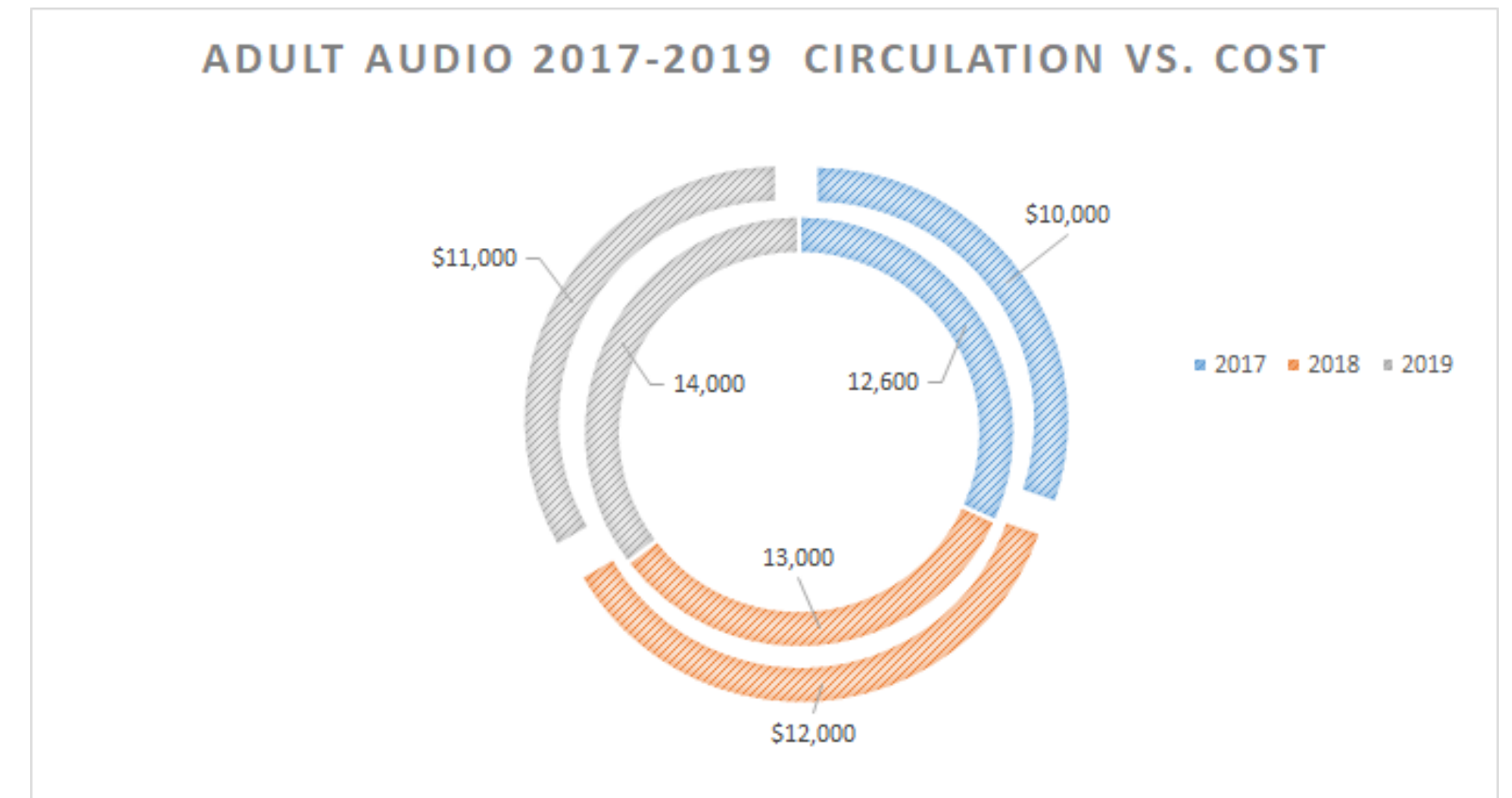
Return on Investment (ROI), both physical & digital materials



Collection Metrics Visualization

Collection Dashboard

- A collection health snapshot for various stakeholders
- Improve tracking of increases/decreases of use with certain collections (Book on CD, etc.)
- Continue to rework budget lines to balance usage vs. expenditures
- End Goals:
 - Develop a curated, well-used collection of materials within the boundaries of our annual budget
 - Provide hard data to support future budget requests based on current and projected trends



Let's Bring
Programming Into This!



Programming: Creating the Metrics

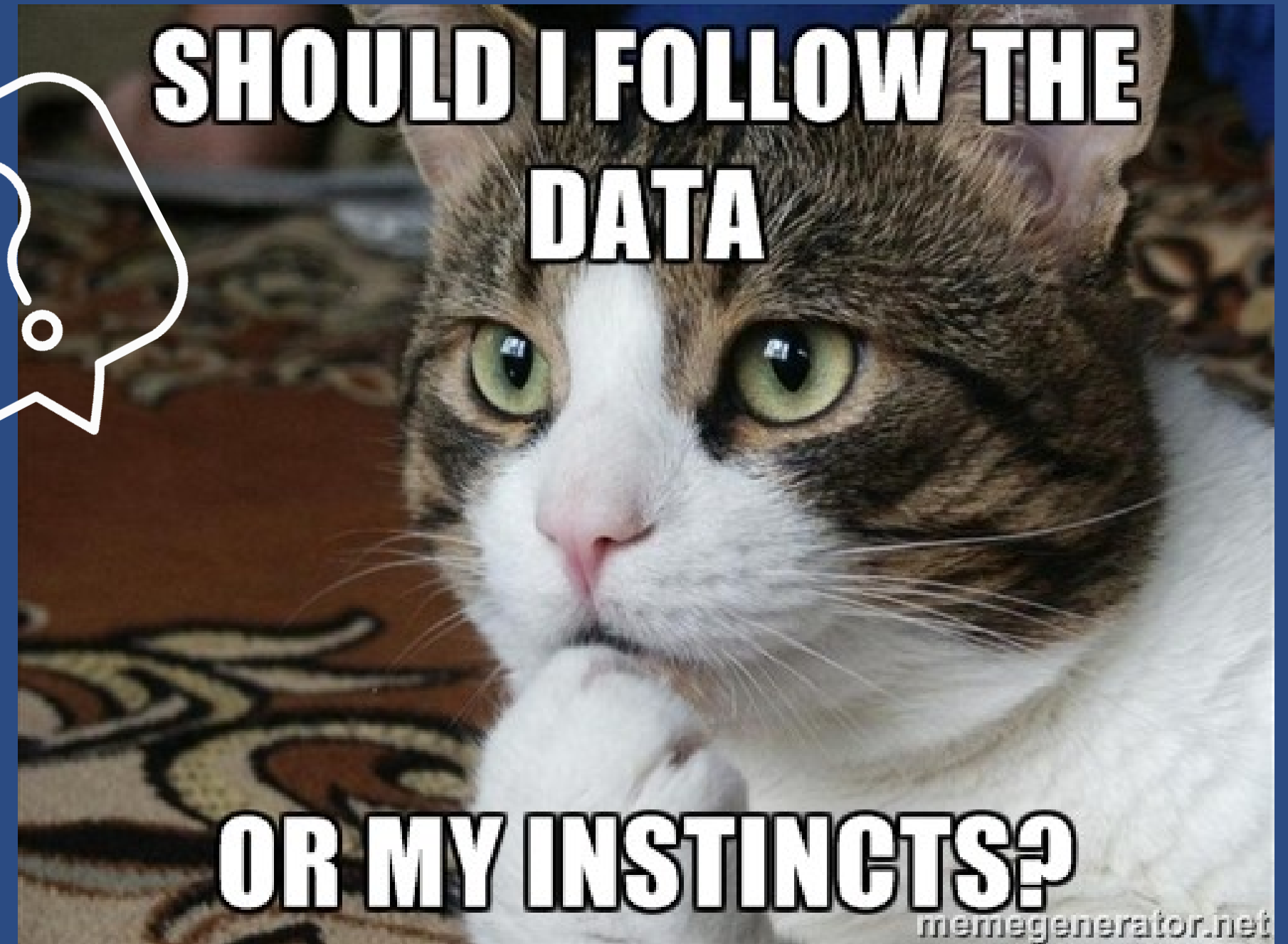


Break it down!

What do we measure?

- Type
- Format
- Set programming categories
- Audience
- Staff Cost/Staff Hours

How do we measure?



YOUTH:
Storytime (includes all preschool storytimes, family storytimes, and Music & Movement)
Baby Storytime
Family Activity Night (FAN)
STEM (Science, Technology, Engineering, & Math)
Community Event (Carnival, Touch the Trucks, Trunk or Treat)
Outside Performer/Instructor (also use for virtual demos by outside paid instructors)
Other Literacy Program (1BBK, Book Picnics, Read Down Your Fines, Winter Read Party, any other reading-centered in-person programs)
Craft/Make & Take (also use for virtual in-house demos)
Other

TEEN:
YLAB (Youth Library Advisory Board) Meeting
Teen Lock-Ins
Battle of the Books (Practices + Competition)
Outside Performer/Instructor (also use for virtual demos by outside paid instructors)
Craft/Make & Take (also use for virtual in-house demos)
Other

ADULT:
Lecture/Speaker (Individual speaker, one-time event)
Multi-Program Series (Weird Manitowoc, Historic 8th Street, In the Garden with Amber & Deena, Great Decisions, etc.)
Speaker Panel (A group of experts on a topic discussing a single topic)
Demonstration (Presenter/speaker is demonstrating without in-room audience participation, such as the cooking demos done virtually)
Demonstration/Hands-On (when attendees participate in the making of something, such as a painting class or Make & Take crafts)
Discussion (Program where the focus is the discussion of a book, movie, etc.)
Maker/Technology Program (Any program using the Idea Box, Technology-based classes, etc.)
Other

 Edit

Fields marked with an * are required

Manitowoc Public Library Program Report

Program Name *

Forum * 

Was this program held at the Library or off-site at another location?

Report in-person and virtual attendance separately in the fields below.

Program Date *

Program Time *

Program Length (Minutes) *

Please use x:xx am/pm for proper formatting.

Intended Audience (must also choose a program descriptor below) *

You must select ONE program descriptor from the program drop-down menu that matches your intended audience.*

Cost of Program - speaker fees, food, supplies, etc. (do NOT include dollar sign) *

Cost of Program - speaker fees, food, supplies, etc. (do NOT include dollar sign) *

Staff Time: Report total number of hours spent per position on preparation, program execution, clean-up, etc. Add total hours for each position (for example, if two Associates spent 4 hours each on the program, the total hours reported in "Associate" should be 8).*

Manager

Librarian

Associate

Technician

Assistant

Clerk

Page

Intern

Comments

First Name: *

Last Name: *

Department *

Email

If you would like a copy of this report, please enter your e-mail address

Example Report: Includes calculated cost per attendee!

Program Report

Program Name: Trunk or Treat

Program Date: 10/26/2021

Program Time: 5:30

Program Length: 90 minutes

In-Person Attendance: 1100

Virtual Attendance:

Total Attendance: 1100

Onsite or Offsite? onsite

Intended Audience: Children 6-11

Example Program Report, continued..

Program Descriptor: Community Event

Forum: In-Person

Base Cost of Program: \$ 0

Staff Cost: \$ 256.88

Overall Cost: \$ 256.88

Expenditure Per Attendee: \$ 0.23

Total Staff Hours Spent: 8.00

Employee Name: Julia Lee

Employee Department: Youth

Employee Email:

Comments: 31 organizations participated!



Collection Metrics Visualization

- Develop a definition of success (different for each program!)
- Determine your cost per attendee goal = what is reasonable for each program?
- Time to pivot! Aligning to DPI Annual Report



Programming Metrics: Establishing Goals

1. Establish programs we want to measure
2. Determine critical measurements and pull similarities across programs if possible - i.e. users per month, cost per use?
3. Create spreadsheet for tracking
4. Determine who updates (and how frequently) and reports data.
5. Patron outputs vs. outcomes
6. Create timeline for process - planning and implementation
7. Determine baseline (could be variable based on type of databases)

Original Timeline



August 2020 - Brainstorm program metrics

Late September 2020 - Establish metrics

Late October 2020 - Develop spreadsheet and determine stat updates, determine stat updater(s), determine location for stats, determine analysis schedule, schedule analysis meetings; develop graphs within the database; discuss revisions needed to programming database

Late October 2020 - Brainstorm outcome vs output measurements

November 2020 - Develop baselines; color code the chart of outcomes based on baselines established

November 2020 - revisions to program (as needed)

November 2020 - Karen and Julia determine budget tracking modifications needed for cost analysis of programs

December 2020 - Communicate tracking with staff and management team via newsletter

January 2021 - Metric - monthly or quarterly; start recording data

September 2021 - Revise database evaluation procedure with new metrics

January 2022 - full metric analysis *disclaimer: COVID may impact stats due to size/location restrictions*

Average Monthly Attendance	Baseline for Average Monthly Attendance	Total Average Annual Attendance	Baseline for Average Annual Attendance	Cost per Attendee (average) - Annual	Baseline for cost per average annual attendance
5.85	20	64.33	20	\$ 1.41	\$ 2.00
5.39	20	59.25	20	\$ 0.44	\$ 2.00
3.18	20	35.00	20	\$ 4.69	\$ 2.00
1.00	20	11.00	20	\$ 2.36	\$ 2.00
6.16	20	67.80	20	\$ 1.91	\$ 2.00
3.55	20	39.06	20	\$ 1.07	\$ 2.00
8.86	20	97.50	20	\$ 1.73	\$ 2.00
0.82	20	9.00	20	\$ 8.65	\$ 2.00
20.23	20	222.50	20	\$ 0.23	\$ 2.00
0.36	20	4.00	20	\$ 19.49	\$ 2.00
9.71	20	106.83	20	\$ 1.92	\$ 2.00
13.01	20	143.13	20	\$ 2.68	\$ 2.00
0.91	20	10.00	20	\$ 6.42	\$ 2.00
30.55	20	336.00	20	\$ 0.30	\$ 2.00
0.18	20	2.00	20	\$ 28.11	\$ 2.00

One Year Later...

- How have metrics changed our perspective on programming?
- One size does NOT fit all
- Helps us see what is popular and what we can let go of
- Example: Teen Lock-In
- A work in progress!
- 2022: Examine trends and adjust baselines as needed



Annual Impact Snapshot

- The problem of communicating library impact
- Telling the story of data, along with actual impact stories
- DIY Infographics: Canva

MANITOWOC PUBLIC LIBRARY

IMPACT SNAPSHOT

PANDEMIC RESPONSE

Manitowoc Public Library pivoted to face the challenges of delivering library services in a global pandemic. Throughout this crisis, staff made many rapid adjustments to the Library's service model to meet the needs of the community. These included curbside pickup services, virtual programming, and physical adjustments in the building to nurture a safer environment for patrons and staff.

CURBSIDE PICKUP

41,134 ITEMS CHECKED OUT WITH CURBSIDE PICKUP

Within two days of the Library's closure on March 16, staff devised a new service model to connect patrons with library materials in a socially distanced world: Curbside Pickup. We relied upon this service model during our closures to safely and efficiently serve the Manitowoc community, even continuing to offer it upon reopening to meet the needs of medically at risk populations.

PROGRAMMING

200 PROGRAMS

20,710 ATTENDEES



"Throughout the pandemic, staff have done an awesome job! Curbside pickup is super handy, the family and kid activity bags were awesome, and story time with the crazy fun youth staff was something to look forward to!"
- Pamela Ford

Since Job Center locations have been closed, library staff have worked harder to meet the needs of jobseekers in Manitowoc County, offering computer access and assistance when there were few alternatives for these services.

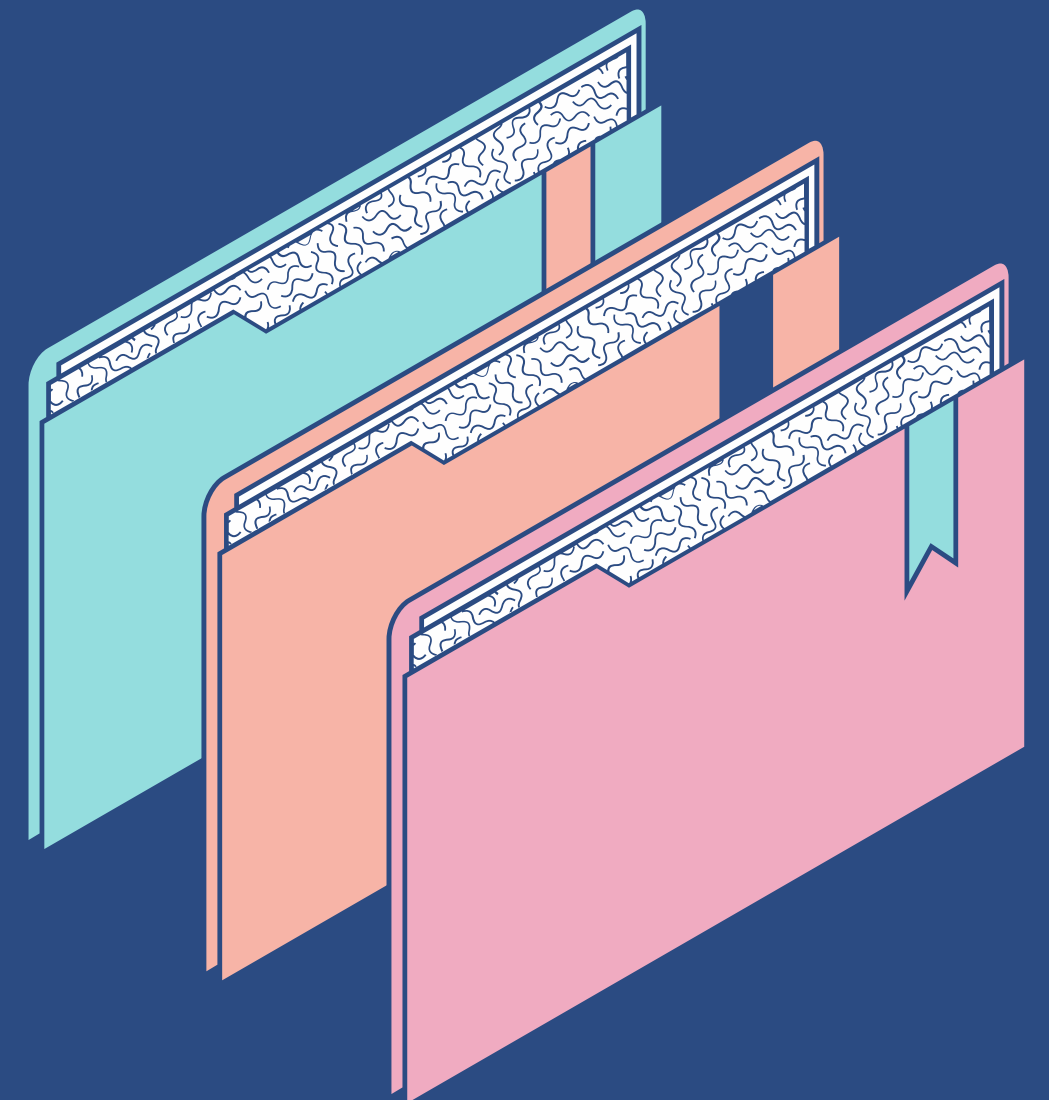


MEETING NEW NEEDS

Measuring the Impact of SRP in Your Community!

Registration Questions & Information Release

Parents of MPSD Students Only: "I authorize the Manitowoc Public Library to release my child's participation in the Summer Reading program to my child's school for the purposes of comparing test scores of students who participate in SRP to those who do not. The information that will be released will be limited to my child's name and the fact they participated. I am making this request under Wis. Stat. 43.30 as the custodial parent or guardian of the individual who is using the library's services."



PREVENT THE SUMMER SLIDE

STUDIES SHOW THAT ACCESS TO BOOKS DURING THE SUMMER PREVENTS A DRASTIC LOSS IN READING - ESPECIALLY FOR KIDS IN NEED

TEST SCORES OF
MPSD STUDENTS NOT
INVOLVED IN MPL
SUMMER READING

SPRING → FALL

KIDS
-8%
TEENS
-4%

TEST SCORES OF
MPSD STUDENTS
INVOLVED IN MPL
SUMMER READING

SPRING → FALL

KIDS
+12%
TEENS
+8%



DATA COLLECTED IN 2019

MPSD TEST SCORE TOTALS

OVERALL TEST SCORES INCREASED **10%** FOR STUDENTS WHO PARTICIPATED IN MPL'S SUMMER READING PROGRAM, AND DECREASED **6%** FOR THOSE WHO DID NOT PARTICIPATE.

THANK YOU

