Measurements that Matter: **Analyzing Patron Behavior** Presented by Joan Frye Williams Tuesday, March 4, 2014 Infopeople helping libraries think differently **Beyond vivid anecdotes** Your mission: **Understand your community better** so you can respond and prepare



Set up patron groups for known behavioral indicators

- · Age range
 - Examples: 0-5, 40-49, under 30
 - Include birthdate or birth year in patron record
- · Tenure as a cardholder
 - Examples: 0-6 months, first year, 10+ years
 - Include date of first registration in patron record
- Membership in a specific constituency
 - Examples: friends, donors, volunteers
 - Include flags for these affiliations in patron record

Encourage patrons to opt into other pre-defined interest groups

- · Subject or genre
- · Service or program type
- · Format or medium
- Preferred communications channel



Create ad hoc patron groups based on specific behaviors

Example:

Create a group of patrons who checked out graphic novels this month. Then see how often that group downloads e-books.



1. Who uses each service?

- · Total transactions
- Number and % breakdown of transactions by patron group
- Total <u>unique</u> users
- Number and % breakdown of unique users by patron group

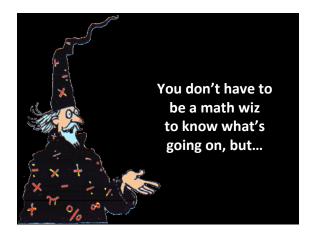


Knowing who's using each service can tell you

- ✓ "Niche" vs. broad appeal
- ✓ How many people/which groups will be affected by change or discontinuation
- √ Which groups to target with outreach or advertising
- √ Which services are starting to "age out"









One simple math concept can help you get a better picture of typical use for any library service

Most libraries calculate average (mean) usage

- 100 patrons borrowed 2 items each
- 20 patrons borrowed 10 items each
- 4 patrons borrowed 50 items each

Total items borrowed = 600 Divided by total patrons = 124

Average (mean) number of items checked out = 4.8

Try calculating the mode instead

The mode is the number that occurs most often http://www.mathsisfun.com/mode.html

- 100 patrons borrowed 2 items each
- 20 patrons borrowed 10 items each
- · 4 patrons borrowed 50 items each

Typical number of items checked out (mode) = 2 i.e. the most frequently occurring situation

Knowing how patrons typically use a service can tell you

- ✓ Where to draw the line for policies and limits
- ✓ Whether one size fits all or to tailor for different groups
- ✓ How to estimate minimum resources required to provide a specific service to a specific population



3. Where is the service being used?

- · Total transactions
- Number and % breakdown of transactions at each location – facility, floor, service desk, workstation ID, IP address
- Number and % breakdown of transactions by each patron group for each location



Knowing where a service is used can tell you

- ✓ How to allocate space to match demand
- √ How to co-locate services for a target group
- $\checkmark \ \mbox{How different groups move through your buildings}$
- ✓ Which virtual transactions are done by patrons and which by staff on behalf of patrons



4. When is the service being used?

- · Total transactions
- Number and % breakdown of transactions by month, day of the week, hour of the day
- For virtual transactions, number and % breakdown of transactions during library building open hours and during closed hours
- Number and % breakdown of transactions by each patron group for each day, hour



Knowing when a service is used can tell you

- ✓ How to avoid scheduling incompatible groups
- ✓ Which services might be corralled into specific "drop in" hours
- ✓ Whether a specific event correlates with increased library usage by target patron groups
- ✓ How virtual services affect in-building workload



This material has been created for the Infopeople Project [infopeople.org], and has been supported in
part by the U.S. Institute of Museum and Library Services under the provisions of the Library Services
and Technology Act, administered in California by the State Librarian. This material is licensed under a
Creative Commons 3.0 Share & Share-Alike license. Use of this material should credit the author and
funding source.

