

Measurements that Matter: Analyzing Patron Behavior

**Presented by
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Beyond vivid anecdotes



**Your mission:
Understand your community better
so you can respond and prepare**



Bonus: Counteract common misconceptions



**Look for relationships
between patron groups
and use of specific services**

**Information
Request**

**As long as you're looking at groups,
you're not breaching confidentiality**



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 unique 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”





2. What is a “typical” transaction for patrons in different groups?



**You don't have to
be a math wiz
to know what's
going on, but...**



**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
- ✓ 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



The analysis part: What to look for



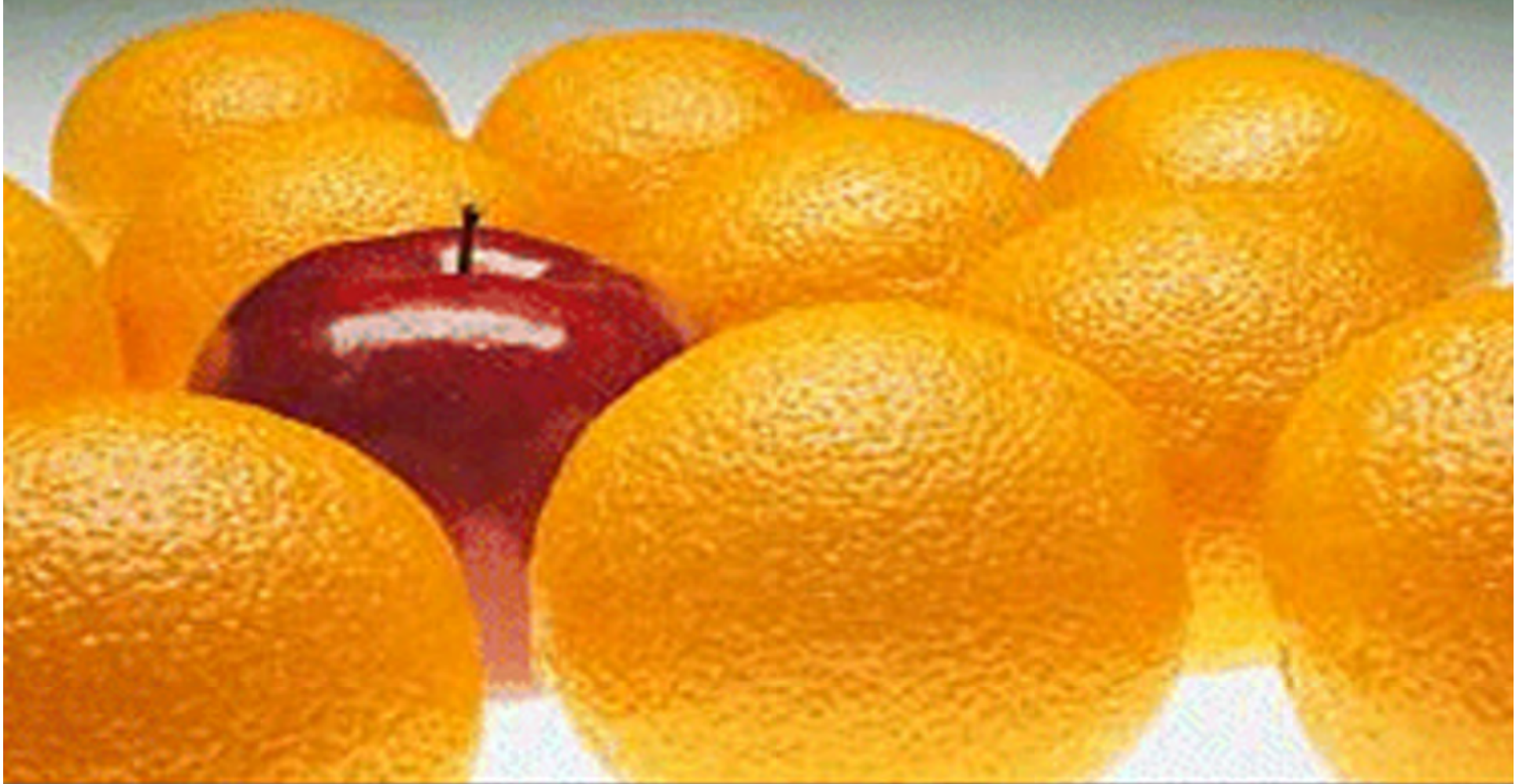
Disparities in size



**Trends over time:
up, down, or steady?**



Outliers and exceptions



What isn't there





Enjoy the thrill of the chase!

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**Let's continue
the
conversation...**

Photo by Martin Helmke



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