# Library Insights

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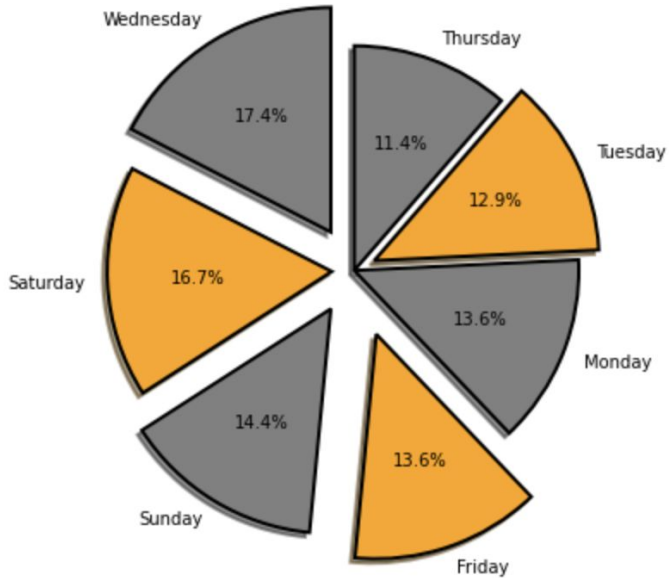
# High-Level Insights



- People close to the age of 40 love to read books and it takes them approximately 17 days to complete these books.
- Most books were returned around summer (July) when people enjoy going out more often.
- People that work in admin and support read the most while blue collar and sales folks do not read that much. You would typically find sales people making pitches instead.

Note: The data used here is mainly from 2018 and 2019, so all stats relate to this time period

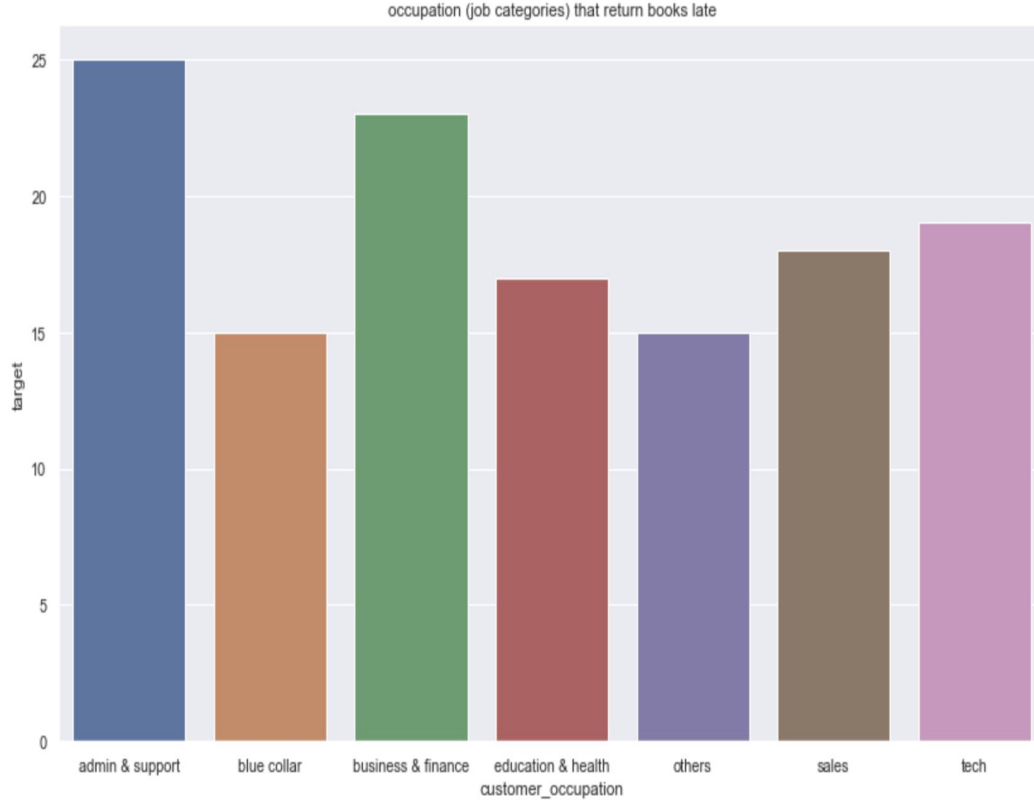**Customers' favorite book titles and categories**
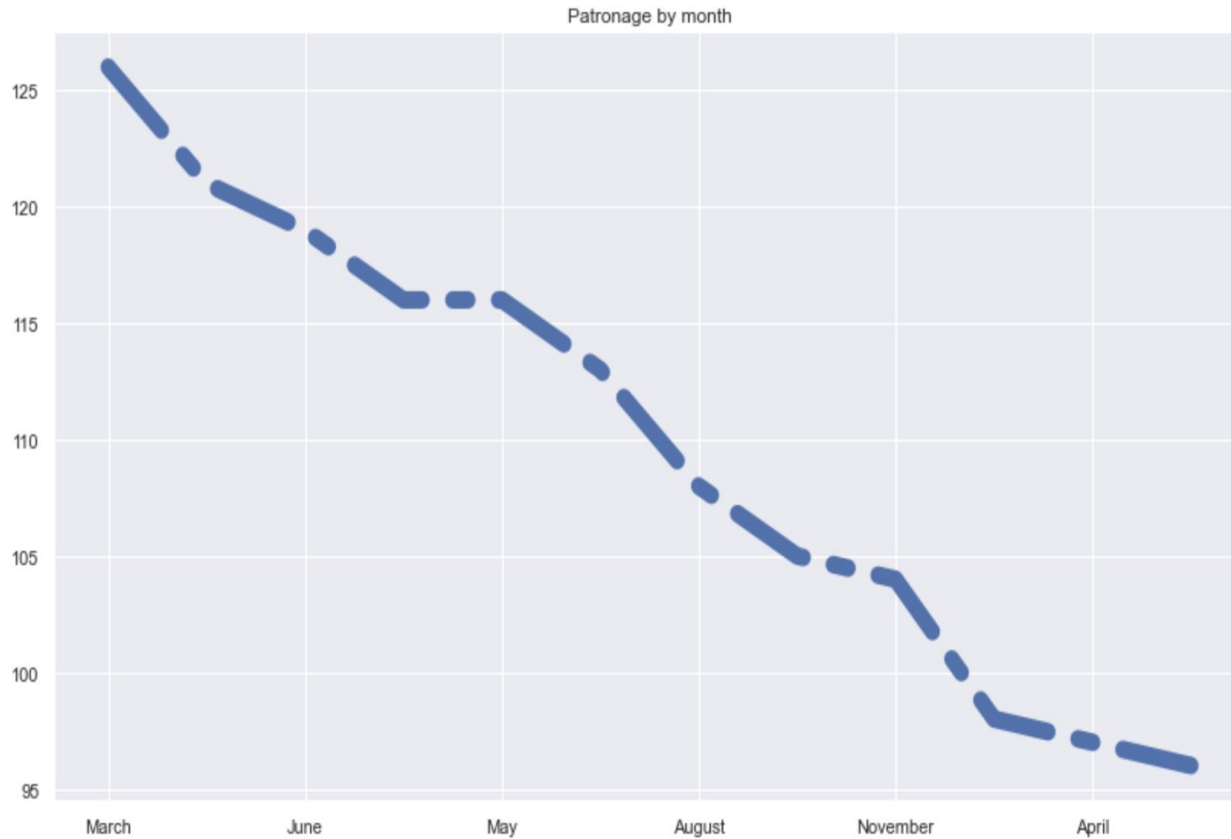
Days with late returns

- Days in which books are returned doesn't necessarily impact lateness as the distribution is almost the same. Wednesdays have the highest rate of late returns though as seen in this pie chart.

# Jobs with late returns peculiarity



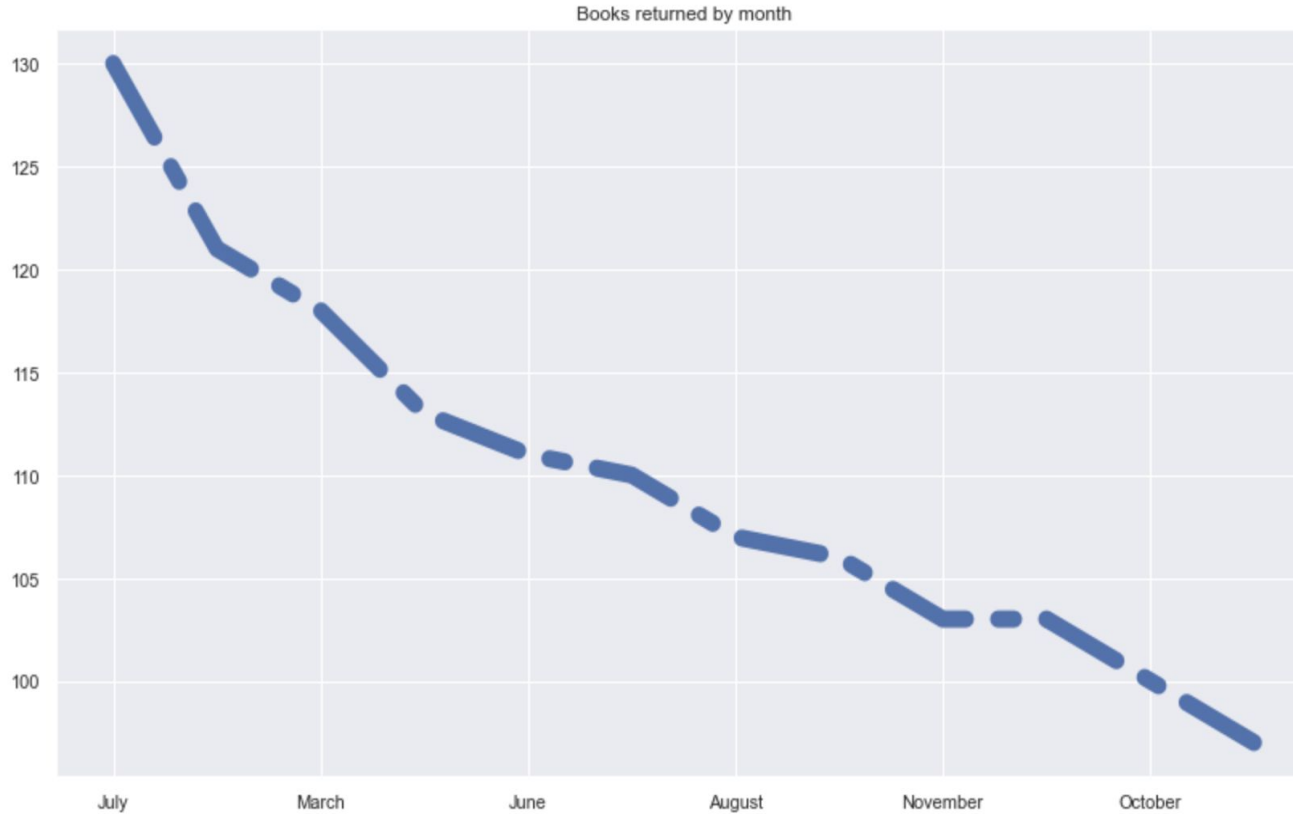occupation (job categories) that return books late

- Admin and support employees typically return borrowed books at a later time when compared to other professions. This makes logical sense as they are the ones that borrow books the most.
- I would assume tech folks spend more time on stack overflow, so they are top 3 in this chart.

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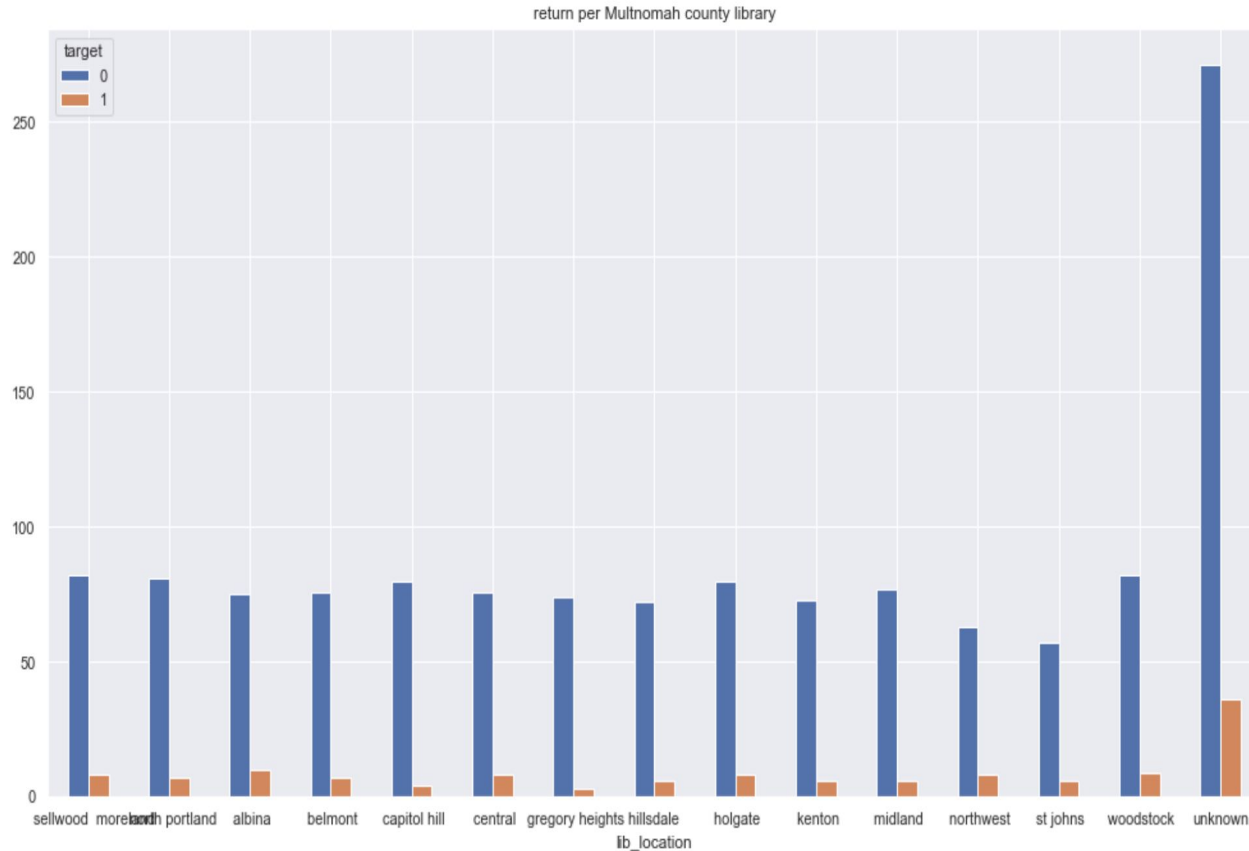# Patronage (checkout) during the course of the year



Patronage by month

- The tail end of Winter present opportunities to learn more about Science, Engineering and nature and you'd find people typically reading books like Popular Mechanics, Mortal Engines and Old Dominion Journal of Medicine and Surgery.

# Book returns during the course of the year

**Books returned by month**



- Summer is a perfect time to step out and get things done. It's no coincidence that July stood out as the peak period for returns.
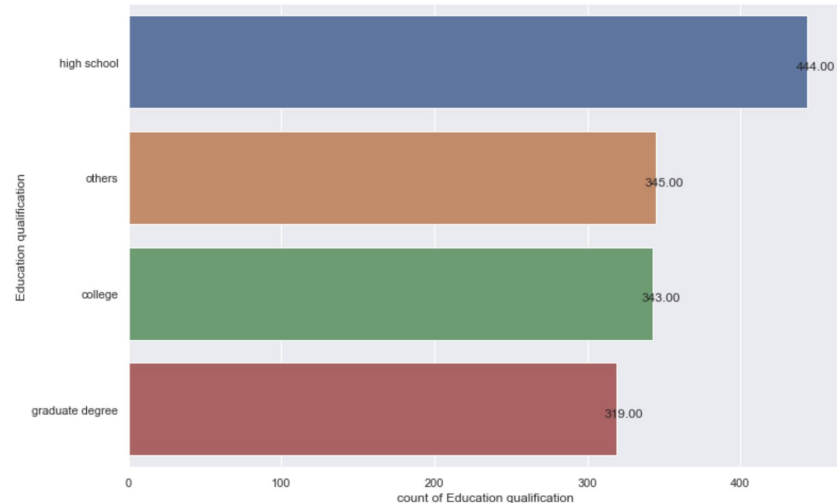
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# Early/Late return in Multnomah county
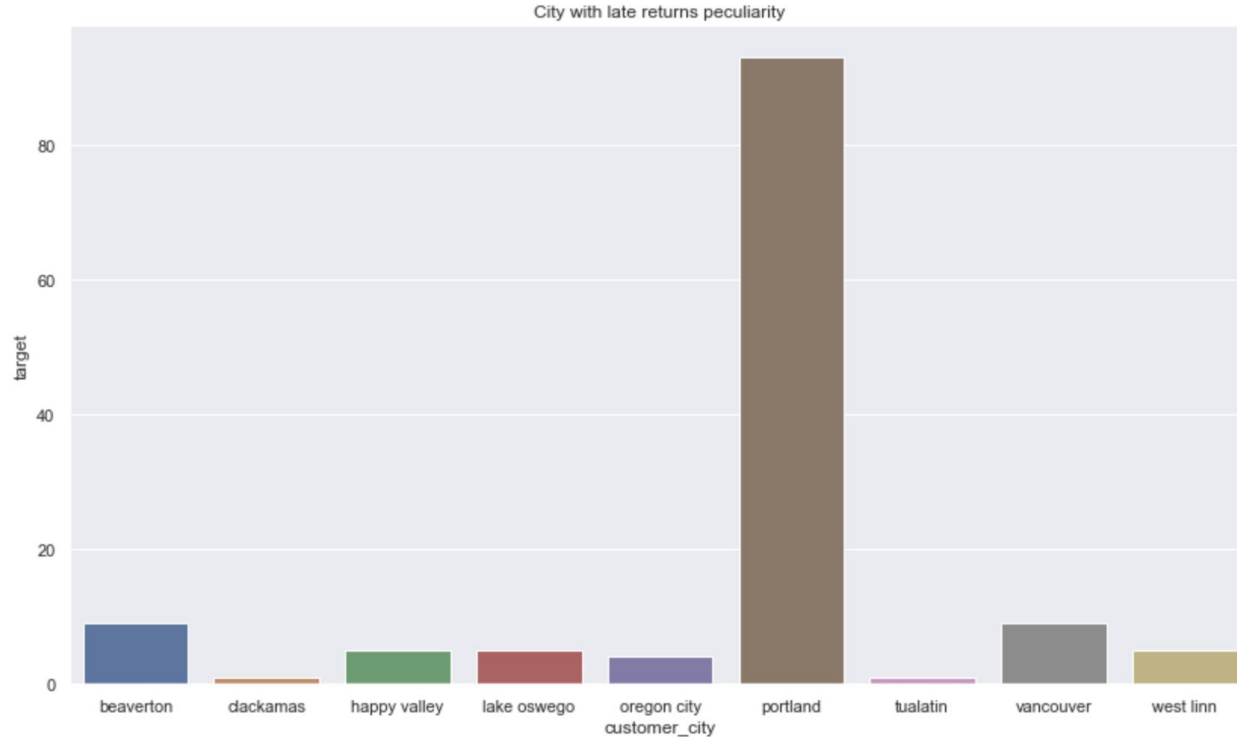


return per Multnomah county library

- Some locations in the Multnomah county are quite disciplined with returning books within the 28-day grace period. Examples of such places are Gregory Heights and Capitol Hill

# Distribution across education levels

- Most readers complete their education up until the high school level and those with graduate degrees likely spend more time in the office or business trips as opposed to reading books
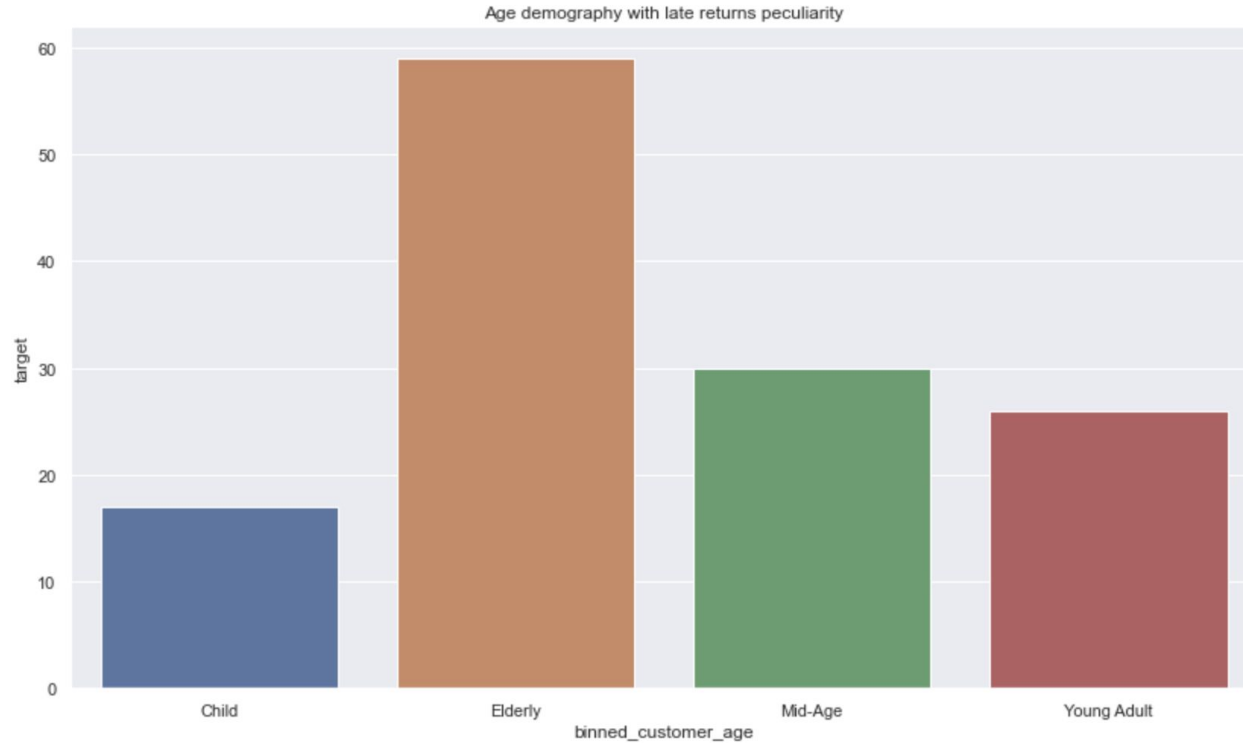
# Cities with late returns peculiarity



City with late returns peculiarity

- The chart here is actually proportional to the number of books borrowed. Despite this, it will be good to keep an eye on readers from Portland, Vancouver and Beaverton

# Age Demography of Reader



Age demography with late returns peculiarity

- Elderly in this case refers to people between the ages of 45 and 99
- They typically enjoy reading books like "Medicine", "Internal Medicine, Today and Tomorrow"

# RECOMMENDATIONS

- Incentivize those that return books early. It could be a discount on their next order
- Give some grace period during winter as the weather could be harsh for people to go out
- Since more elderly people read books, an arrangement could be made for delivery and pick up for them
- From the feature importances of the predictive learner, book prices and number of pages contribute the most to lateness, this should be considered when giving out books

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# Thanks

**Got Questions?**

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