Analyzing Amazon's Best Selling Books: Uncovering Trends and Insights in the World of Literature.

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Source: MyGaming.

The bedrock of all knowledge is hidden in books. *Charles W. Eliot* once opined that "Books are the quietest and most constant of friends; they are the most accessible and wisest of counselors, and the most patient of teachers." Having said this, one can not overemphasize the need to have amongst your possession lots of books according to your knowledge needs.

Amazon is a top e-commerce platform where you can get your books easily. It was founded in 1994 by Jeff Bezos solely as an online book store but has grown over the years to provide other services in diverse sectors. We will be focusing on their book sales in this report. We will be analyzing their sales data with the purpose of gaining insights into the best books sold by them in a specified time period.

Aim

The sole purpose of this project is to look in depth into the sales catalog of Amazon between the years of 2009 to 2019 and gather insights and understanding on how books are being sold and bought and also considering the customer's satisfactions.

Data Overview

The data used for the analysis was obtained from the Amazon website via web scraping. It was curated from the best selling books section in Amazon. The data covers the best selling books from the year 2009 to 2019. It has features such as the name of the book, the Author's name, the price, the book rating and the number of reviews the book got from the customers.

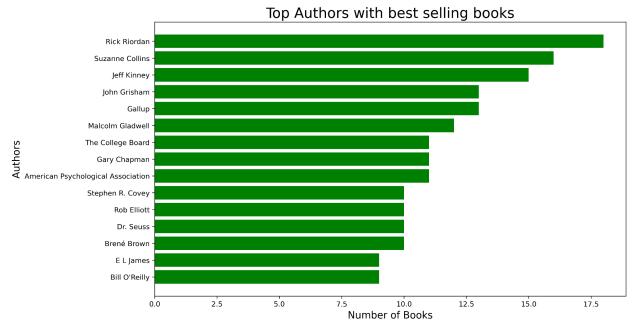
Findings

The data was subjected to further analysis after lots of data cleaning was carried. The following insights were obtained.

Best selling Authors

There are 436 authors that had their books featured at one point in time or the other in the Best selling books category over the 11 years period under consideration.

Amongst these authors, some of them authored a lot of books that got featured as best sellers. The chart below shows more as regards this.

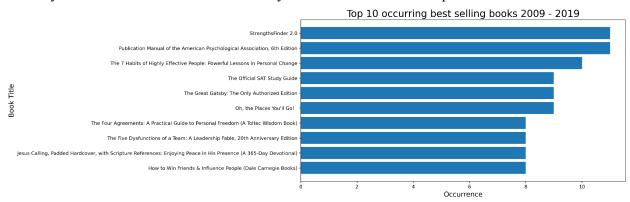


Rick Riordan authored 18 bestseller books followed by Suzanne Collins with 16 books and Jeff Kinney with 15 books.

Best Selling Books

The best selling books catalog featured a total of 637 unique books as best sellers over the 11 year period given.

Some books happened to retain their position in the best selling catalog more than once meaning that they were best sellers for two or more years. The chart below explains more

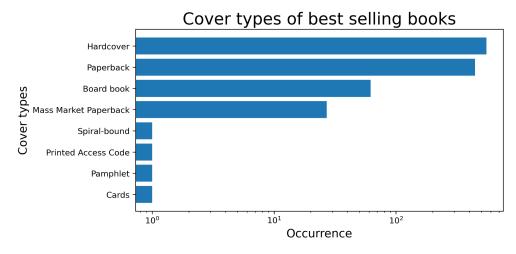


StrengthFinder 2.0 and Publication Manual of the American Psychological association happens to be bestsellers for the whole 11 years whereas The 7 habits of Highly effective People sold best for 10 years straight.

Book Cover types

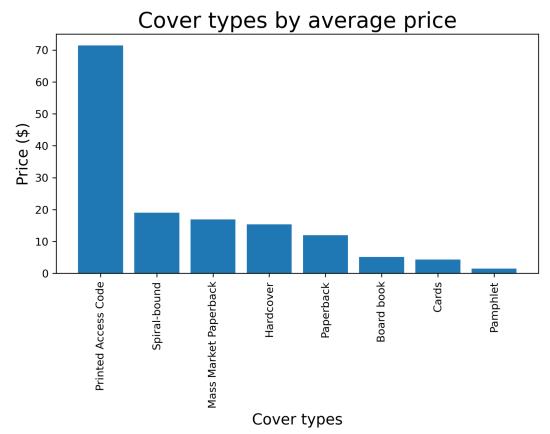
Book covers are also a factor in the high sale of books. We decided to look at the distribution of the book cover types to determine which cover type sold the most.

There were 8 distinct types of book covers recorded in the best selling books data and they sold as shown in the chart below.



The Hardcover type was the highest selling book cover type with a total of 552 followed by the Paperback having 444 books.

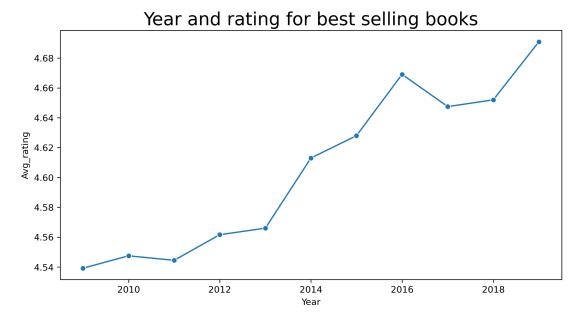
Moving further we analyzed the average price of the book covers to discover if the covers affect the price of books.



We noticed that the Printed Access Code cover type is the costliest while the Pamphlet is the least expensive. The Hardcover and the Paperbacks are the most affordable occupying the mean price.

Ratings of Book per year

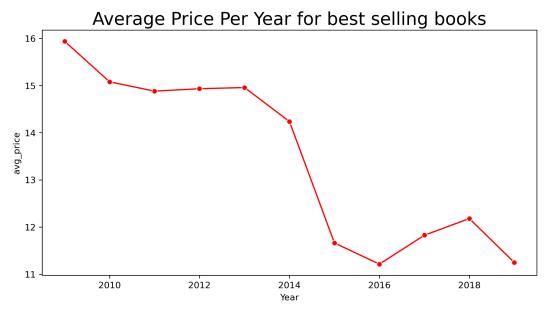
How the succeeding years affects the ratings of the best selling books was looked into and the chart below says more.



From the chart, it seems as if the ratings on average are rising as the year increases. This might mean that the class, knowledge and taste of the readers is also becoming better.

Price Trend per Year

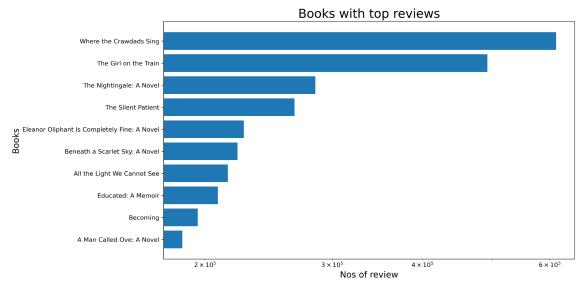
Moving on, we decided to analyze the average price per year for the best selling books to determine the trend. The chart below shows the trend.



It seems as if the price of books is decreasing as the year goes by. This might be because of new innovations in printing technology such as introduction of various cover types and other factors.

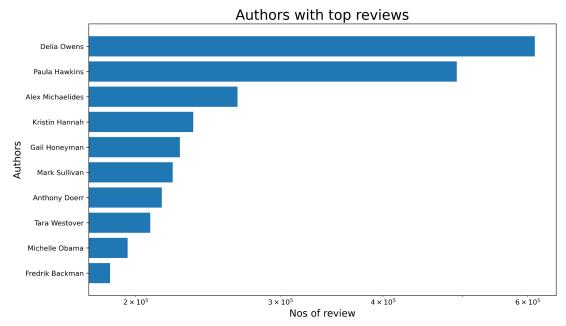
Book and Author Reviews

The reviews the books received from the customers were collated and we decided to see the trend of the reviews per book.



Where the Crawdads Sing, The Girl on the Train and The Nightingale: A Novel are the top three books that received the most reviews in the time period in question.

Also, the reviews that the individual authors received as relating to their books were also looked into. It goes like this as stated in the chart below.



Delia Owen happens to be the author that her works were reviewed the most followed by Paula Hawkins.

Summary

- There are 436 best selling authors featured within the 11 years period.
- We have 637 books tagged best selling books within the period.
- Rick Riordan authored 18 bestseller books followed by Suzanne Collins with 16 books and Jeff Kinney with 15 books.
- StrengthFinder 2.0 and Publication Manual of the American Psychological association happens to be bestsellers for the whole 11 years whereas The 7 habits of Highly effective People sold best for 10 years straight.
- The Hardcover type was the highest selling book cover type with a total of 552 followed by the Paperback having 444 books.
- The Printed Access Code cover type is the costliest while the Pamphlet is the least expensive. The Hardcover and the Paperbacks are the most affordable occupying the mean price.
- It seems as if the ratings on average are rising as the year increases. This might mean that the class, knowledge and taste of the readers is also becoming better
- It seems as if the price of books is decreasing as the year goes by. This might be because of new innovations in printing technology such as introduction of various cover types and other factors.
- 'Where the Crawdads Sing', 'The Girl on the Train' and 'The Nightingale: A Novel' are the top three books that received the most reviews in the time period in question
- Delia Owen happens to be the author that her works were reviewed the most followed by Paula Hawkins.

Conclusion

The Analysis have given us great insights that any book lover or book merchant needs to scale up business.

To learn more about the analysis check out the Github repo.