



CS 410 | Team Gold | 26 October 2022







Our Team



Estefania Barron



Jada Keeve



Natalie Mohun



Vaelyn Dulce



Joshua Wang



Thomas Harlow



Yao Wang



- 4. Problem Background
- 5. Problem Background cont.
- 6. Problem Statement
- 7. Customers & End-Users
- 8. Current Process Flow
- 9. Solution Statement
- 10. Solution Characteristics
- 11. Solution Process Flow

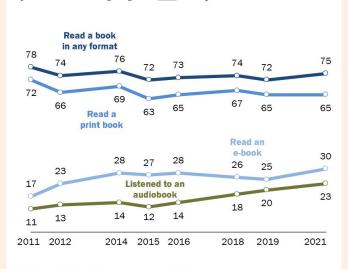
- 12. Competitors
- 13. Competition Matrix
- 14. Customer Risks
- 15. Technical/Security Risks
- 16. Legal Risks
- 17. Conclusion
- 18. References





Print books continue to be more popular than e-books or audiobooks

% of U.S. adults who say they have ____ in the previous 12 months



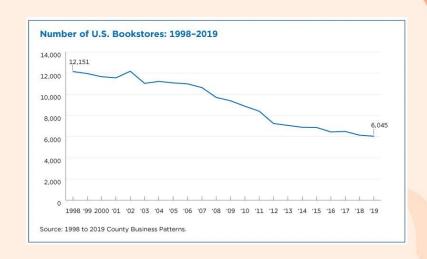
Note: Those who did not give an answer are not shown. Source: Survey conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER





- Decrease in physical bookstores and increase in online bookstores^{[1][5]}
- Not all booksellers list the same criteria
 - Type, edition, condition, etc.
 - Buy vs. Rent
- Hard to find the lowest overall cost when buying books online
 - Amazon dominates the market^[6]
 - General increase in shipping and handling costs due to COVID-19^[2]



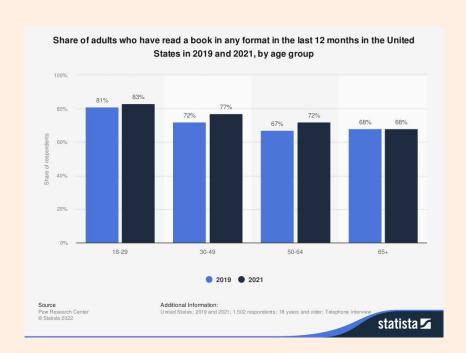




There exists no platform that allows a user to search for a book based on its type (physical or electronic), edition (e.g., hardcover or paperback), and condition (new or used) as well as display its cheapest total cost (including shipping and handling) for small, independent bookstores.



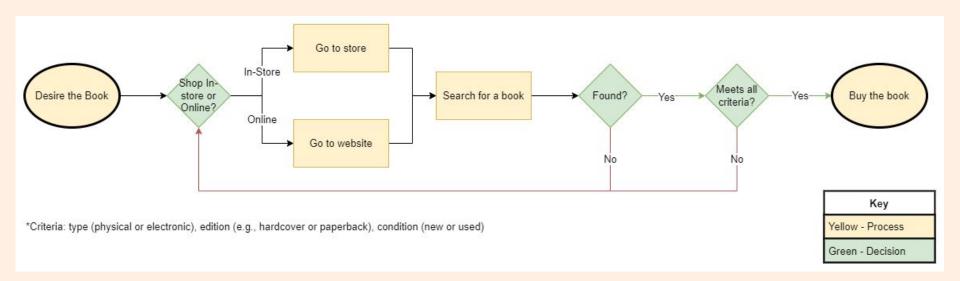
Customers & End-Users



- Customers: independent bookstores
- End-Users: book-lovers



Current Process Flow





Booked is a web-based application that shows users which independent bookstore to purchase a book from based on its type, edition, condition, and lowest total cost.

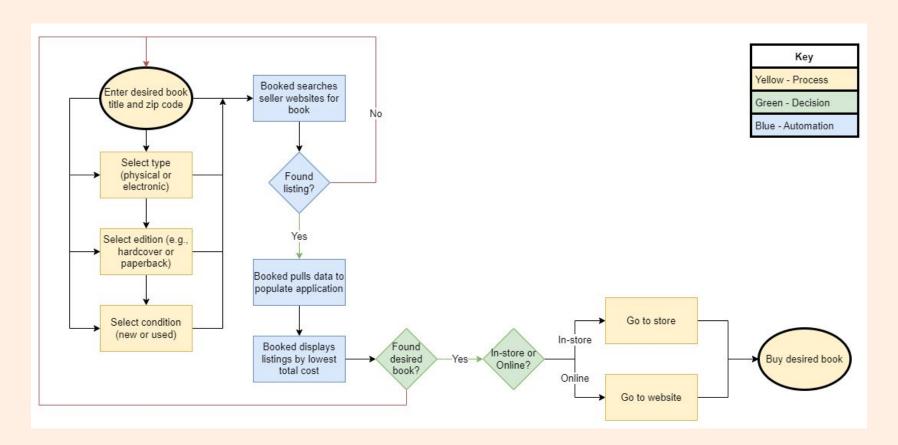




- Booked will save time and money during the book-searching process by laying out the type, edition, condition, and cost for the customer
 - Will be done by database searching and web scraping
- For those who prefer to shop online, they are presented with a link to seller's website
- Those that prefer to shop in-person will be presented with bookstore's address
 - Will introduce user's to local, independent businesses



Solution Process Flow





Biblio: Largest independent book marketplace that specializes in used, rare, and out-of-print books.

BookFinder: Search engine for new, used, out-of-print books and textbooks. Checks major catalogs, retailers and listing sites.

Bookshop: Online marketplace that partners with independent bookstores.

Amazon: Largest marketplace in the United States. Offers new and used books and textbooks, as well as book and ebook rentals.

AskMissy: Learning resource recommendation system.



Competition Matrix

Functionality	Booked	Biblio	BookFinder	Bookshop	Amazon	AskMissy
Find physical books and e-books	V	V		V	V	V
Sources include independent bookstores	V	V	V	V		V
Offer new and used books	V	V	V	V	V	
Filter and sort by edition	V		V			V
Filter and sort by book condition	V	V				
Show total cost	V					
Recommend books				V		V
Limited to learning resources						V

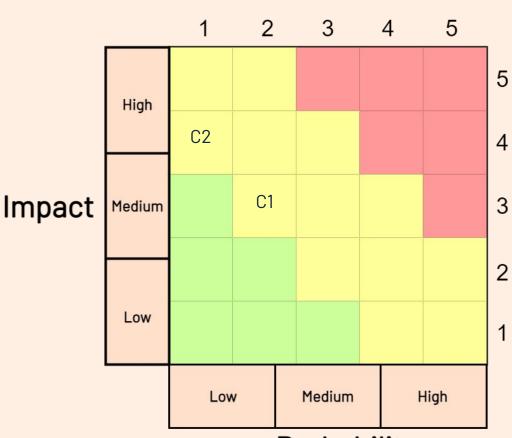
Customer Risks

C1: Difficult to appeal to customers Mitigation:

 Show differences between us and competitors

C2: Account emails could be compromised Mitigation:

 Use best practices to secure customer information



Probability

Security/Technical Risks

T1: Incomplete or outdated data pulled Mitigation:

Put checks in place to verify data

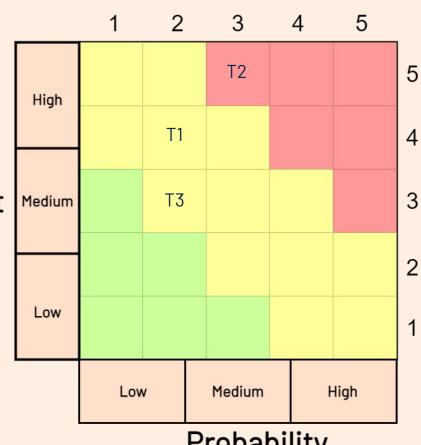
T2: No backup system for maintenance or unplanned downtime Mitigation:

 Create backup system so Booked is always online for customers

T3: Booked platform is compromised Mitigation:

 Use standard practices for website security

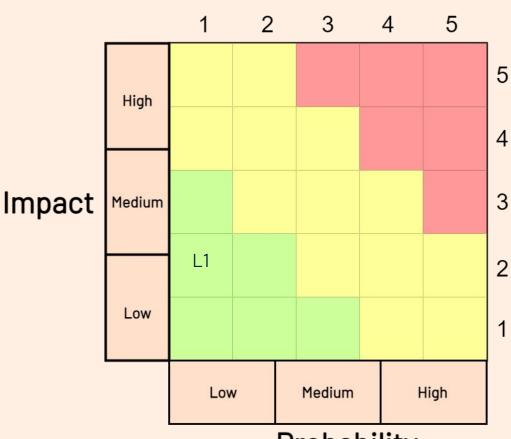




Legal Risks

L1: Cease and desist for web scraping Mitigation:

- Obtain data through API
- Form partnerships with bookstores that want advertising



Probability



Conclusion

Booked will not...

- Provide personalized book recommendations
 - Relevant purchases only
- Be limited to textbooks

Booked will...

- Allow users to find specific books based on **enhanced** criteria
- Ensure that the criteria are met exactly
- Include independent bookstores in search results
- Provide users with the actual cheapest price





Thank you!









- 1. "12 Stats on the State of Bookstores in the U.S." *OEDB.org*, Copyright © 2006-2022 OEDb.org, a Red Ventures Company, 2 Aug. 2018, https://oedb.org/ilibrarian/12-stats-on-the-state-of-bookstores-in-america-today/#:~:text=Today%2C%20there%20are%20around%2010%2C800%20bookstores%20in%20the%20U.S
- 2. "4 Reasons Why Shipping Is so Expensive in 2022." *Gilson Solutions*, 11 Mar. 2022, https://gillsonsolutions.com/4-reasons-why-shipping-is-so-expensive-in-2022/
- 3. "Book Lovers Presentation." Slidesgo, https://slidesgo.com/theme/book-lovers#search-book+lovers&position-1&results-3&rs=search.
- 4. Faverio, Michelle, and Andrew Perrin. "Three-in-Ten Americans Now Read e-Books." Pew Research Center, Pew Research Center, 2 Feb. 2022, https://www.pewresearch.org/fact-tank/2022/01/06/three-in-ten-americans-now-read-e-books/
- 5. Hait, Andrew W. "Despite Our Love of All Things Electronic, Bookstores Still Relevant This Holiday Season." Census.gov, 13 Apr. 2022, https://www.census.gov/library/stories/2021/12/do-not-turn-the-page-on-bookstores.html
- 6. "Print Book Market Share by Channel", @Statista 2022, 6 Jan 2016, https://www.statista.com/statistics/534111/amazon-book-market-share-usa/
- 7. Watson, Amy. "Book Readers in the U.S. by Age 2021." Statista, 27 July 2022, https://www.statista.com/statistics/249787/book-reading-population-in-the-us-by-age/.