



CS 410 | Team Gold | 19 October 2022







### **Our Team**



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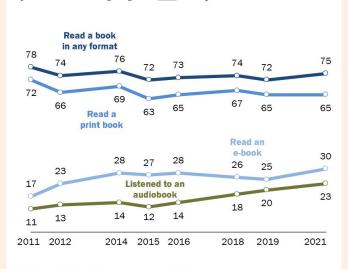
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#### Print books continue to be more popular than e-books or audiobooks

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



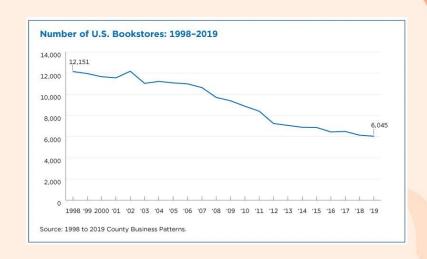
Note: Those who did not give an answer are not shown. Source: Survey conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER





- Decrease in physical bookstores and increase in online bookstores<sup>[1][5]</sup>
- 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<sup>[6]</sup>
  - General increase in shipping and handling costs due to COVID-19<sup>[2]</sup>



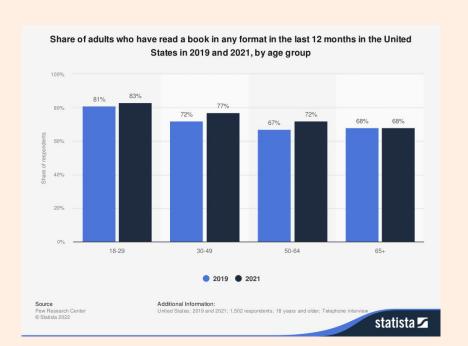




There exists no platform that allows a user to search for a book based on its type (physical or electronic), edition (e.g., hardcover or paperback), and condition (new or used) as well as display its cheapest total cost (including shipping and handling).



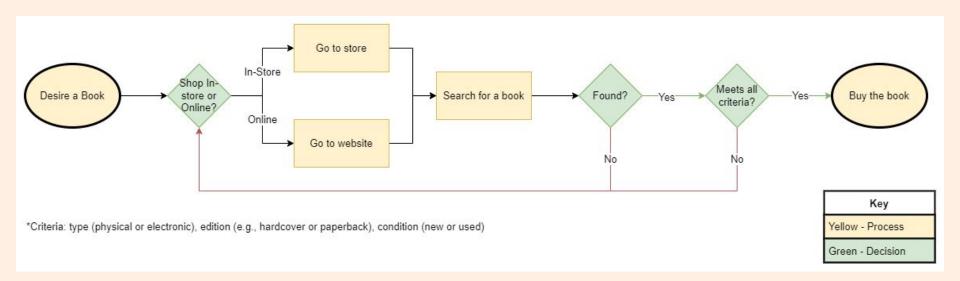
#### **Customers & End-Users**



- Customers: independent bookstores, schools
- End-Users: book-lovers (specifically Adults ages 18-29<sup>[7]</sup>), teachers/educators, students



#### **Current Process Flow**





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

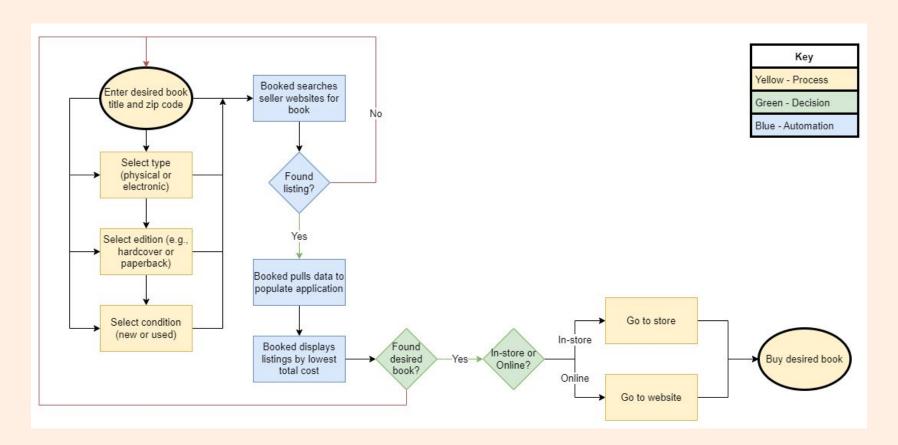




- Booked will save time and money during the book-searching process by laying out the type, edition, condition, and cost for the customer
  - Will be done by database searching and web scraping
- For those who prefer to shop online, they are presented with a link to seller's website
- Those that prefer 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	<b>V</b>	<b>V</b>		<b>V</b>	<b>V</b>	<b>V</b>
Sources include independent bookstores	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>		<b>V</b>
Offer new and used books	<b>V</b>	<b>V</b>	<b>V</b>		<b>V</b>	
Filter and sort by edition	<b>V</b>					<b>V</b>
Filter and sort by book condition	<b>V</b>	<b>V</b>				
Show total cost	<b>V</b>					
Recommend books				<b>V</b>		<b>V</b>
Limited to learning resources						<b>V</b>

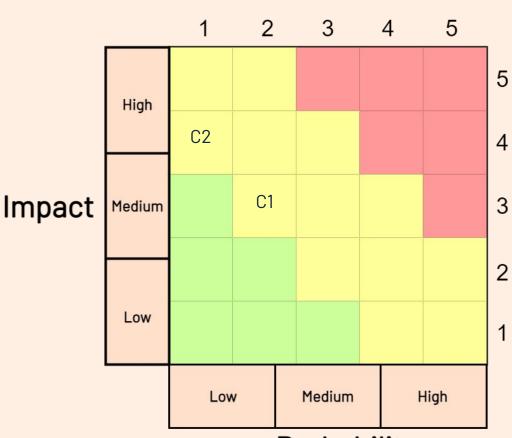
#### **Customer Risks**

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

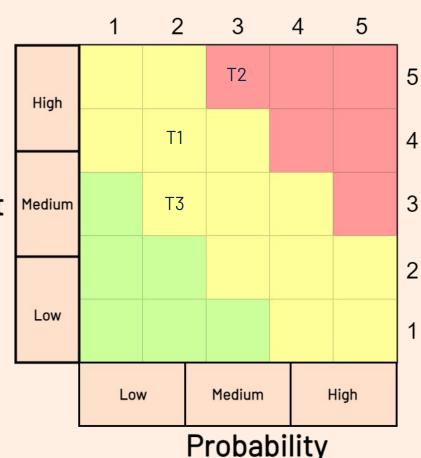
T2: No backup system for maintenance or unplanned downtime Mitigation:

 Create backup system so Booked is always online for customers

T3: Booked platform is compromised Mitigation:

 Use standard practices for website security

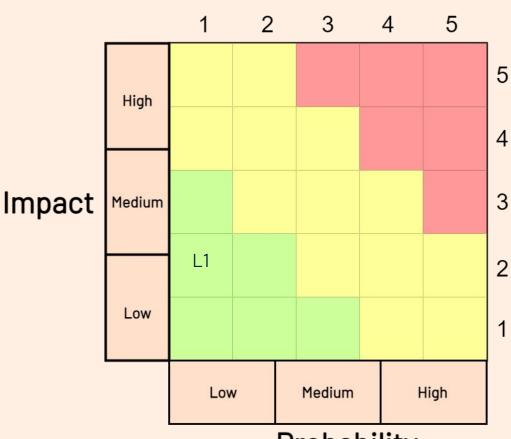




### Legal Risks

L1: Cease and desist for web scraping Mitigation:

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



Probability



#### Conclusion

#### Booked will not...

- Recommend books
  - Relevant purchases only
- Be limited to textbooks

#### Booked will...

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





# Thank you!









#### References

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