

# **Adobe Analytics Challenge 2021**

Team Wacarale - Lenka Raslova & Catherine Wang October 6, 2021



### **AGENDA**

- 1 Introductions
- **2** Business Questions
- **3** Recommendations

### **INTRODUCTIONS**



### Lenka Raslova

- 2021-2023: PSM of The Data Science and Business Analytics
- 2018-2021: B.S. Statistics and Econometrics at Prague University of Economics and Business

### **Catherine Wang**

- 2020-2022: MBA at University of North Carolina at Charlotte
- 2019-2021: Supply Chain Leader at PepsiCo
- 2015-2019: B.S. Industrial Engineering, The Ohio State University

For those whose first purchase is during the period, what behaviors are most indicative of a subsequent (or multiple subsequent) purchases? How do we encourage this?



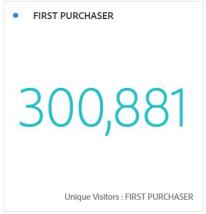
### The first time purchasers

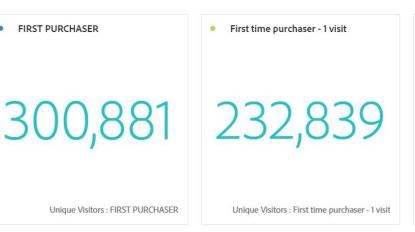
#### FIRST PURCHASER

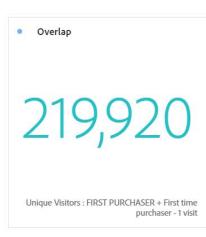
- purchaser the purchased for its first time the web/app
- is consisting of purchasers who purchased at their very visit (First first time purchase - 1 visit) and who purchased at several visits

#### Webpage





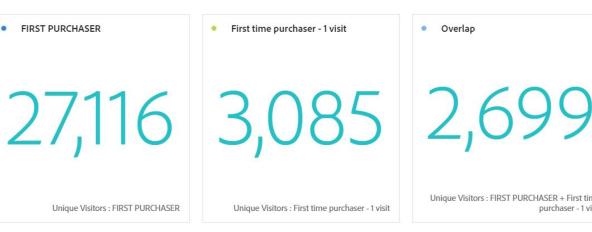


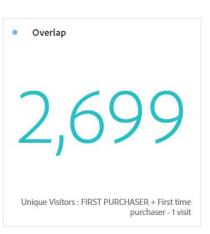


#### App





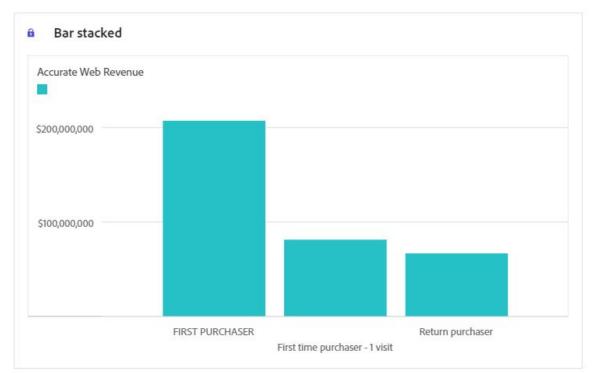


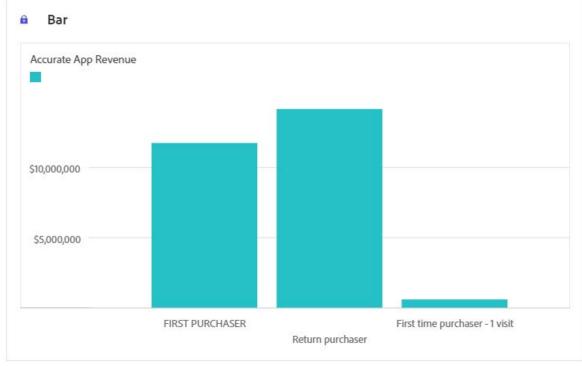


The Purchasers who entered the web purchased more at their first visit than purchasers who visited the app and bought something at their first visit

during the last 60 days

### Comparison of the first time and return purchasers





#### Web

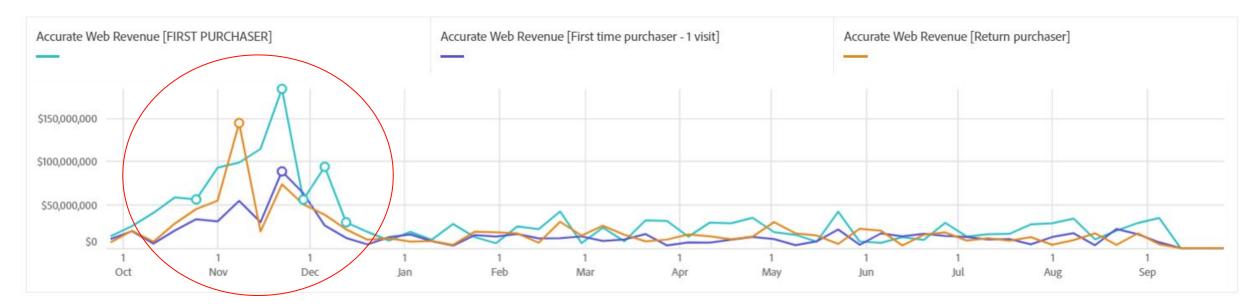
- First purchasers generated the highest revenue
- Return purchasers had the lowest revenue
- In comparison of return purchasers and first time purchasers - 1 visit, return purchasers were a weaker group in generation of revenue

#### last 60 days

# Return purchaser is purchaser who purchased more than once

#### App

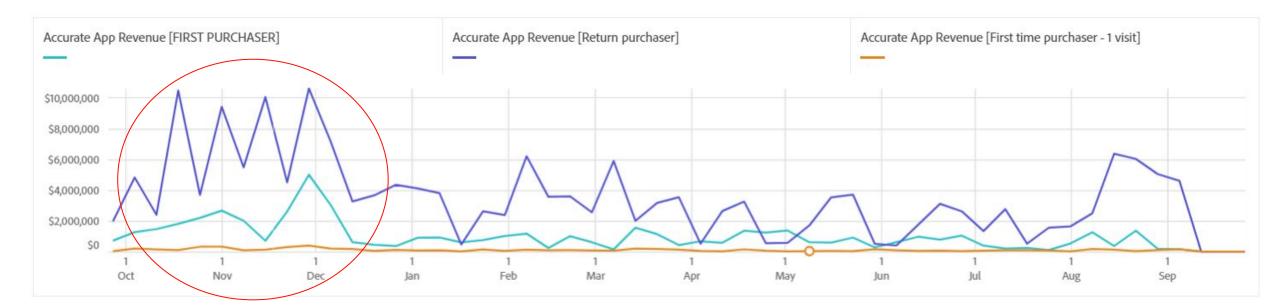
- Return purchasers generated the highest revenue
- Return purchasers are generating little bit more revenue than first time purchasers
- The first time purchasers 1 visit had the lowest revenue



Christmas season - purchasers behave differently

Web - purchasers behave more balanced

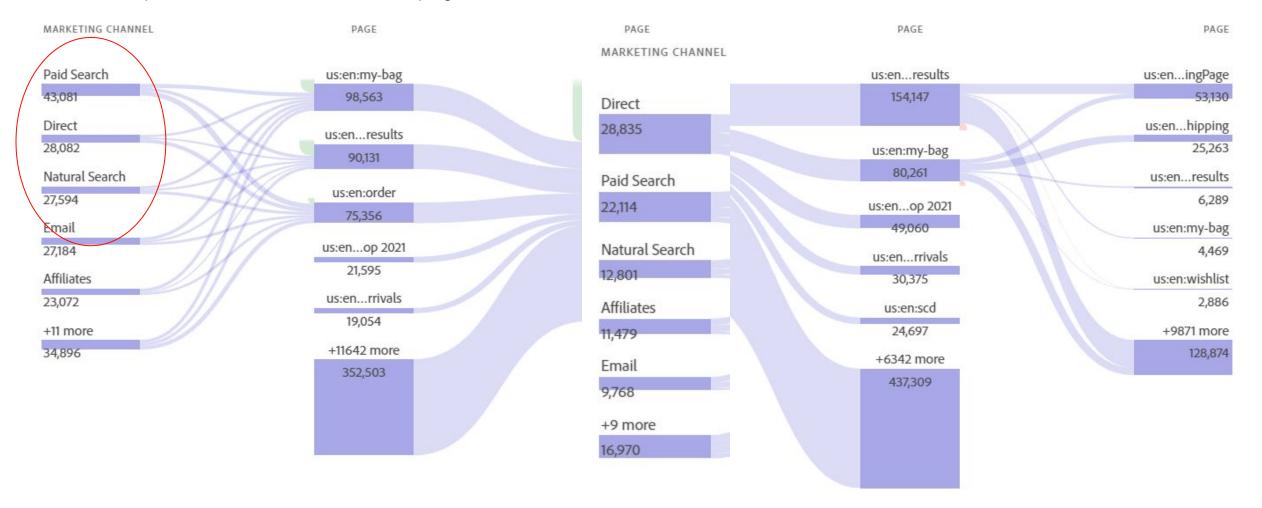
App - a lot of leap development, first purchasers lag far behind return purchasers





### Web: First time purchaser

73.6 % new purchasers' visits were from campaign



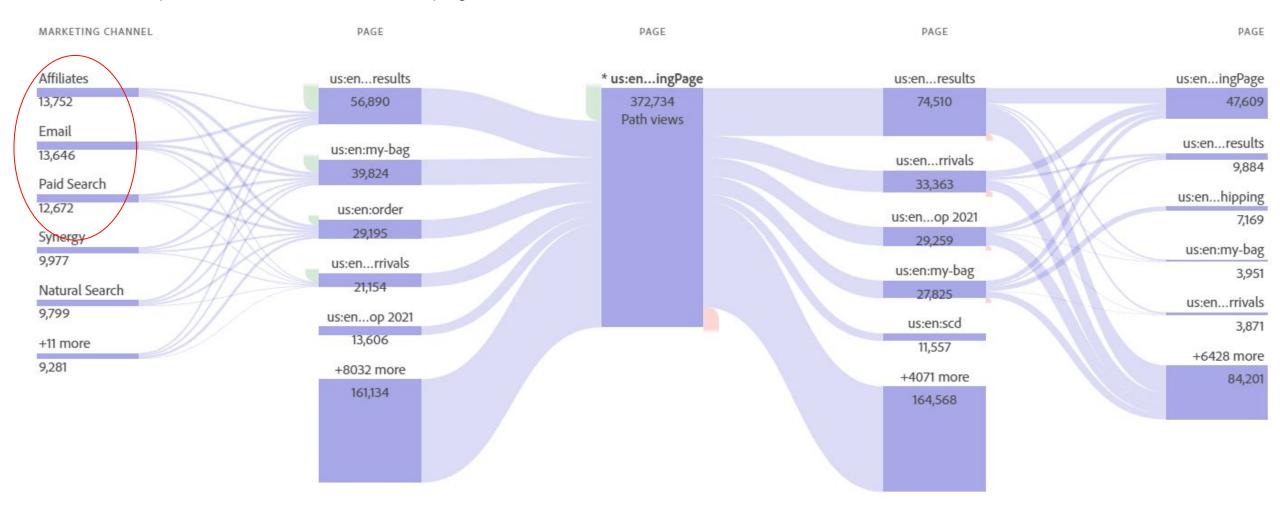
First time purchasers - 1 visit had 70.8 % of their visits from campaign (Marketing channels: Direct, Paid Search, Natural Search, Affiliates, Email and more)

last 60 days



### Web: Return purchaser

#### 85.7 % return purchasers' visits were from campaign







# The first time purchasers - visits before order

Web

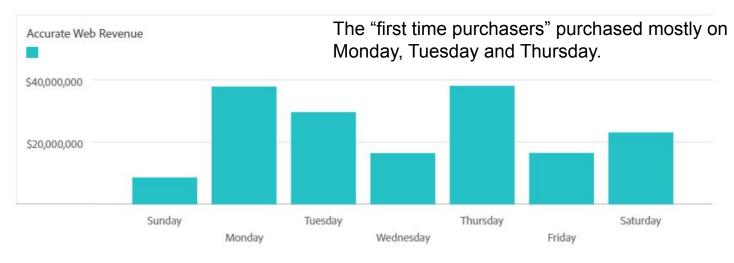
Cohort	Included	+1 Weeks	+2 Weeks	+3 Weeks	+4 Weeks	+5 Weeks	+6 Weeks	+7 Weeks	+8 Weeks
Average retention	60,857	7,676 8.2%	3,864 4.3%	2,290 2.6%	1,446 1.7%	669 0.9%	0 0.0%	0 0.0%	0 0.0%
Aug 1 - Aug 7	78,235	11,612 14.8%	8,864 11.3%	4,939 6.3%	3,960 5.1%	2,677 3.4%	0	0	0
Aug 8 - Aug 14	93,136	14,950 16.1%	6,607 7.1%	4,948 5.3%	3,271 3.5%	0	0	0	
Aug 15 - Aug 21	98,779	11,437 11.6%	6,319 6.4%	3,852 3.9%	0	0	0		
Aug 22 - Aug 28	102,334	12,932 12.6%	5,257 5.1%	0	0	0			
Aug 29 - Sep 4	99,928	10,476 10.5%	0	0	0				
Sep 5 - Sep 11	75,303	0	0	0					
Sep 12 - Sep 18	0	0	0						
Sep 19 - Sep 25	0	0							
Sep 26 - Oct 2	0								

App

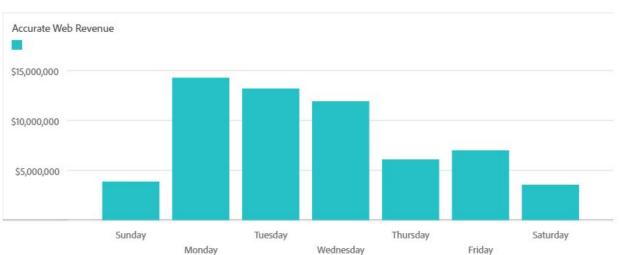
Cohort	Included	+1 Weeks	+2 Weeks	+3 Weeks	+4 Weeks	+5 Weeks	+6 Weeks	+7 Weeks	+8 Weeks
Average retention	10,841	1,788 10.7%	1,410 8.6%	1,040 6.3%	728 4.7%	365 2.5%	0 0.0%	0 0.0%	0 0.0%
Aug 1 - Aug 7	14,423	2,958 20.5%	3,179 22.0%	2,063 14.3%	1,979 13.7%	1,460 10.1%	0	0	0
Aug 8 - Aug 14	17,199	3,853 22.4%	2,351 13.7%	2,332 13.6%	1,663 9.7%	0	0	0	
Aug 15 - Aug 21	18,149	2,733 15.1%	2,508 13.8%	1,842 10.1%	0	0	0		
Aug 22 - Aug 28	17,503	2,696 15.4%	1,831 10.5%	0	0	0			
Aug 29 - Sep 4	16,589	2,060 12.4%	0	0	0				
Sep 5 - Sep 11	13,702	0	0	0					
Sep 12 - Sep 18	0	0	0						
Sep 19 - Sep 25	0	0							
Sep 26 - Oct 2	0								

### Web purchasers during last 60 days

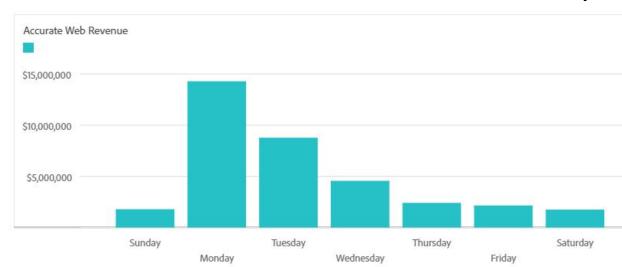
#### First time purchaser - more visits



First time purchaser - the first visit



The "first time purchasers - the first visit" and "return purchasers" mostly purchased on Monday - Wednesday

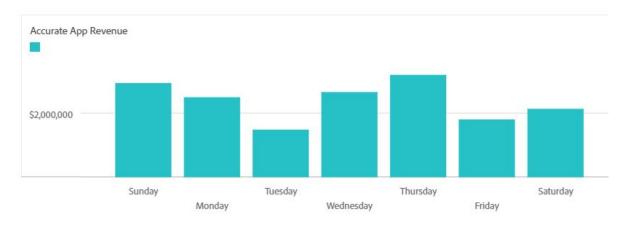


Return purchaser

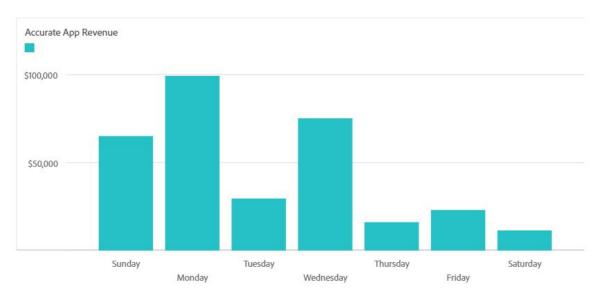


### App purchasers during last 60 days

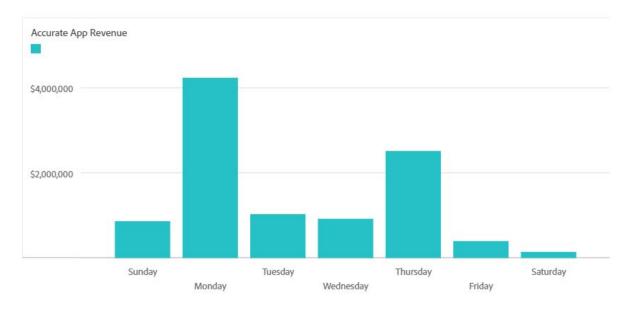
#### First time purchaser



#### First time purchaser - the first visit



#### Return purchaser



The app purchasers behave similarly to the web users. They mostly purchased on Thursday, Sunday and Monday. However, the "first time purchasers - first visit" purchased mostly on Monday and Wednesday. "Return purchasers" purchased mostly on Monday and Thursday.



### **BEHAVIORS**

Web and app purchasers have different behavior

- Web
  - The first time purchasers generate higher revenue than return purchases
  - The first time purchasers (the first visit) and return purchasers enter through different main marketing channels
  - The highest revenues are on Monday

- App
  - Return purchasers generate higher revenue, the first time purchasers first visit are negligible
  - The first time purchasers visited app more times before they order
  - The highest revenues are on Monday

### RECOMMENDATIONS

### Web:

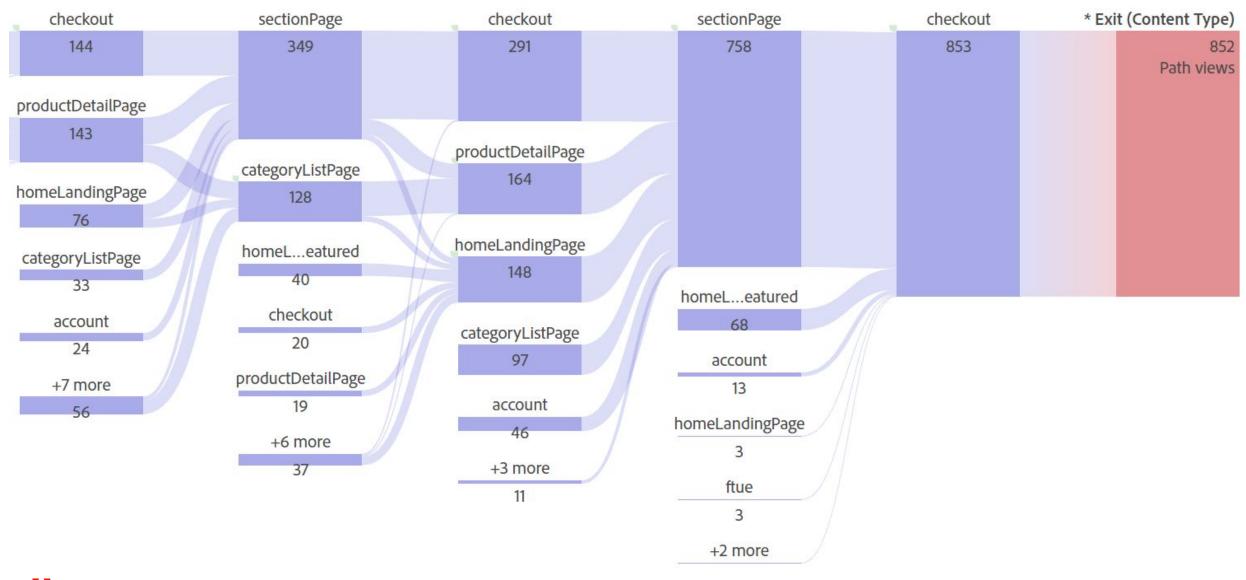
- Target more on return purchasers (ex. discount for future purchase)
- More support purchasing on very first visit (ex. discount for the first purchase)
- Offer more events on the days when the highest revenue occurred support grow of purchases

### App:

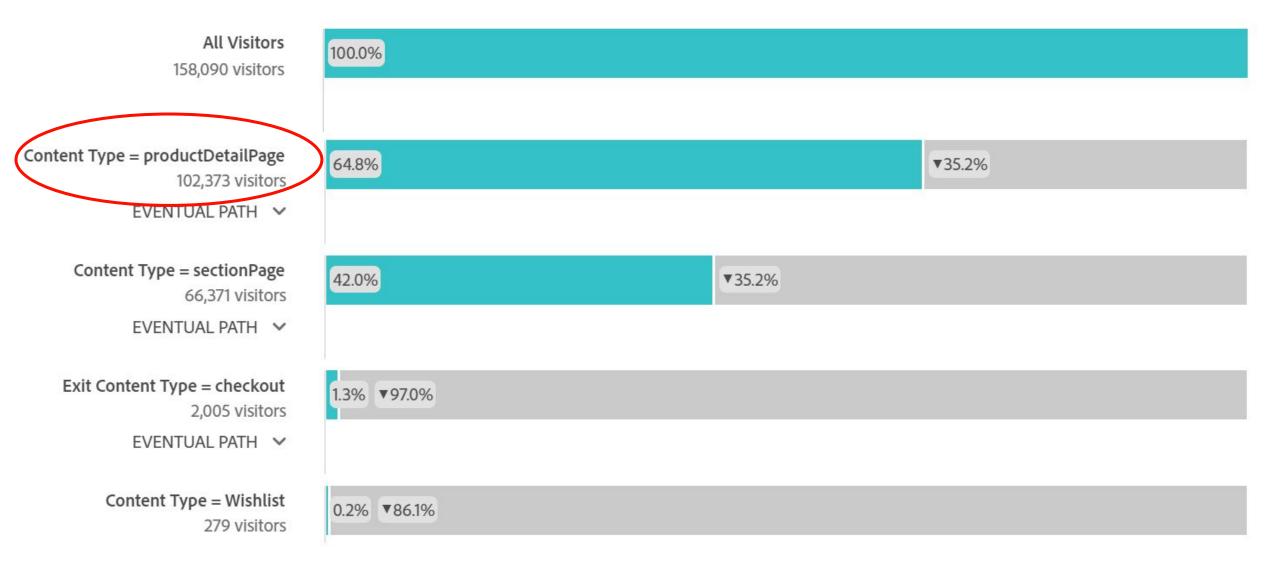
- More encourage the first time visitors to purchase on their first visit of app sign up discount
- Support more app and purchasing on it
- Balance revenue in the longer term

What key differences exist between a purchase flow on mobile vs. desktop, and how should we treat those platforms differently/the same?

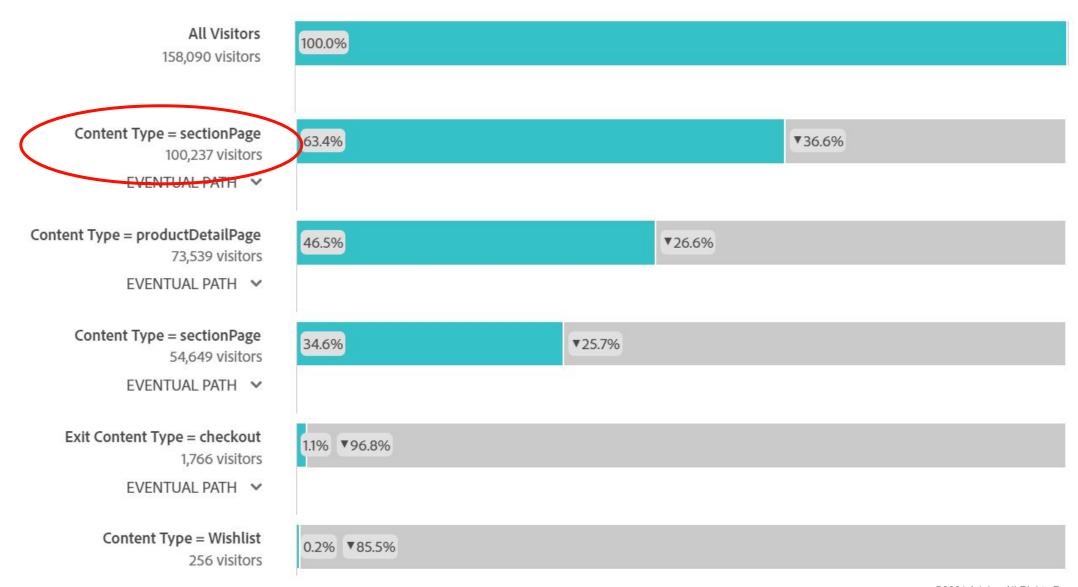






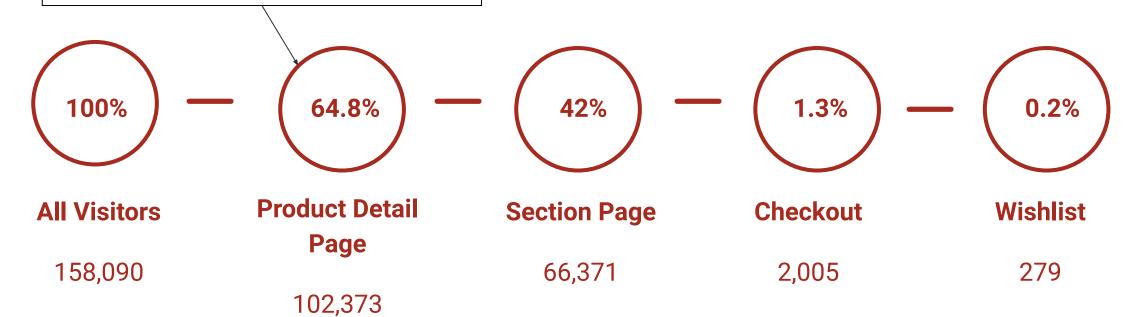


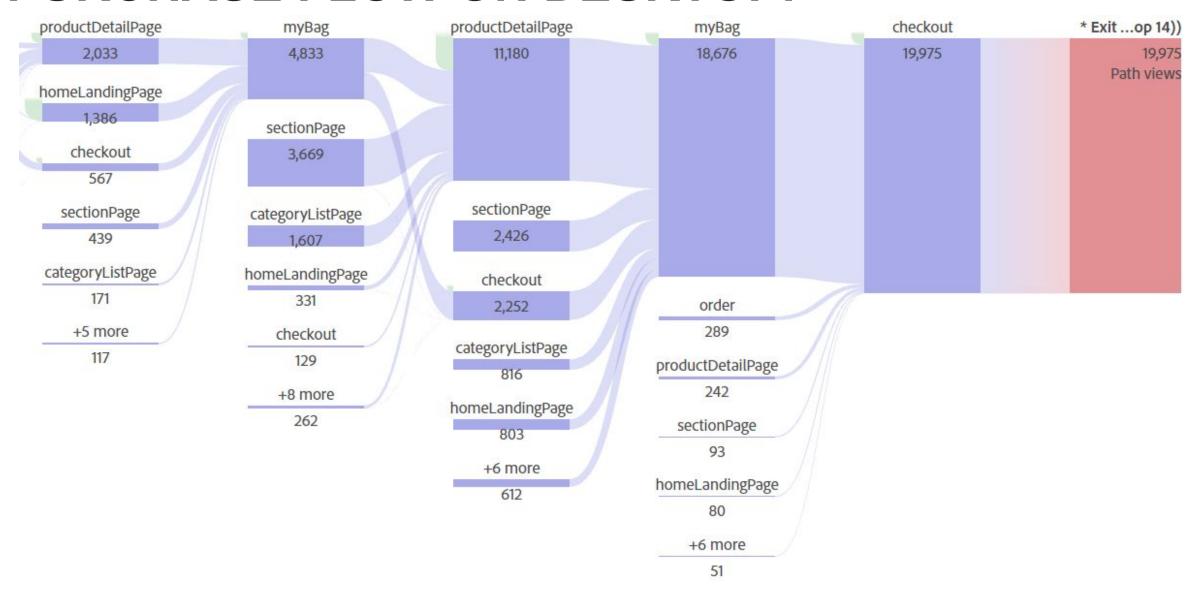


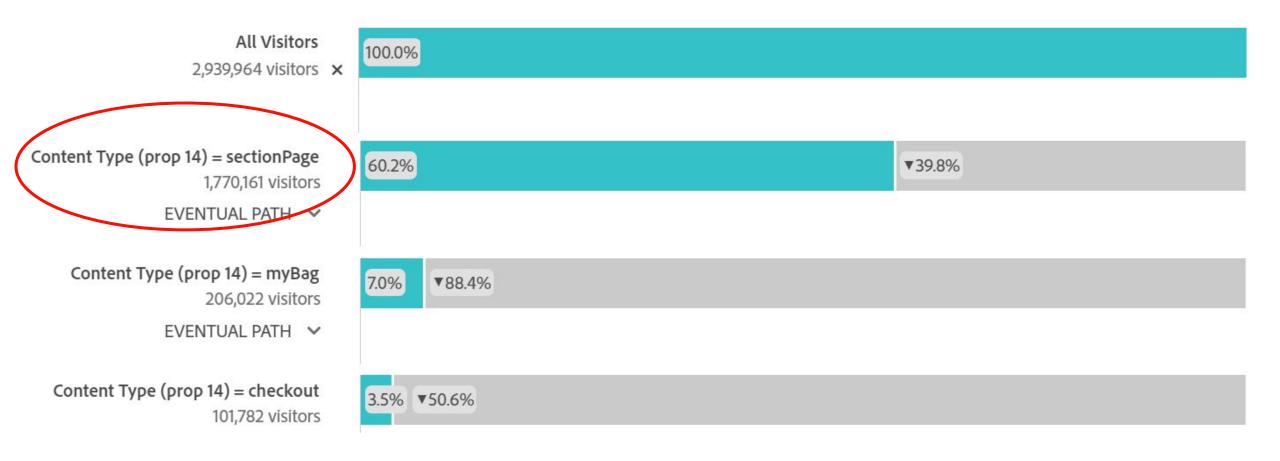




Conclusion: More people purchase when they select Product Detail Page first





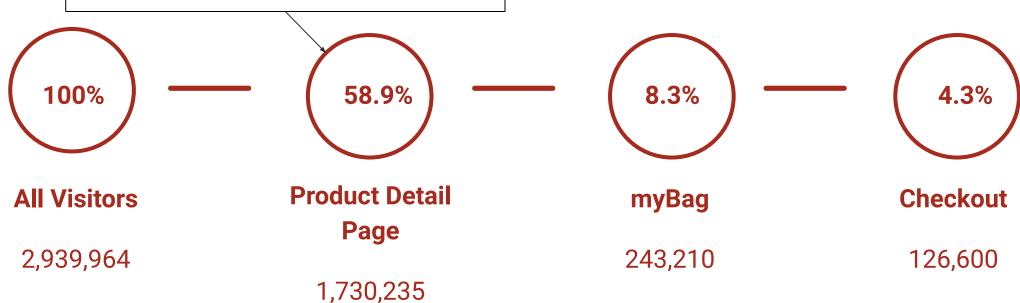






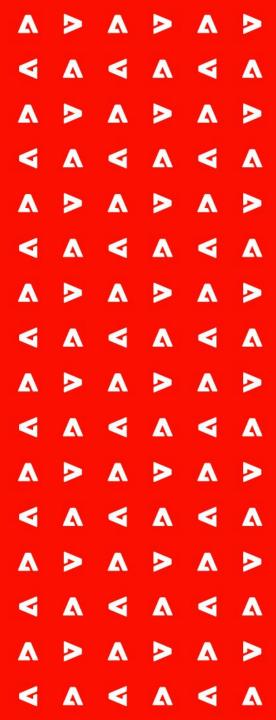


Conclusion: More people purchase when they select Product Detail Page first



### Key differences & similarities:

- 1. More people use the desktop web vs. the mobile application
- 2. There is no "myBag" option for the mobile application
- 3. There is no "wishlist" option for the desktop web
- 4. The majority of people who checkout select "Product Detail Page" first



### RECOMMENDATIONS

### Product Flow between desktop and mobile:

- 1. The desktop and mobile app should have the same flow as customers using one will be used to the set up and expect the same in the other.
- 2. The desktop gets more customers to purchase, therefore it would be a good idea for the mobile app to add a "myBag" option to their Product Flow

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Thank you, any questions?



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