

A-B TESTING ANALYSIS FOR ECOMMERCE WEBSITE

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An ecommerce case study



CASE OVERVIEW

- **Problem:** DigitalPath Innovations sought to improve their ecommerce website's user experience, engagement metrics, conversion rate, and customer satisfaction.
- **Approach:** A randomized A/B test was conducted over two weeks, where users were randomly assigned to either Version A or Version B of the webpage. User interactions, behaviors, and responses were captured to analyze the effectiveness of each design.
- **Data Analysis:** The dataset was analyzed using Tableau to gain insights into user behavior and preferences. Key metrics considered included:
 - **User Engagement:** Time spent on page, bounce rate, scroll depth.
 - **Conversion Rate:** Purchase rate, add-to-cart rate.
 - **Customer Satisfaction:** Feedback, survey responses, customer support interactions.

A I M



To identify which webpage version performs better across various user engagement metrics.



Effectiveness of each design, inform future design interactions, enhance user-experience

INDUSTRY PERFORMANCE BENCHMARK

Industry Standards for Performance Measurement

To benchmark performance, students should consider the following industry standards:

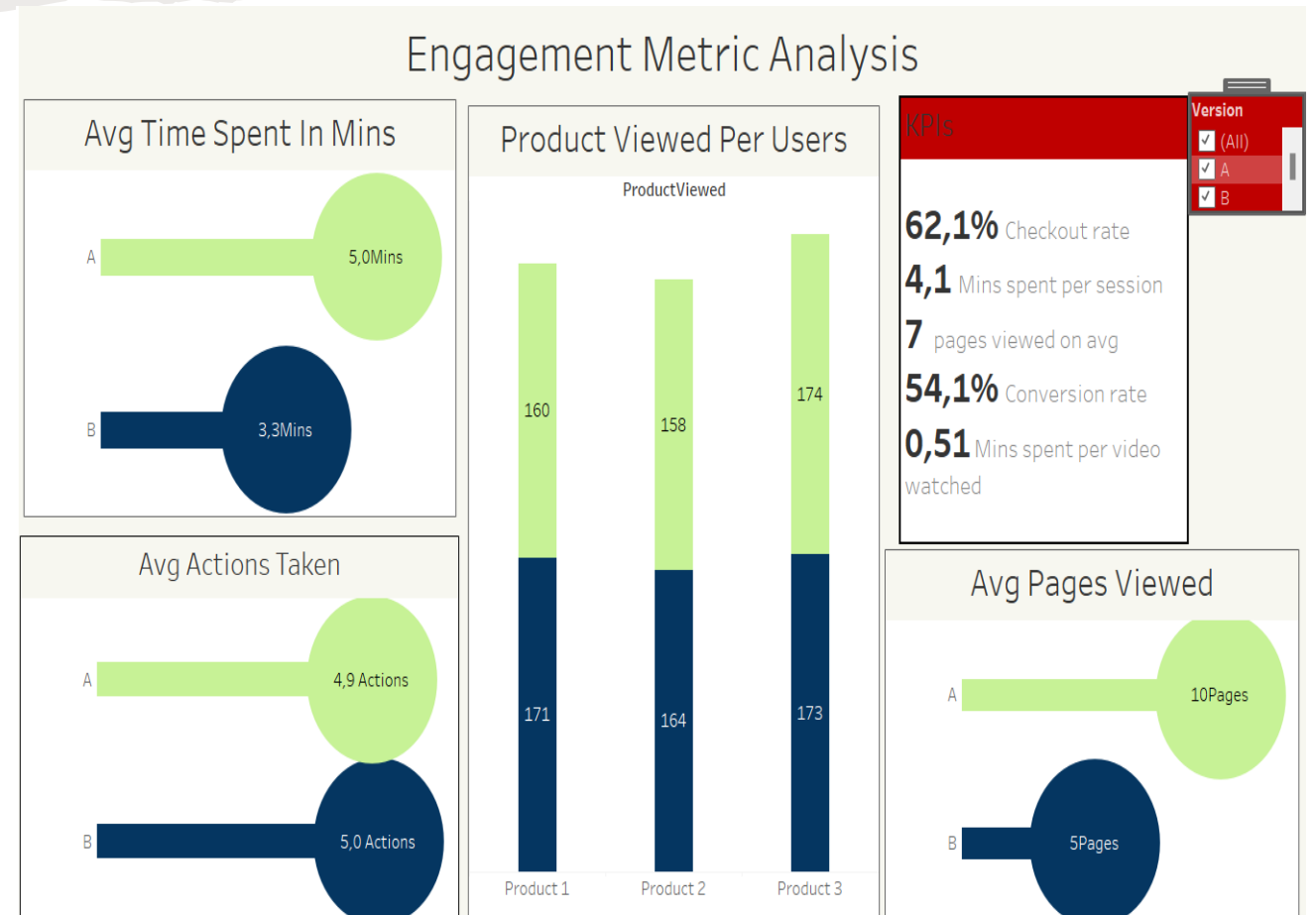
- **Average Time on Site: 2-3 minutes**
- **Conversion Rate: E-commerce industry average is about 2-3%**
- **Pages per Session: 2-5 pages**
- **Bounce Rate: 40-60% for e-commerce websites**
- **Checkout Initiation Rate: 10%**
- **Purchase Completion Rate: At least 50% of initiated checkouts**



ENGAGEMENT METRIC ANALYSIS

INIGHTS: Engagement: Version B has more actions even though they had number of pages viewed and minutes spent than that of version A. However, the difference is not much.

Product Viewed: Product 3 attracted more users followed by product 2 and lastly product 1. Also, between version A and B both viewed products marginally as there is no much difference.

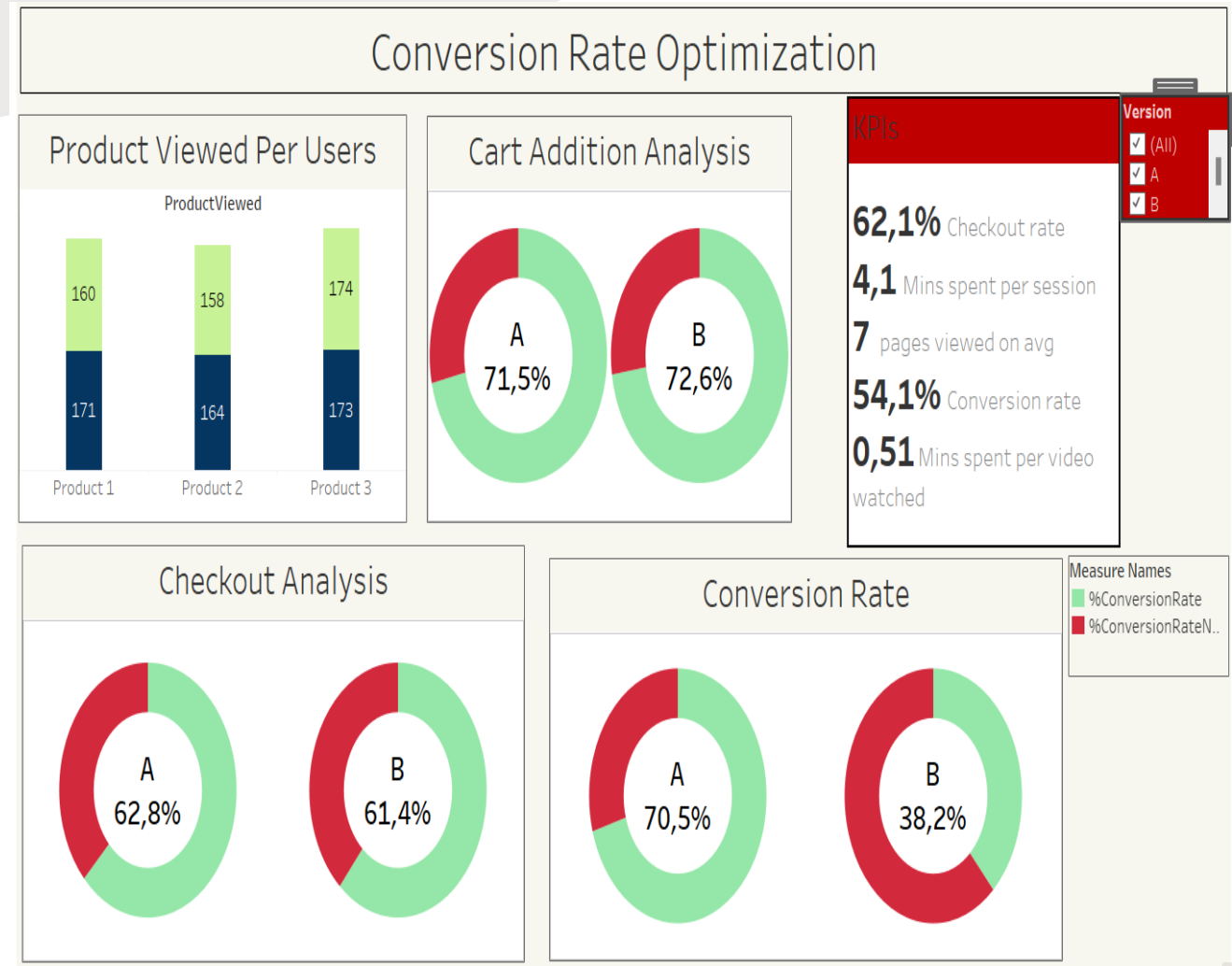


CONVERSION RATE OPTIMIZATION

INSIGHTS: Version A had 70.5% conversion rate while version B had 38.2% which is still within the industry standard. However, version B had more cart additions than A.

ROOTCAUSE: Some users in version A might make payment instore as checkout Analysis for both versions are 60%.

RECOMMENDATION: Version A had 10pages view within 5 min, the more you can keep people glued on the website improves it conversion rate. The marking strategies used in version A is going to help the firm make profit.



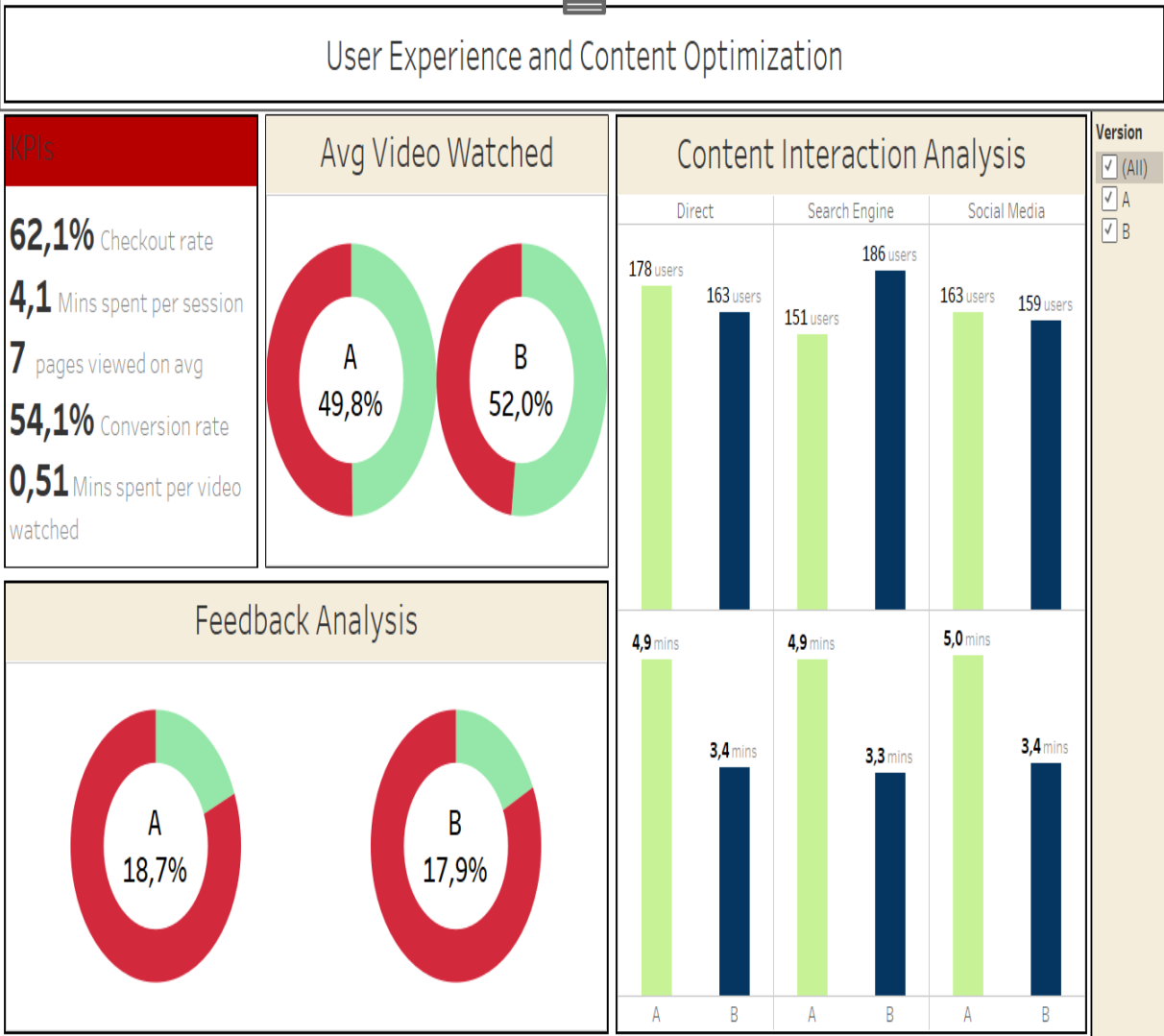
USER EXPERIENCE AND CONENT OPTIMIZATION

Conversion Rates and Referral Sources

- Version A's Advantage:** Version A demonstrates better conversion rates for users coming from Direct and Social Media referrals, particularly within the 4.9-5.0 minute timeframe. This suggests that Version A's content or design might be more appealing or effective for users acquired through these channels.
- Version B's Strength:** Version B excels in converting users from Search Engine referrals, achieving a higher conversion rate (186 users) in a shorter time (3.3 minutes). This indicates that Version B's content or SEO strategy might be optimized for search engine users.

Content Interaction (Video Watch)

- Version B's Edge:** Version B has a slightly higher percentage of users watching videos (52% vs. 49.8%) and does so in a marginally shorter time (0.52 seconds vs. 0.50 seconds). This suggests that Version B's video content might be more engaging or easier to consume.
- Feedback Analysis**
- Minimal Difference:** The feedback analysis for both versions is relatively similar, with only a slight difference of 0.8% in favor of Version A. This indicates that both versions are performing similarly in terms of user satisfaction or feedback.



RECOMMENDATION

1. **Leverage Version A's Strengths:** Continue to optimize Version A for Direct and Social Media referrals, potentially exploring ways to improve conversion rates for other referral sources.
2. **Enhance Version B's Reach:** Given Version B's strong performance with Search Engine referrals, consider investing in SEO or content marketing strategies to attract more organic traffic.
3. **Analyze Video Content:** Dive deeper into the video content of both versions to identify specific elements that contribute to the higher engagement rate in Version B. This could involve analyzing topics, length, visual style, or call-to-actions.
4. **Monitor Feedback Trends:** Continuously track feedback for both versions to identify any emerging patterns or areas for improvement. This could involve conducting surveys or analyzing user comments.

CONCLUSION

For profit maximization DigitalPath Innovations should use the Version of the ecommerce website because it provides more conversion rate of 70.5% which is above the industry standard of 2-3% of the initiated conversion.

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