

## **Scholastic Analytics Challenge Findings**

### **Middle Tennessee State University**

**Team: Kevin Barrett, Katelyn Walls, Tanya Bak, Juliia Romanchuk, Trynia Pillow**

Our illustrations display potential improvements to Scholastic's distribution strategy by exploring trends and analyzing where distribution channels should be based. We also explored which book categories might be worth emphasizing for each distribution channel.

We found that the South region dominates the Channel 1 distribution channel with 52% of total books sold for the channel. For all the other regions, Channel 2 seems to be the primary distribution channel with the Midwest having the highest percentage of books sold for that channel (32%). Our map illustration shows this distinction by highlighting the highest sales channels by state and showing the optimal distribution hub locations. We would recommend having the Channel 1's primary distribution center be based in the South region near Texas and Channel 2's primary distribution center be based in the Midwest region near Illinois. This would allow Scholastic to quickly and efficiently serve the bulk of its customers for both channels.

We also explored the number of books sold by channel at a more granular (county) level. Our insights revealed that, despite the southern United States (US) having more books sold by Channel 1 and the rest of the US being Channel 2, there were counties that were exceptions to this pattern. For Channel 1 states, the exceptions tended to occur around areas with major cities. For example, Davidson County, TN which includes Nashville had more books sold by Channel 2 but surrounding areas were dominated by Channel 1. Likewise, for Channel 2 states, we saw that the rural areas of these states were much more Channel 1-centric. Therefore, Channel 2 should not only focus on the states shown in the graphic but also on the areas with highly populous counties (>100,000 people) where Channel 1 should focus on the more rural areas.

With concern to certain book categories across regions, we noticed that many of the same categories were the best sellers for both channels. To avoid this significant overlap between channels, we would recommend marketing the most popular categories per channel. Our analysis revealed that picture books are the best-selling category across both channels; but, the second and third best-selling categories differ. For example, Channel 1's second and third most popular categories are 'Easy Reader' and 'Graphic Novels' and Channel 2's are 'Instruction Resource Division' and 'Chapter'. Pushing the marketing of these relative better sellers could reduce the amount of overlap across channels for the different book categories and increase revenue.

With this strategy, the Scholastic children's book market will continue to thrive into the future.