

SmartPop: AI Demographic Integration

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Dear Ms. Hoover,

After working in K12 as a teacher and counselor, I have noticed how vital representation is for our students in their curriculum and people they see everyday in the classroom and on campus. However, working as an Intellectual Property Specialist, I have the capability to research images and videos for the company's curriculum which students from various districts around the United States use daily. I get to ensure various races, ethnicities, economic backgrounds, and disabilities are shown in HMH's content. According to Iweuno et al. (2024), research in this area highlights how important it is to integrate a multicultural curriculum that reflects racial and ethnic diversity, especially for minority students. Our HOTS data tracking system is outdated, and it depends on the people's eye to choose the correct demographics, and there is not an option to track people with disabilities. I propose we integrate AI into HMH's data tracking system to automatically and accurately recognize the demographics once the images are uploaded.

AI has been frowned upon because it has been deemed scary to some people; however, there are positives with AI. Our company uses and promotes the usage of Copilot for transmitting notes, creating email responses, and modifying images. Utilizing AI to collect data in real time is beneficial because it will help with recognizing trends, irregularities, and new patterns as they come in (Panchal, 2024). Therefore, incorporating the use of AI in demographic collection can

give us data quickly, so we can know what we may need to further research or include less of in the curriculum.

The question that is vital to answer is the implementation of the AI integrated database. To be able to successfully utilize AI into our system, we would need to have a major system update. As a company, we would have to research which AI company tool would be the best fit to recognize demographics precisely. Once that is addressed then there will need to be a trial run between at least two AI options to see what is the best fit. The benefit of the solution is saving time for the employees and being able to become more exact by identifying demographics based on simply uploading images. Having more accuracy with demographics will assist with HMH's goal which ensures inclusivity is in every product.

Unfortunately, nothing comes free, so it is a must that finances of this implementation are examined. Due to the specifications of the database, we can expect to spend up to \$500.00 or less. FP Data Solutions Team (2024) states, AI project costs vary based on development, hardware, data quality, feature complexity, and system integration, ranging from \$5,000 to over \$500,000. I would like to examine the budget; however, if funds are not available, we may have to increase the cost of products for districts to balance out the cost of the new AI tool. For IP Specialist to begin using the new feature, there will need to be a 30-minute training course to show examples of uploading the images and AI recognizing the correct demographics. Of course, mistakes are bound to occur; however, this AI tool will provide the opportunity for less recognition mistakes and more accuracy which will ultimately benefit the students and teachers.

Sincerely,

Tierra Lewis

References

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