

# NLP and E-commerce



**BY KAUSTUBH.S. AWAGHADE**

AJEENKYA DY PTIL SCHOOL OF ENGINEERING

Natural language processing (NLP) is the branch of artificial intelligence (AI) that deals with training computers to understand, process, and generate language. Search engines, machine translation services, and voice assistants are all powered by the technology. While the term originally referred to a system's ability to read, it's since become an informality for all computational linguistics. E-commerce retailers can use NLP to categorize products into highly specific datasets to develop intelligent search bars that help customers navigate to the exact product they're looking for. While we're yet to scrape the surface of how NLP apps could change the way we shop, some of the world's largest online retailers are already exploring how they can combine AI-enabled tech to revolutionize online experiences. It is essential for e-commerce businesses to recognize and analyze the requirements and behavior of their customers. With the help of Natural Language Processing, machines are able easily to pick what phrases and words are generally used by humans while they are searching for a particular product. It helps in customizing the searches for users who are interacting with the system using a search engine.

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One of the goals of online retailers is to keep improving the customers' shopping experience. That includes product discovery with search and category browsing which is the highest priority for improvement since it can always help customers find the products. On the other hand, customers are not that easy to impress. Most customers expect the search systems to fully understand their shopping intent even when the search queries are not specific, to begin. It also helps the retailers to keep the visitors interested by recommending the right things to them. If you show products that fit the customers' needs - it will reduce site abandonment and increase the number of purchases. Amazon has stated that the purchases made through the recommendation that their site gave increased their revenue by 35%.

Sometimes users can tend to get lost among hundreds and hundreds of products. It makes them feel like it is impossible to find the product that they want. With NLP, users will not feel overwhelmed - it will seem less of a burden for them to browse through products and items. It will make users' experience much better and more enjoyable. Poor customer service can severely hurt your business. When the problem isn't addressed, you will start losing customers and brand credibility. Implementing natural language processing technologies can provide you with faster customer support. Some customers don't like to wait for a human support agent. By taking advantage of NLP, you'd be able to reduce problems and save money in the long run. Progress in Machine Translation (MT) creates opportunities for online retailers to step into international

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markets and improve the customer experience across multiple languages (read this article to discover the challenges of language-facing. One example of great NLP integration is Alibaba Cloud which has created NLP and deep learning technology alongside e-commerce data to produce accurate translation services that partners across the globe. Translating web content and advertisements with high accuracy is essential to enhance brand loyalty and make customers feel appreciated.

NLP in E-commerce is bringing improved customer care and is highly cost-effective. It clears up time for employees to work on more valuable or intricate projects rather than wasting time on mundane tasks. NLP is creating new propositions for business models and bringing a unique experience to consumers.

Updated information about customer's review about their product is constantly needed by the business houses. They need to know the behavioral trends and fair ratings of the customers. Polls, emails, pop-ups, blogs, social media posts, phone calls, and messages can help in gathering information which is managed by applications powered by AI. The pursuit of information is never-ending and the gathered information is interpreted and analyzed in a precise manner.

There are great benefits to using NLP in e-commerce. The world of business would greatly benefit from these in-depth insights that are controlled by AI. It will help in increasing customer satisfaction rates and will improve the revenue curve as well. More and more innovative ideas revolving around the concept of NLP will transform the future of business operations.