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CROWDSOURCING

Crowdsourcing is a process of obtaining services, ideas, or content by enlisting the services of a large number of people, typically over the internet. It's a crowdsourced way of outsourcing human intelligence tasks traditionally done by employees, and it allows businesses to tap into an online pool of talent quickly and cost-effectively. People can be crowdsourced for a variety of business and tech tasks, such as content creation, designing, coding, data collection, market research, etc. With crowdsourcing, companies can collect information from customers and use it to their advantage. Brands gather opinions, ask for help, receive feedback to improve their product or service, and drive sales. By using people's skills, work, and opinions, businesses manage to save their time and resources on developing a product or improving it. Tasks can be divided into 4 groups:

- 1) Microtasks: breaking a large project into tiny, well definable tasks for a crowd of workers to complete. They require short-term commitments and offer relatively shorter incentives. We fragment a large project into smaller, well-defined microtasks for a crowd to complete. Great for: data validation, research, image tagging, translation.
- 2) Macrotasks: presenting a project to the crowd & asking them to get involved with the portions they're knowledgeable in. Participants are empowered to determine the best course of action. Most suitable for: R&D, project development, etc.
- 3) Crowdfunding. Crowdfunding is a way of crowdsourcing funding from a large number of people in exchange for equity or other rewards. It enables startups, entrepreneurs, and businesses to raise money for their projects or causes. Most suitable for: product fundraising, startups, disaster support, market research.
- 4) Contests: asking a crowd for work, and only providing compensation to the chosen entries. A crowdsourcing project is offered to a crowd to complete, and the right one is chosen against compensation. Most suitable for: logo/poster design, business name search, etc.

With crowdsourcing, business owners can reap various benefits, from saved costs to employee salary. However, these aren't the only advantages. Thus, marketing approach in outsourcing helps you find solutions to problems your team has worked on for a long time. These solutions are often out of the box and enable brands to drive customers' attention fast. Many famous brands rely on experts outside the company to change the usual way of thinking and ideas. As a result, brands gain new approaches to various difficult situations with products and clients. By engaging people outside the company, a business can create marketing buzz around its product. Crowdsourcing causes competition among customers and word-of-mouth advertising. In addition, companies have more customer insights. After gathering data from customers, brands manage to understand customer preferences, needs, and desires. As a result, they can offer personalized solutions. Customer satisfaction increases, and sales rise.

Crowdsourcing can be used in various ways in a business since you get access to a vast pool of talent that can help them achieve their goals. However, it is important to remember that crowdsourcing is not a one-size-fits-all solution and that businesses should only crowdsource tasks that are suitable for outsourcing.

Here are some areas that can benefit from crowdsourcing:

- 1) AI/ML development. Crowdsourcing can be used to help in AI/ML development in areas such as; crowdsourced data collection, data annotation, algorithm creation, etc. The dataset can be sourced from a diverse team of data collectors and annotators to train AI models. For AI algorithms, crowdsourcing can fulfill the following tasks: feature engineering, hyperparameter tuning, debugging algorithms, etc.
- 2) Market research & promotion. Crowdsourcing can be used to quickly and cost-effectively collect data for market research. Brands can use crowdsourcing to survey their target audiences and gather feedback on products or services. This helps companies better understand their customers, allowing them to make more informed decisions when it comes to product development, marketing strategies, and other business operations.
- 3) E-commerce optimization. E-commerce businesses can benefit from crowdsourcing in a variety of ways. Crowdsourcing can provide access to crowdsourced writers, designers, developers, and marketers who can help create content that engages customers. By crowdsourcing data analysis, e-commerce businesses can gain insights into customer behavior that can help improve their products, services, and the overall customer experience. By crowdsourcing user-generated content (UGC), e-commerce businesses can leverage the online community to create content that resonates with customers.

4) Software testing

Software testing can also be crowdsourced to access a large pool of testers who can provide feedback on the product or service. This allows businesses to get real-time customer feedback, which can be used to improve the quality and user experience of the product or service. Crowdsourced software testing or crowdtesting also helps businesses quickly identify bug fixes, usability issues, and other areas of improvement. This can help software developers to save time and money.

Crowdsourcing as a tool is still in its infancy, so an organization that will be able to effectively use its power will undoubtedly be able to take the most competitive position in its sector. This is a huge force for developing solutions for the implementation of global projects. For states, this is a way to change the world for the better. For private companies - a means of effective creation of new products. For users - a means of self-expression, self-promotion and even earnings. A person can find himself in any role in the process of crowdsourcing and get some benefit, bring some benefit to society, therefore, this technology and its application are relevant for study.

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