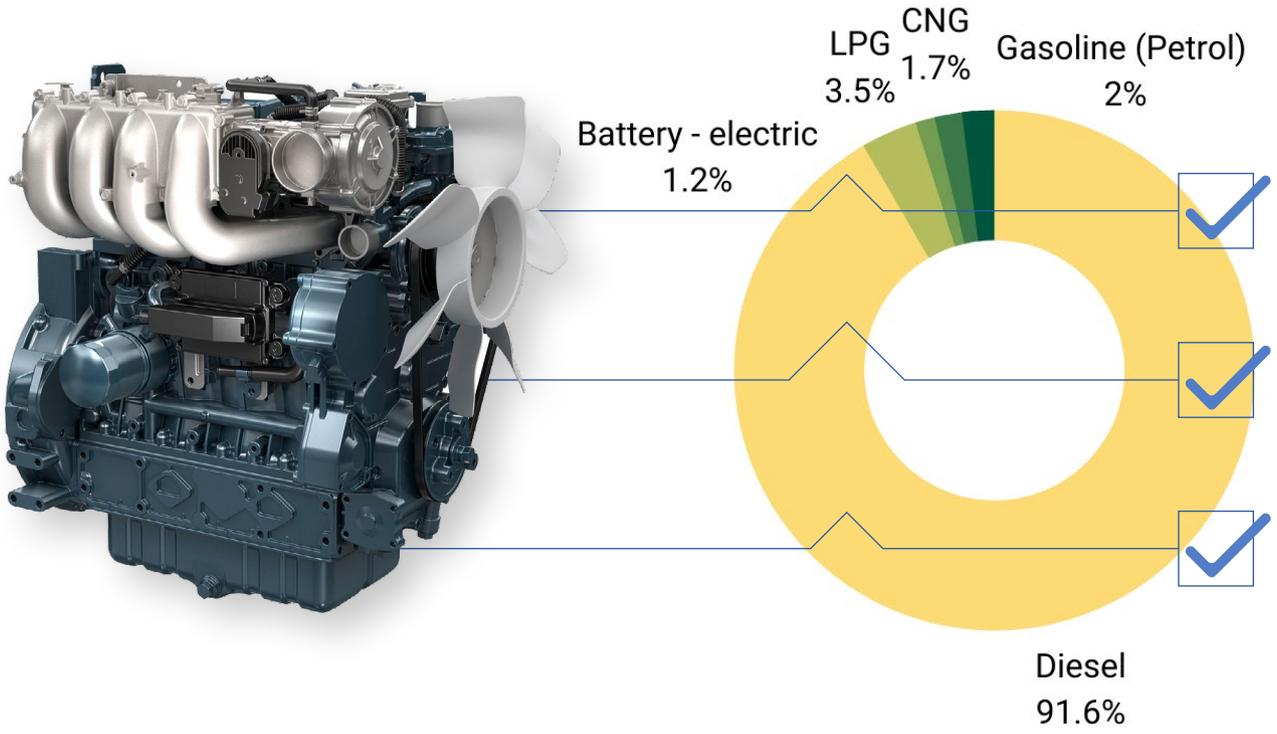


USA & Canada



LECTURA Flash Survey

Engines

ABOUT LECTURA

About LECTURA

LECTURA has been the leading provider of machinery intelligence on the market **since 1984**. Our database contains information and data on more than **147,778 heavy machinery models** and provides evaluation of used machines through our online tools and digital solutions.

This extensive database of equipment information attracts hundreds of thousands of professional visitors every month, when researching machinery before their purchase decision. This buyers guide represents the perfect platform to reach buyers and decision makers.

Our web portal LECTURA Press provides the latest news from the heavy machinery industry, exclusive interviews with industry experts and market leaders and publishes the quarterly online magazine the DigiMessenger in order to always bring the most relevant information to our readers.



Content overview

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About LECTURA Flash Surveys

The world of heavy machinery incorporates many different industries and corresponding companies that manufacture either whole machines or suitable components. Moreover, some companies also provide services and solutions that are closely linked to heavy equipment such as online trading platforms.

Flash surveys represent a new service by LECTURA that helps industry representatives to find out valuable opinions of our visitors – potential customers. The surveys are quick (hence “flash”) as they are designed to run just 1-2 weeks. Nevertheless, our wide audience does not hesitate to participate, and we receive **800 replies** per day in average (depending on chosen topic). It is an optimal way to achieve an important piece of market intelligence from all sorts of construction and agricultural industries.

Where do the results come from? Our web portal LECTURA Specs is visited by more than **600,000 professionals** monthly and serves as the ultimate buyers’ guide. LECTURA Specs is a huge multi-lingual online database with almost **150,000 machinery models** enriched with specifications, datasheets, and pictures, that are updated daily. Our audience is made of machine owners/buyers, dealers, engineers, contractors, farmers, repair shops, service providers and other professionals that search information via LECTURA services every day.

Flash Survey: Engines

An engine or motor is the heart of every machine and the equation is simple: When the engine switches on, the machine starts to work. Choosing the right engine for your machines may be a little bit complicated. Various manufacturers offer a broad range of models and different fuel options. We asked our audience on LECTURA Specs to share their experience and preferences with us and conducted the following survey.

We asked our visitors three questions in total:

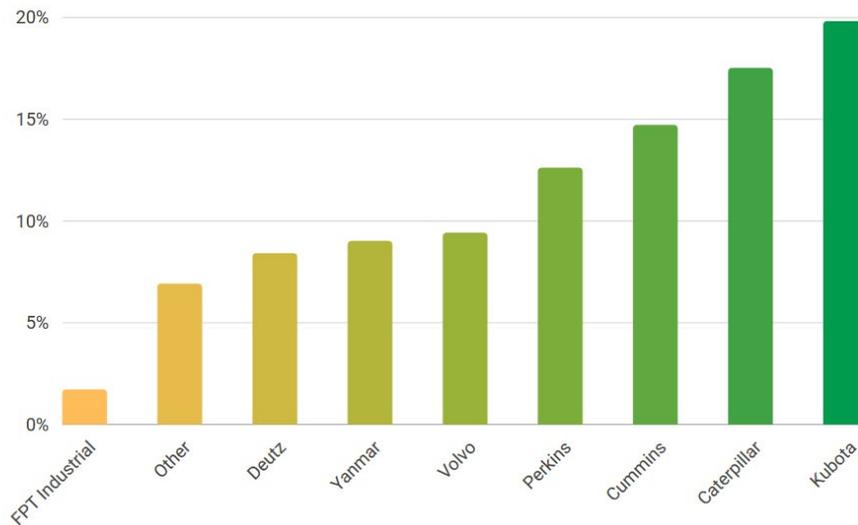
- 1) Which engine brand do you consider the most reliable?**
- 2) What fuel option do you prefer?**
- 3) Where do you usually buy spare parts for engines?**

The survey ran for a one week across all categories on our ultimate buyer's guide LECTURA Specs and we managed to reach 1524 respondents in total. The data was collected from 12th October to 19th October 2020. The following analysis provides results from the global point of view and also a comparison between visitors from Europe and North America (combined audience of 829 respondents).

Engines: Global Results

GLOBAL RESULTS:

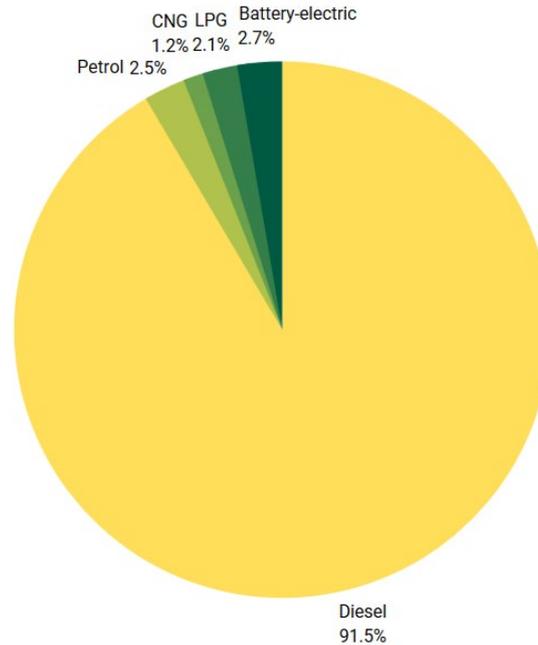
WHICH ENGINE BRAND DO YOU CONSIDER THE MOST RELIABLE?



The biggest number of respondents indicated Kubota as the most reliable engine brand (301 in total = 19.8%). The second most reliable brand according to our professional audience is Caterpillar that acquired 267 votes (17.5%). The third place is occupied by Cummins that was selected by 224 professionals (14.7%) as the most reliable engine brand. Remaining positions: 4th Perkins (192, 12.6%), 5th Volvo (144, 9.4%), 6th Yanmar (137, 9%), 7th Deutz (128, 8.4%), 8th FPT Industrial (26, 1.7%). Regarding the section "other", John Deere and Mitsubishi were among the most frequent answers. It is quite interesting and a little bit surprising at the same time, that Kubota was selected as the most reliable brand both in Europe and North America...which is analysed on the following pages.

GLOBAL RESULTS:

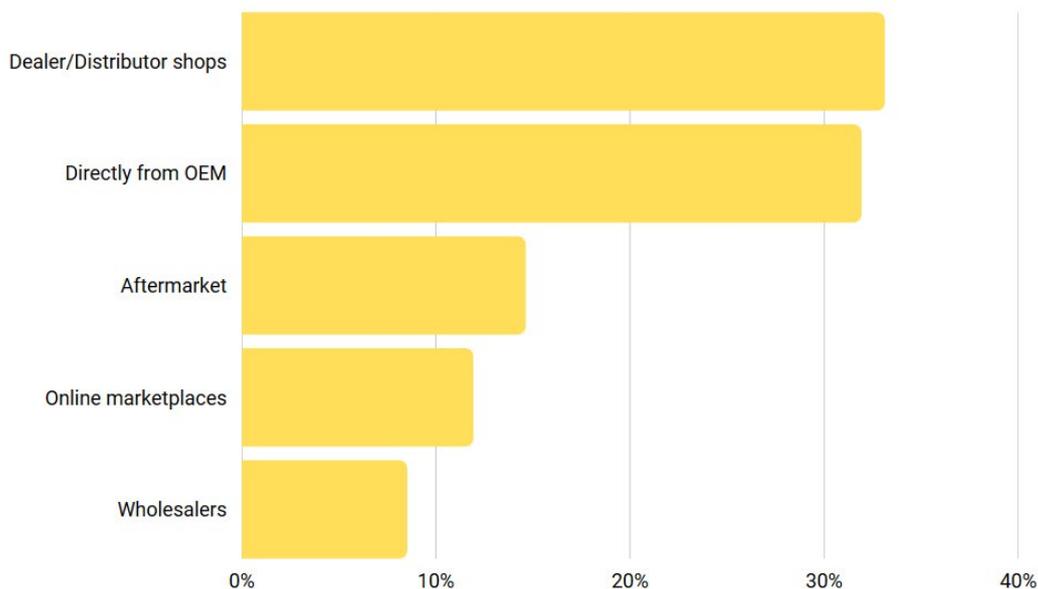
WHAT FUEL OPTION DO YOU PREFER?



The second question was focused on the preferred type of fuel. As we can see from the pie chart above, diesel is the most popular type of fuel by far as it was selected by 91.5% of all respondents. The rest of options gained significantly less percent: Petrol 2.5%, LPG 2.1%, CNG 1.2% and Battery-electric 2.7%. The results are not much of a surprise as diesel engines are traditionally the most popular among large and heavy machinery due to their high-power output and performance. On the other hand, smaller machines such as mini excavators or compact wheel loaders could benefit from alternative sources of energy such as electric drives combined with battery packs.

GLOBAL RESULTS:

WHERE DO YOU USUALLY BUY SPARE PARTS FOR ENGINES?



The majority of respondents (33.1%) stated that they usually buy spare parts for engines in distributor/dealer shops. Almost the same number of respondents (31.9%) prefer to acquire spare parts directly from the original equipment manufacturer. Approximately a half of that number of respondents (14.6%) is used to buy spare parts via aftermarket. Almost 12% of respondents often seek spare parts on online marketplaces and only 8.5% of respondents rather visit wholesalers. The results show that customers who seek spare parts for engines mostly prefer to acquire them from official distributors and dealers and also directly from original equipment manufacturers, probably because they prefer quality and guarantee of bought components.

Engines: North America vs Europe

DO EUROPEANS AND AMERICANS SHARE THEIR PREFERENCES ABOUT ENGINE BRANDS, PARTS SELLERS, AND FUEL OPTIONS?

Furthermore, the comparison of engines' brands' preferences between respondents from North America (The United States) and Europe (the European Union) was made. The total sample of whom were subsequent analyses performed consisted of 425 Respondents from North America and 404 respondents from the EU. The contingency tables analyses, and chi-square tests of independence were performed to see whether the respondents from the two groups differ in their market behaviour, specifically in buying engines.

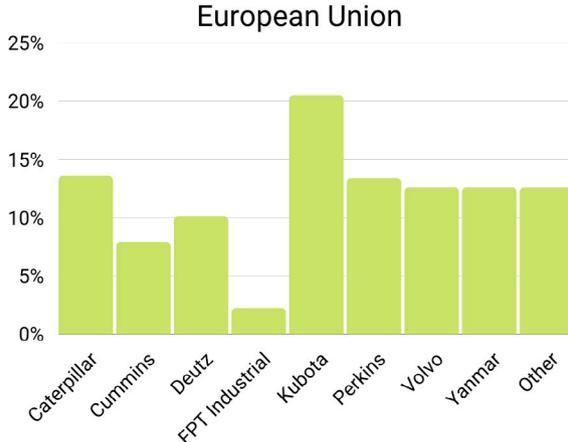
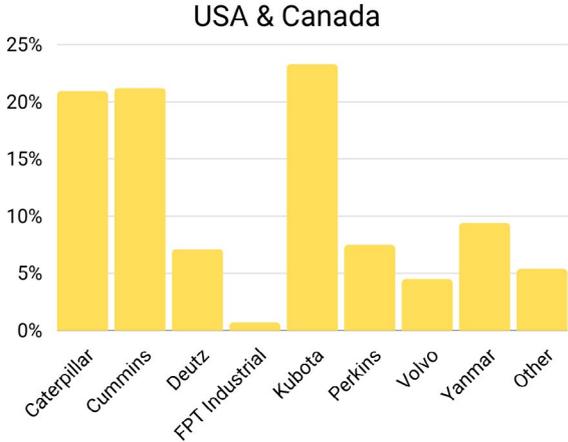
WHICH ENGINE BRAND DO YOU CONSIDER THE MOST RELIABLE?

Several differences were found between the perceived reliability of engine brands between American and European respondents. While brands like Caterpillar (20,9% compared to 13,6%), Cummins (21,2% compared to 7,9%), and Kubota (23,3% compared to 20,5%) are more popular in The United States and Canada, the European respondents favour engines produced by Deutz (10,1% compared to 7,1%), FPT Industrial (2,2% compared to 0,7%), Perkins (13,4% compared to 7,5%), Volvo (12,6% compared to 4,5%), and Yanmar (12,6% compared to 9,4%). According to our analyses, the results from our survey sample are generalizable and reflect preferences of typical European and American engines buyers.

ENGINES: NORTH AMERICA VS EUROPE

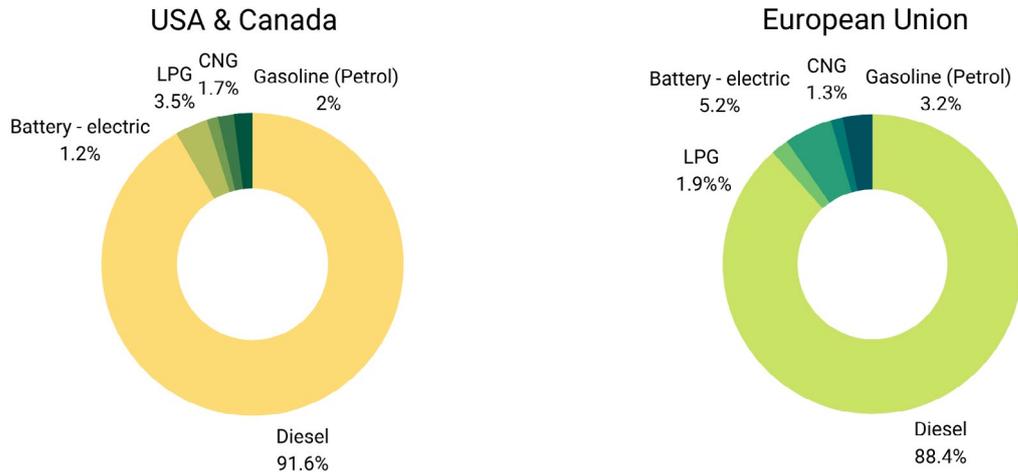
Our results fit the assumption the European respondents would mostly favour European brands as opposed to people from The US and Canada who consider American brands more reliable. Surprisingly, the most reliable brand regardless of region was Kubota - originally a Japanese manufacturer.

However, the fact the people claim they consider the brands reliable does not have to imply they would buy equipment from the brand. Anyway, even the behavioural researchers usually find a high correlation between attitudes and behaviour, we may expect given brands would also be at the top of the value of sales in the given region.



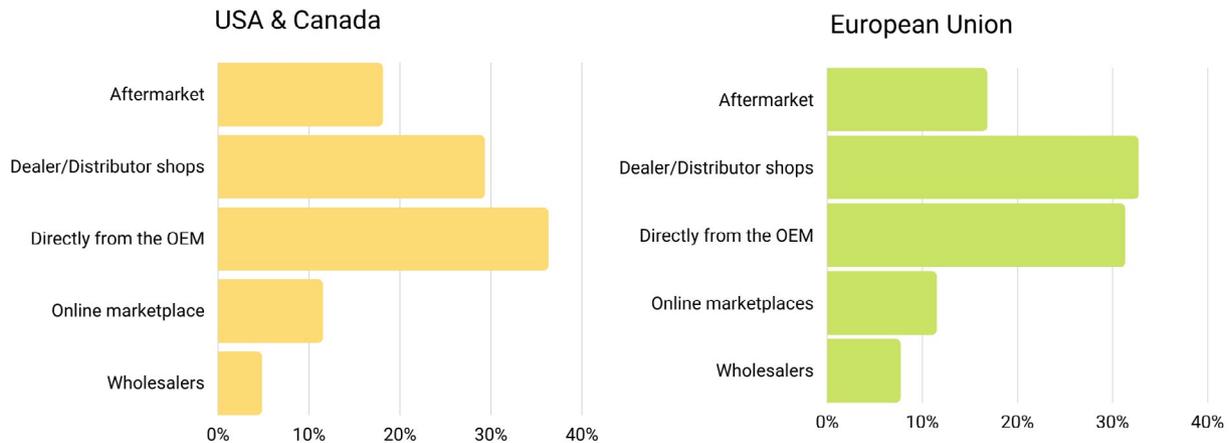
WHAT FUEL OPTION DO YOU PREFER?

The respondents were then asked to choose what fuel option they prefer. Some similarities - but mostly marginal were found between the Europeans' and the Americans' preferences. Both groups of respondents agreed that diesel is the best option for them (EU: 88,4%; USA & Canada: 91,6%). In the case of alternative fuel options, 5,2% of the Europeans prefer electric batteries and 3,2% of them would choose gasoline. 3,5% of Americans favour LPG. Other results are not mentioned because the percentages are too small. However, presented similarly to previous results about brand preference, even these results are generalizable.



WHERE DO YOU USUALLY BUY SPARE PARTS FOR ENGINES?

Finally, we found no statistically significant differences in preference of places where the respondents buy spare parts. Despite the fact, the data in the graph shows that American respondents favour aftermarkets and OEMs as opposed to the European respondents claiming they buy spare parts from dealers and wholesalers more frequently than their American counterparts, the differences were marginal and as our analyses indicate caused only by the specific characteristics of our survey sample. The most illustrative example of insignificant/negligible differences presents the distribution of results for online marketplaces preferences where 11,5% of both groups, the Europeans and The American, claimed they prefer this option when buying spare parts.



Conclusion

The three most important findings from our survey are as follows. The most reliable engine brand all over the world is Kubota. Even when differences between European and American samples (on which we tried to focus mainly) were considered, on both samples, our results indicated that according to the opinion of our respondents, the Kubota engines are products they trust the most. However, looking deeper into the differences between European and American responses, our statistically significant analyses indicated that the Americans prefer American brands, and the Europeans trust rather European brands.

Next, when considering the popularity of fuel options, despite new and institutionally supported alternatives appearing on the market (e.g. CNG or LPG), diesel engines are still the first choice of the respondents regardless of their region of origin. We do not consider the result surprising because of their high-power output and performance. However, as mentioned earlier, smaller machines such as mini excavators and compact loaders could benefit from alternative sources of energy. In this case, the Americans would prefer LPG and the Europeans electric batteries.

The previously discussed results showed some specificities based on the region of origin. However, what is also our third most important finding, there are no statistically significant differences between the preferences of spare parts sellers. Overall, most of the respondents would buy spare parts from dealers or distributor shops, closely followed by original equipment manufacturers. The dealers and manufacturers should have the quality/guarantee and readily available components. Moreover, previous feedback from clients and testimonials are provided to check the quality of their service.

CONCLUSION

We hope our findings provide you with a deeper insight into the field of market behaviour of engine buyers. However, our data represent rather respondents' opinions than actual behaviour. The limitation of our survey results may, therefore, lay in the link between attitudes and behaviour. However, the correlations between these two phenomena are very high while other factors should also be considered – e.g. the availability of sales points of the mentioned brands.

Interested in your individual survey?

Whenever you want to improve and grow your business conducting a survey may help you. Despite the fact that there are plenty of research methods or strategies to understand your customers' behaviour, the easiest way to get information about people is to simply ask them. Understanding your customers' perspective and needs provides you with the most important information about the future development of your business and therefore determining priorities of its direction. Moreover, ongoing communication with your customers and demonstration of the interest in their needs helps maintain their loyalty.

LECTURA can get your survey in front of hundreds of thousands of industry professionals – your potential customers due to our large audience. More than 600,000 professionals research equipment on our ultimate buyer's guide LECTURA Specs every month. Moreover, they are actively engaging with our polls and surveys. More specifically, the engagement is about 4% which results in about 800 daily replies. We provided our clients already with surveys focused on e.g. telematics, spare parts or equipment rating, having collected tens of thousands of answers.

When wondering about the targeting, LECTURA can select your respondents' sample based on some predefined criteria: region/country of origin, industry and type of business. To reach the criteria we are able to target to place your survey on specific web pages only or provide you with 8 language versions – English, German, Spanish, French, Italian, Dutch, Polish and Russian (for English, German, Spanish, French and Polish with translation, too). Moreover, we provide our survey in two formats. In the first one we can show the survey questions in a widget which

INDIVIDUAL SURVEY

'peeps' from the bottom of the page. In the second format potential respondents are provided with a URL which can be given to them directly, such as including it in a newsletter email send out. However, we consider the former as more unobtrusive than the latter. Nevertheless, the final decision depends on your considerations. To make it more specific – the process of research collaboration with LECTURA is as follows. At the beginning we discuss the objectives of the research – who is it for, why, what information do you want to obtain via your survey. When all previously mentioned is clear, you create the questions which we place on the webpages. After some time, the data are collected and it depends on you whether you want to analyse them by yourself (we are able to provide you the raw data in .xls, .sav or .csv format) or let the LECTURA Surveys to analyse them for you and provide you with a comprehensive report of results. More about LECTURA Surveys: <https://www.lectura.de/surveys/>.

OTHER SURVEYS BY LECTURA

- **COVID survey in cooperation with CECE and ERA**
- Flash survey: Finance and Leasing (in progress)
- Flash survey: Tires (scheduled)

You can find all published surveys on LECTURA Press in the [reports](#) section.

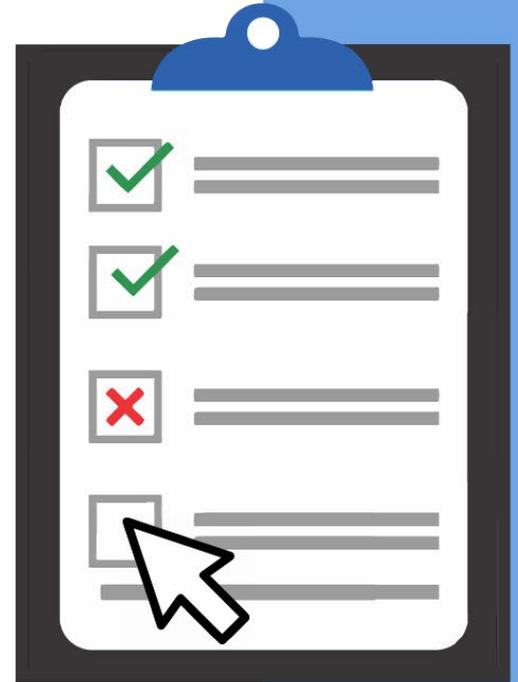
GET IN TOUCH FOR YOUR SURVEY DETAILS

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raw data • analysis • comprehensive report



600,000 professionals on LECTURA
Specs every month

800 replies
every day

8 language
variants