



# How are today's survey respondents affecting your data quality?

*Impact of audience characteristics and  
behaviors on market research outcomes*



## Introduction

If a challenge could be easily solved by the sheer amount of brainpower, attention and hype surrounding it, then we would have perfect data quality in the market research industry. In truth, data quality has been central to nearly every conversation in the industry for years, but we've yet to definitively find a way throughout the market research industry to move the needle on this critical issue. It is complex, its solution requires collaboration among both sides of the research marketplace, and it needs a multi-faceted, evolving approach to tackle it in any meaningful way.

A primary research-on-research project conducted by Rep Data and DM2 in October 2022 examines how audience makeup and characteristics impact the data quality equation. Below we look at the potential for response differences based on traditional audience demographics such as age and gender; the type of device used to answer the survey questions; self-reported behaviors and personality types; and other key indicators.



### In this paper, we:

- Examine the impact of audience demographics and characteristics on data quality
- Review data surrounding the quality of responses based on device used to complete surveys
- Uncover best practices for avoiding data quality pitfalls

## Methodology

This project was conducted by research veterans at DM2 and data collection experts at Rep Data to assess the consumer audiences at the highest risk of producing data quality issues in market research studies. Three different surveys, with an approximate length of seven, 12 and 18 minutes, were conducted among n=1,800. Completes were divided evenly by survey length and device type, as well as reflecting consistent age and gender quotas.

Device Type	Total Completes	Female 18-29	Female 30-49	Female 50+	Male 18-29	Male 30-49	Male 50+
Mobile Phone - Short	300	50	50	50	50	50	50
Mobile Phone - Medium	300	50	50	50	50	50	50
Mobile Phone - Long	300	50	50	50	50	50	50
Desktop/Laptop PC, + Tablet - Short	300	50	50	50	50	50	50
Desktop/Laptop PC, + Tablet - Medium	300	50	50	50	50	50	50
Desktop/Laptop PC, + Tablet - Long	300	50	50	50	50	50	50

### Measuring Quality

To measure quality this report uses DM2's Qscore methodology, which leverages trackable, quality-oriented question sets used for many years to determine sample provider and respondent quality and characteristics. The longevity of these question sets provided data that gave significant benchmarks for the United States, from 50K+ interviews in the past year alone. In addition, some standard questions from sources such as the U.S. Census, were included to give a foundation for outside comparisons.

## Quality Components

We take multiple components into consideration when examining data quality, including the ability of respondents to comprehend the information in the questionnaire and the level of effort they apply to providing valid, consistent responses. The structure of the survey and the environment in which it is administered are also important factors, which is why the survey for this study used a variety of question types, rating scales and subject matter. It was designed to assess consistency and engagement during the interviewing process. Among the items we measured and evaluated to determine the quality of responses were:



- Item completion
- Time to complete the survey
- Time spent on various survey items (e.g., evaluating a concept)
- Answer consistency (within a grid, and across the entire survey)
- Rating consistency on “opposite” attributes (e.g., “I always buy brands” and “I always buy generics”)
- Propensity to state many low incidence items
- Open-ended response quality, including length and contextual relevance

A quality score is computed through examination of these items, generally by summing up many binary (1,0) “poor data” flags, although some art was applied to categorize a few items on a continuum for quality (e.g., open-ends).

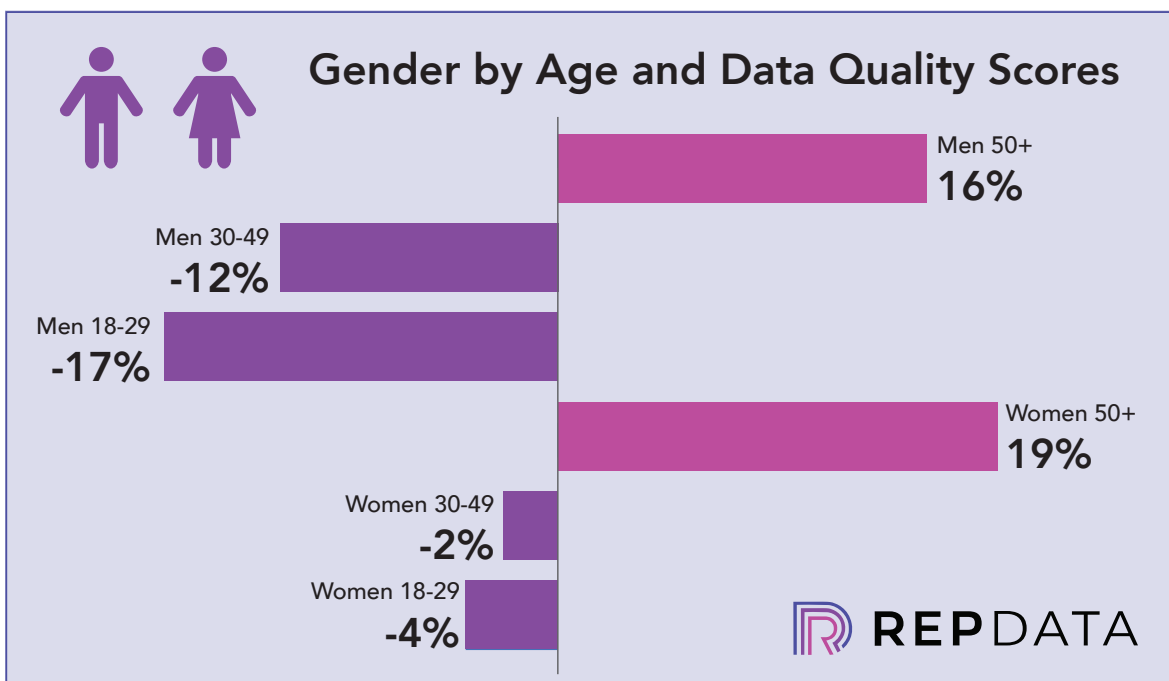
## The Findings

1. Men & younger people continue to provide lower quality responses across the board
2. Survey-taking device used impacted quality levels
3. Education levels, political leanings and income levels display bell-curves for quality
4. Respondent behavioral characteristics and activities that impact outcomes

### **Men & younger people continue to provide lower quality responses across the board**

Consistent with other research-on-research findings, men were found to have much lower quality ratings than women, trailing by an average of 8% across all age groups. Men of 18-29 years were the most suspect and, in this study, their low quality score was closely followed by men aged 30-49. Respondents were given the option to identify as a non-binary or write-in gender, but responses in these demographic groups were less than .5% of the total respondent base.

Older populations scored significantly higher for quality, another finding that was consistent with multiple other studies. Speculatively, this could be attributed to the fact that older, retired generations may have more time to thoughtfully complete surveys.

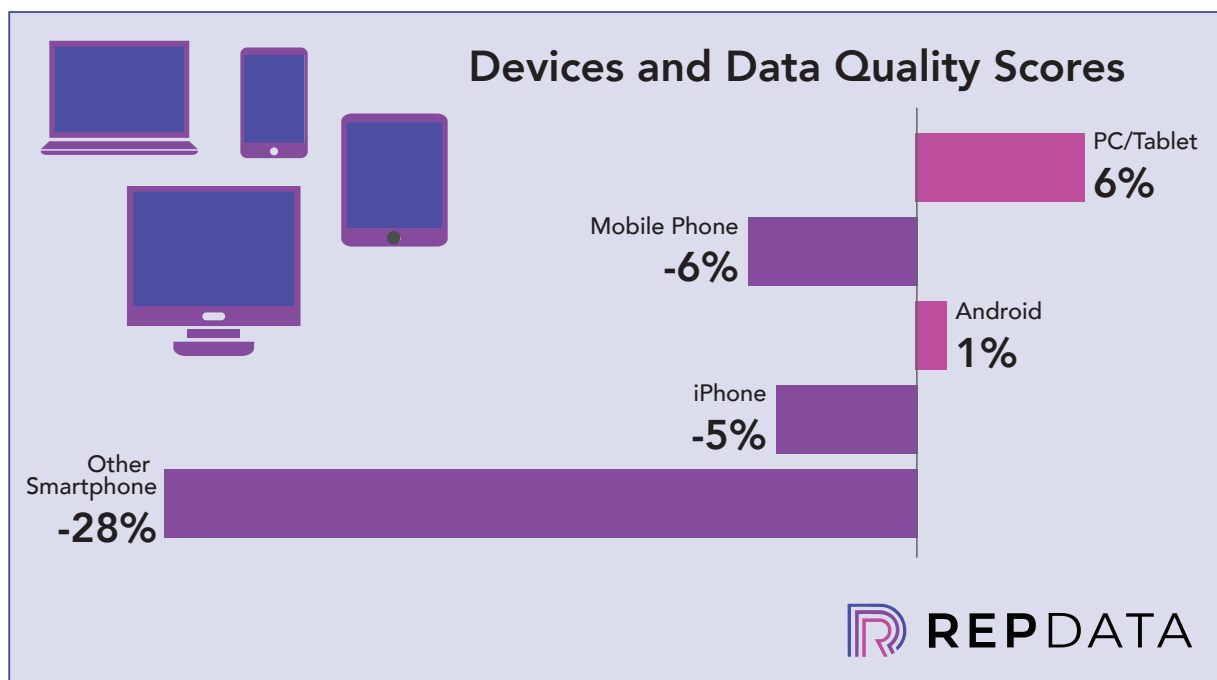


## Survey-taking device used impacted quality levels

Although the conversation surrounding the importance of mobile-friendly surveys should be well past us, we are still seeing mobile users provide lower quality responses. Our study found that, with age and gender held constant, mobile users provided lower quality data than desktop computer, laptop computer or tablet users. As the three surveys in this study were designed to be device-agnostic, this behavior could be attributed to more distractions present on mobile devices with the average smartphone user receiving [46 push notifications per day](#).

However, there are still the age-old challenges surrounding small screen size and smaller, mobile devices providing a less-friendly interface for survey-taking. Additionally, our study found that iOS users provided lower quality data than Android users.

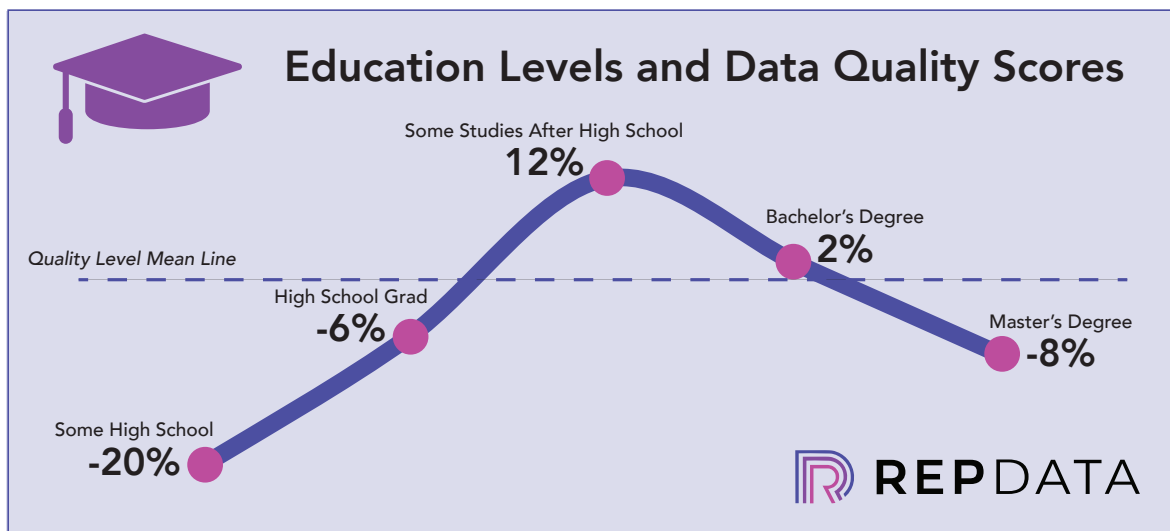
A portion of our respondent base indicated that they were using a smartphone type that was neither Android or iOS, which contradicts marketplace data indicating that smartphone usage outside of these two operating systems is [less than 1%](#). This indicates that they were not thoughtfully answering the questionnaire.



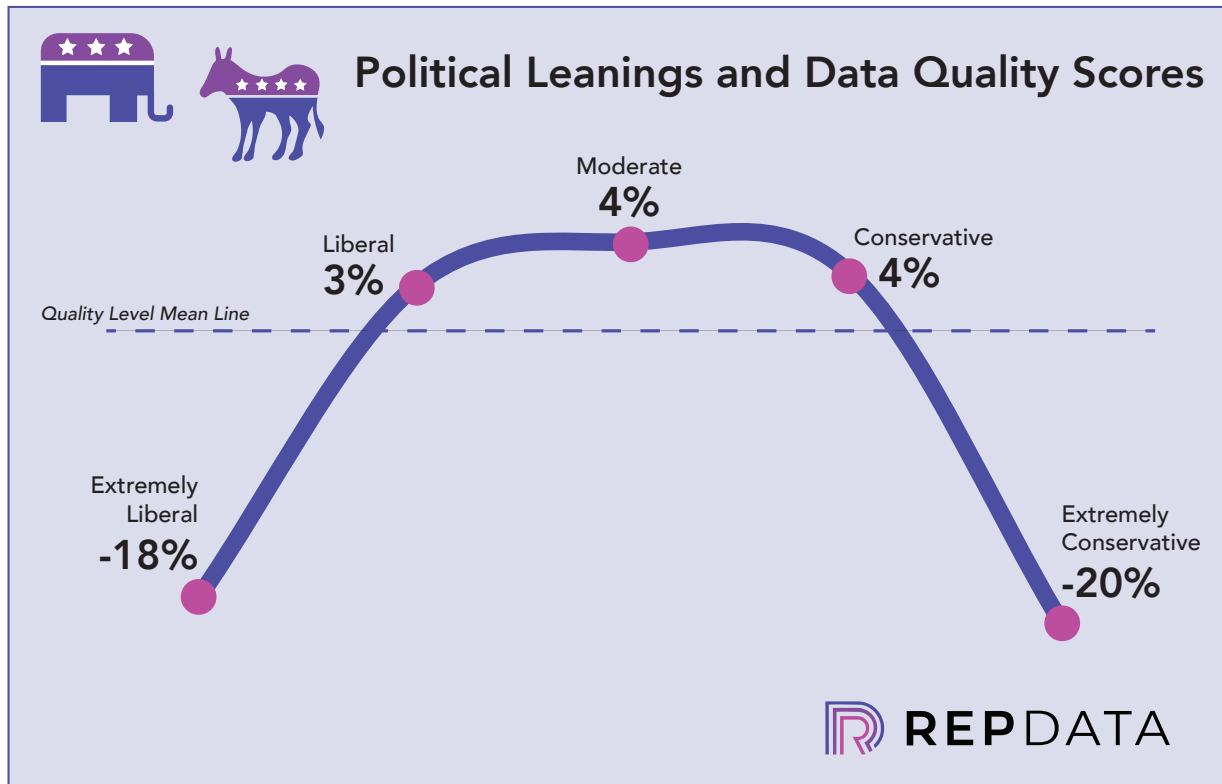
**Education levels, political leanings and income levels display bell-curves for quality**

For education, political leanings and income levels, there is a bell curve to data quality. Those answering with extremes at each end provided the lowest quality data and those who selected “prefer not to answer” were the worst quality, on average performing at 46% below the quality mean.

In terms of education, the sweet spot for data quality appears to be among those with some studies after high school and those with four-year bachelor degrees. The least educated and best educated individuals provided data that was of lowest quality, including answer inconsistencies.



The same bell-shaped curve applies for political leanings; those who identified as extremely liberal or extremely conservative were, on average, 19% less likely to provide quality answers.



On the income side, we see a mostly bell-shaped curve (although less pronounced than the other two categories in this section) with a small peak anomaly at the mid-range income level of \$50,000-\$74,999 which dips very slightly below the quality mean at -1%. Still, all this data points to audiences who are at either end of a specific spectrum tending to provide lower quality answers.

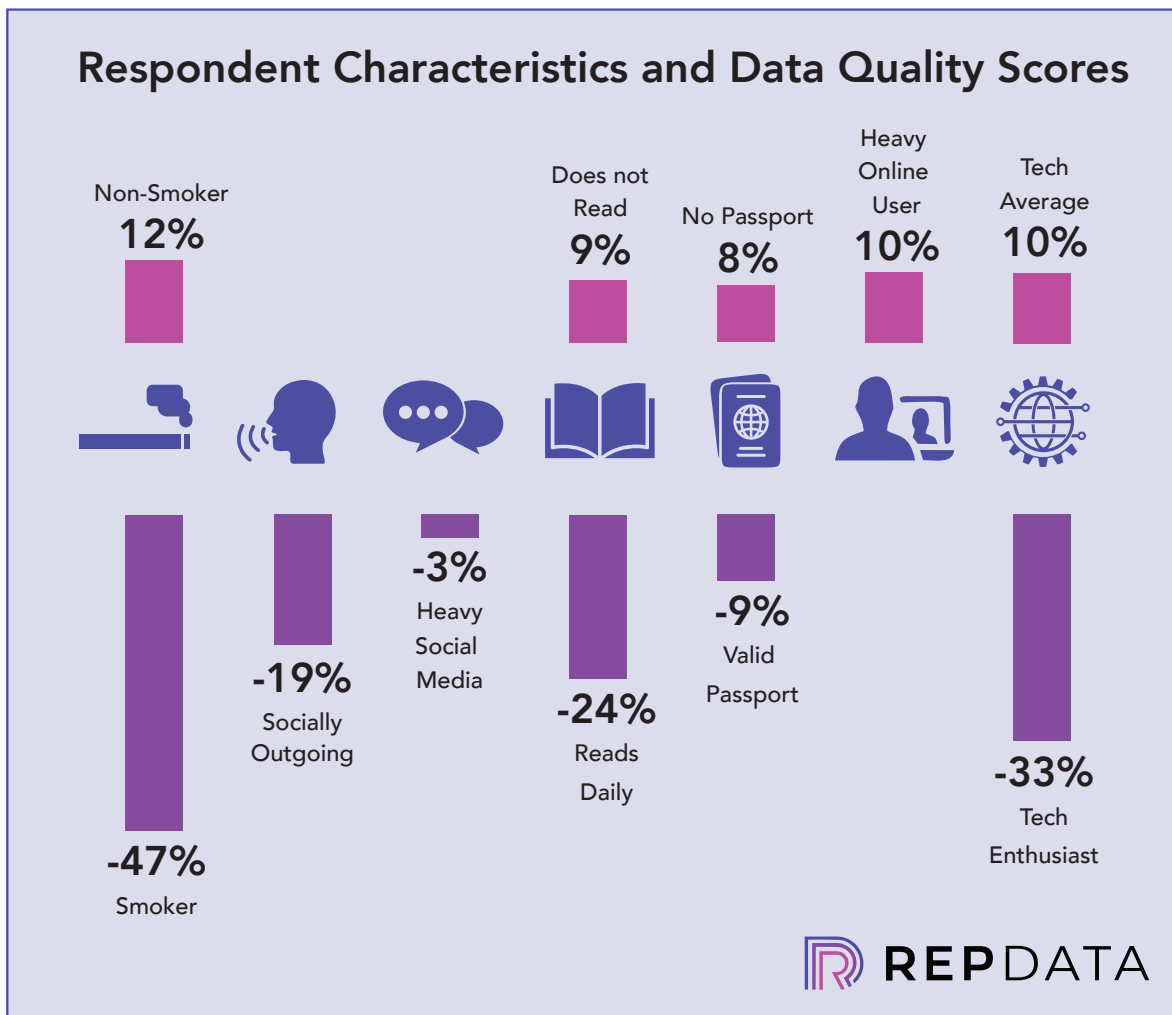
**Respondent behavioral characteristics and activities that impact outcomes**

We asked respondents a series of behavioral questions related to their personalities and activities to examine whether or not certain sub-groups behaved differently in the survey environment. As we are seeing more and more clients seeking highly profiled, niche audiences for primary research, this becomes important as quality is affected among groups with certain characteristics.



Those who self-reported that they were socially outgoing, risk takers or outspoken performed at a lower level overall, and were 19% less likely to provide quality data. Smokers trailed non-smokers as 44% less likely to provide quality data; those who read a daily newspaper (oddly) fell behind those who did not by 33%; and those holding a passport provided lower quality answers than those reporting they did not have a passport (17% less). While those who reported heavy social media use were slightly below the baseline at negative 3%, general heavy online users performed 10% higher than the baseline.

Those who identified as technology or mobile enthusiasts, and were interested in the latest innovations in these categories, were 25% less likely to provide quality data. Those who felt that they were either average or behind in technology adoption and interest did better overall from a quality score standpoint (+10%).



## Best practices

Our research ecosystem is changing rapidly and, even with ongoing focus by the industry and its leaders on data quality, there has been little significant progress. From survey design to respondent engagement and attention, to persistent fraud that is becoming more sophisticated, quality can be affected at any stage in the research process. Adapting our research practices to mitigate common issues that may arise is critical to success.

### ***Improving respondent experiences***

Keeping a respondent's attention and improving their experience is fundamental to improving data quality, avoiding dropouts and incompletes, and garnering more thoughtful answers. Creating engaging surveys that aren't too long and complex is the most basic change that needs to happen, and there is no shortage of expert input on this front. Respondents must also be incentivized properly for their time and effort, as this can help encourage meaningful participation.

And (although no one thought we'd still be talking about this particular topic in 2022) we must ensure that surveys are created and deployed using a device-agnostic approach.

This study confirmed what we've been talking about for years: those who take surveys on mobile devices are more likely to provide lower quality answers. Yet, more and more people are spending their online



time on their phones, as over the past five years (2016-2021), the mobile share of internet usage has increased from [43.7% to 55%](#). This promises to continue, and it is well past time the market research industry figured it out.

### ***Sample aggregation needs to become the norm***

As the industry continues to evolve, researchers must increasingly be prepared to employ more thoughtful sampling techniques to improve data quality. For audiences that fall into high-risk categories, such as those identified by this study, aggregating sample can help to target higher quality respondents by bringing them in from a wider number of sources. This approach can also address the pandemic- and economic-instigated squeeze we are currently experiencing when it comes to demand for respondents exceeding current supply. In our prior study, and this one, it has become clear that unbiased, efficient sourcing from multiple panels and sample suppliers delivers higher quality, more representative results and is a critical path-forward to addressing the never ending quality challenge.

### ***Elevate project management expertise***

In addition to aggregating sample, researchers can improve data quality by using expert project managers during fielding. Our evolving research landscape means expert project managers must have a deft blend of technical expertise, industry knowledge, attention to detail and strong communication. To improve data quality, look for project managers that:

- deeply understand the overall ecosystem so they know where to go to find the best respondents and can identify possible high-risk audiences up front, saving time and headaches and ultimately ensuring data quality
- have the technical savvy to find these audiences via the wide number of DIY platforms and technology solutions available today
- are strong communicators with attention to detail who shepherd the project start to finish including personal monitoring of sample and study quality and the creation of a post-project feedback loop to allow continuous improvement.

## **Fraud mitigation**

While we didn't specifically examine fraud mitigation techniques in this study, our previous paper, [Data collection techniques for quality outcomes](#), covered the impact of three specific techniques on data quality: sample sourcing expertise, fraud mitigation technology, and research project management. What we found was that layering fraud mitigation techniques positively impacts outcomes by creating a clean, healthy and efficient market research ecosystem. This is a component that cannot be overlooked when seeking enhanced data quality.



While little progress may have been made in the industry as a whole when it comes to data quality, the more we can educate ourselves about the factors that are impacting it, the better. We all must work together for real change. When we examine all the granular details that are impacting data quality—including the impact of specific audience characteristics—the better informed we will be to implement practices, standards and techniques that will create better outcomes for every research project.


## Study Executed by:

### Rep Data

Rep Data was founded to directly address key challenges in today's market research ecosystem, with a mission of providing reliable, repeatable data collection processes. In less than two years, Rep Data has run two million completes for 350+ customers while achieving an 81 NPS. The firm's full-service data collection solutions help expedite primary research studies, with a hyper-focus on data quality and consistent execution. Known for its excellent customer service and ability to fill quotas for extremely targeted projects, Rep Data has been consistently applauded by its clients in a huge range of industries.

### DM2: Digital Marketing & Measurement, LLC

DM2 provides clients significant capability in digital marketing, marketing research and business intelligence—capabilities centered around data to deliver quantifiable insight. Founder Chuck Miller developed the majority of DM2's products from experiences as a BI and Consumer Insights VP at AOL and Time Warner, focusing heavily on advertising metrics. Chuck and his team at his previous company, Digital Marketing Services (DMS), earned a reputation as pioneers and innovators in on-line marketing and marketing research. Thanks to this heritage, DM2 prides itself on innovation, continually exploring the ever-changing digital world to bring the best solutions to clients today.  
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