

Using Big Data to Transform Your Customer's Travel Experience

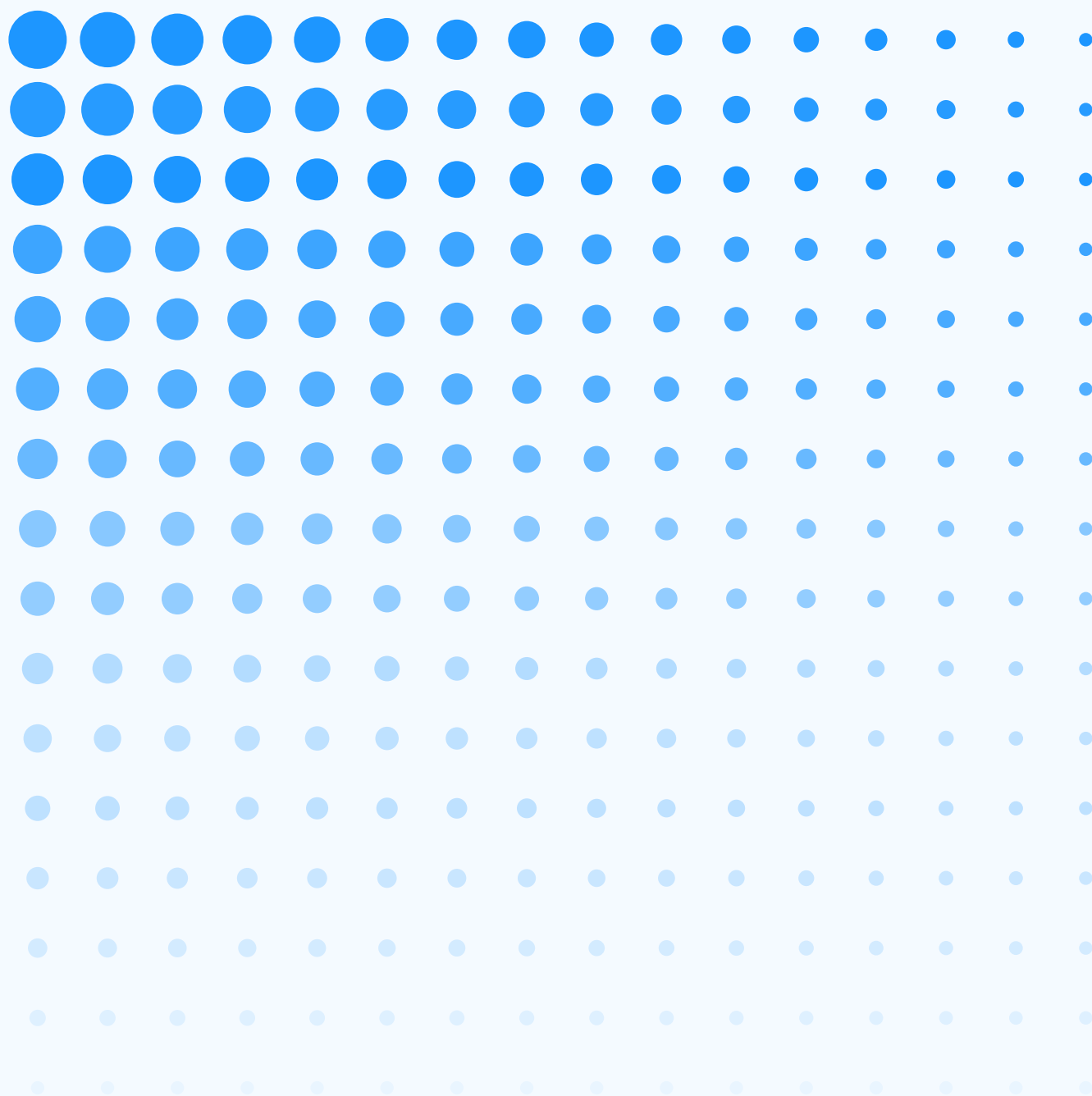
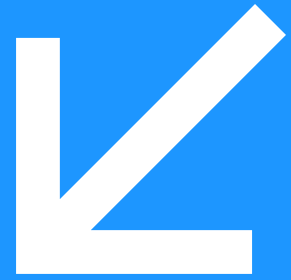


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01

INTRODUCTION

Data has become a valuable commodity in today's society, and it will only continue to grow in importance as technology evolves.

"[Data is the new oil](#)," said one of the world's leading experts on digital transformation. The power of data can be seen everywhere- from social media sites like Facebook and Twitter to eCommerce websites like Amazon and Walmart to airlines such as United Airlines or Delta Air Lines. These companies know that they must use big data analytics to provide an outstanding customer experience if they want their company to succeed in this day and age.

However, there are specific industries impacted by data differently than others. When it comes to the travel industry, real-time data is an invaluable resource. The travel industry is unique because it offers consumers a variety of experiences. So many data points are generated and collected on its customers and their various travels each day that different systems and practices need to be implemented to take advantage of the data available to companies.

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SMART DATA VS. BIG DATA

In a world dominated by analytics and data, it is essential to identify the difference between intelligent data and [big data](#). Big data is a term that was initially coined by tech gurus Alvin Toffler and John Naisbitt in their book "[Megatrends](#)."

Big data refers to the high amount of unstructured information coming from different sources.

Big Data Analytics can help companies create a unique online presence for customers. It can also help them personalize customer experiences while creating engaging content that will repeatedly lead many people back to your site.

On the other hand, Smart Data refers to a more targeted approach. It analyzes specific data from customers who have been on your site already. This type of data is much easier for companies to collect since only those interested customers in its products or services will be active on their website and social media platforms.

When dealing with travel industry data, smart data is the preferred type of data.

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PERSONALIZATION AND ENGAGEMENT

If you could create the perfect customer experience for every person who steps foot inside your store, wouldn't you want to?

Well, that is exactly what companies in the travel industry are doing- creating unique experiences based on each individual's likes, needs or wants.

Companies can better understand their customers' interests through big data analytics platforms like [SAS](#), thus serving relevant content when they visit their website

or social media pages. By engaging with potential customers through intelligent personalization techniques, brands within this sector increase conversions rates while also increasing revenue opportunities.

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DATA ANALYTICS

To address the specific needs of customers in the travel industry, companies must first understand that customer.

When looking at the industry trends, senior-level involvement in travel programs and policies has increased drastically over several years due to data analytics taking precedence.

This type of involvement is crucial because it allows companies to create stronger relationships with customers and create safer experiences overall. This is especially important when considering all of the risks of traveling across state lines or even internationally.

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COLLECTING REAL-TIME DATA

Real-time data is essential for brands within the travel industry.

Real-time data is particularly important in the travel industry because customers expect to be able to book a flight or hotel room with ease and any delays can mean negative feedback or a loss of customers.

According to SAS, "Companies are still struggling with how best to collect real-time data at scale." This is because there are many different aspects of travel companies' processes that involve collecting this type of information, such as customer service (contacting customers regarding their booking), delivery (keeping track of packages), and marketing (reaching out via social media platforms like Facebook and Twitter).

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THE CHALLENGES WITH REAL-TIME DATA

While real-time data has an abundance of use and value in the travel industry, companies face many challenges when managing and interpreting that data.

One of the biggest challenges is knowing when, where, and how to implement real-time information to benefit your customers. According to SAS's analytics experts, "The main challenge with real-time data today is convincing companies it exists!"

This creates a problem because many travel managers are unaware that they have access to valuable data or even what it might be used for to improve their overall customer experience.

Here are some of the main issues that arise with organizations and real-time data:

1 SLOW OR NONEXISTENT INFRASTRUCTURE

Having slow or nonexistent infrastructure is a common issue that companies experience with real-time data.

Companies must have the proper IT tools in place to handle this type of information. Otherwise, they will not benefit from it at all. Making matters worse is when you factor in how many systems are now mobile and regularly need access to accurate, up-to-date data.



2 POOR QUALITY OR INACCURATE FEEDS

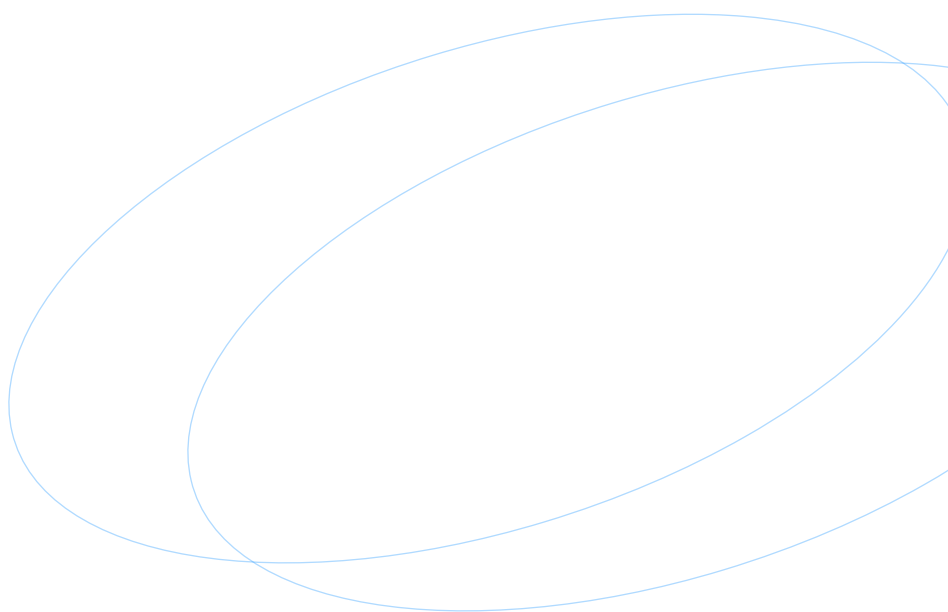
Another issue that often arises with real-time data is poor quality or inaccurate feeds; if the company's infrastructure cannot support them, these problems become even more difficult for customers to deal with.

3 UNDERSTANDING AND INTERPRETING THE DATA

While data collection is precious for an organization, real-time data can lead to challenges when interpreting the data. Real-time data is constantly changing, requiring a lot of time and effort to analyze the data correctly. Therefore, any company looking to take advantage of this type of information must have staff members trained in handling real-time data or have software in place that can handle the changes.

4 HAVING VARIOUS DATA POINTS IN MULTIPLE LOCATIONS

When using real-time data, there are often multiple data points coming from various locations. This makes it difficult for companies to know which data sets are the most accurate and where they can be found within their infrastructure. Also, this can lead to challenges when trying to communicate and relay information to cross-functional teams within the organization.



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HOW TRAVEL COMPANIES HANDLE REAL-TIME DATA CHALLENGES

There are many ways that organizations can handle the difficulties that are associated with real-time data.

Some of the main ways that companies can deal with these challenges include:

1 CHOOSING A MOBILE DEVICE MANAGEMENT SOLUTION

Having a mobile device management platform in place can be crucial for travel managers. This type of tool provides real-time data, which means it is constantly changing as customers move from one location to another and as they complete their transactions on your website or within your app.

2 PROVIDING ANALYTICS TRAINING

Another way organizations handle real-time information is by providing employees with some analytics training. This ensures that everyone working at an organization

understands real-time data and knows what types of programs would benefit most from such changes. Implementing new technologies like wearables

3 USING CLOUD-BASED STORAGE SOLUTIONS

Cloud-based storage solutions such as Amazon Redshift, Blob, or BigQuery can also alleviate some of the companies' issues when managing real-time data.

These tools are designed to support various cloud storage solutions, including Amazon SES, MongoDB Stitch, Azure Databricks, and more.



4 USING TEXT MINING SOFTWARE

Text mining software is another way organizations can overcome the difficulties of using real-time data in their customer travel programs. These platforms help companies analyze words within emails sent by customers and tweets posted on social media channels like Twitter; this allows them to gather information about what type of information would best benefit customers.

5 USING AN ETL TO CHANGE DATA IN MULTIPLE LOCATIONS

ETLs are another way travel companies can deal with the challenges they face when using real-time data. ETLs allow organizations to change multiple types of information at once, which can help them manage customer data more efficiently and effectively. ETLs can assist in transferring data from various locations into a centralized location where it can be analyzed and used more effectively. Using a platform such as Integrate.io will allow your company to utilize real-time data and make sure it is used as effectively as possible.

6 UTILIZING A SINGLE PLATFORM

A final method for handling these difficulties includes having one system in place so that you can access all of your customers' interactions throughout their entire journey. This streamlines business operations provides accurate information about various programs or services and allows employees to understand better what type of content would be most helpful for customers on an individualized level.

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BENEFITS OF PROPER DATA ANALYTICS

There are many advantages to having proper data analytics and interpreting the data for companies in the travel industry.

Here are some of the benefits to understanding the data:

1 IMPROVE THE CUSTOMER EXPERIENCE

Being able to collect and understand customer data leads to an increased overall experience. Knowing what type of information customers are looking for or providing them with personalized recommendations based on their preferences allows companies to understand exactly how they can help the clientele.

2 IMPROVE MARKETING CAMPAIGNS

Being able to utilize customer data also assists in improving your company's marketing efforts and overall brand awareness. By knowing who your audience

is, where they live or travel often and which activities they enjoy most will allow organizations to create targeted ads that reach the right people at the right time.

3 DECREASE COSTS ASSOCIATED WITH INCORRECT DECISIONS

Making incorrect business decisions can be detrimental to a business's success. If you are making business decisions off "gut feelings" or assumptions, something is wrong. Data analytics allows companies to make decisions based on real information and statistics, reducing the likelihood that incorrect choices are made.



4 REVENUE MANAGEMENT

Organizations in the travel industry can utilize data analytics to increase their revenue potential. Companies can make a larger profit margin by creating personalized experiences for clients and offering them incentives based on their interests.

5 AVOID FRAUD WITH REAL-TIME TRANSACTIONAL MONITORING

Monitoring your business transactions is essential when it comes to an understanding of how effective your company's marketing efforts have been. With predictive analytic platforms, you can monitor customer behavior online and determine whether or not there may be fraudulent activity occurring within the system that could lead to an issue down the line. This is just one example of how monitoring specific areas of interest ensure organizations avoid any problems before they become problems later on.

6 REMAIN STRATEGICALLY INNOVATIVE

Innovation is the key to any successful business and utilizing Big Data Analytics can allow your company's employees to remain more innovative. By having real-time data available, you can create new ideas, products, or services that will help improve client experiences or increase revenue margins without spending too much time in the planning stages of development.

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WITH MORE DATA COMES MORE RISK

While large amounts of data provide more accurate information and allow for more informed decisions, it also comes with its own set of risks.

If you do not have the proper data management systems to organize your customer's information, mistakes can be costly when making business decisions based on inaccurate or incomplete information.

Here are some common risks that are associated with big data in the travel industry:

1 DATA LEAKS AND DATA BREACHES OF CONFIDENTIAL INFORMATION

In today's world, high-profile data breaches are becoming more and more common. According to a report from ForgeRock,

in 2020, there were over one billion compromised records in the United States alone.

The most vulnerable type of data is data that is being transferred. Looking at an industry that depends on real-time analytics, information is constantly on the move. One of the best ways to secure moving data is to ensure an [SFTP](#) is being utilized. SFTP is an acronym for Secure File Transfer Protocol, which adds another layer of protection to the information being transferred between two systems via a third-party server.



2 UNORGANIZED DATA CAN LEAD TO INCORRECT ANALYSIS

Your organization must stay organized when looking over the vast amount of available data you have access to. Every piece of information needs to make sense and relate to an overarching goal or purpose. If not correctly monitored organizations could end up with conflicting reports making it difficult to draw accurate conclusions based on what they find within their collected data sets. This can lead companies down incorrect paths, resulting in poor decisions being made without the necessary knowledge needed to succeed. Being unorganized wastes valuable resources and decreases

3 INSECURE DATA STORAGE

The more data you store, the harder it is to keep track of and the risk that your records will not be held securely.

Accountability for protecting customers' details falls on businesses who hold this type of sensitive information, so ensuring policies designed specifically for keeping private data secure should always be a top priority if doing business online.

3 INACCURATE DATA ANALYSIS

When data is collected in multiple locations, from various sources, and stored in multiple formats, the analysis can be more complicated.

When analytics teams are left to their own devices for analyzing customer data, they may not be able to provide a complete picture of your customers' wants and needs. This means any marketing campaigns or product decisions could limit sales opportunities while also wasting valuable resources.

Incomplete information about your customers is always going to lead to frustration on both sides. So finding ways to collect better, store, analyze, report upon and use private data will give businesses much more insight into how best to serve their customers - making everyone's life easier in the long run.

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DATA RISK MANAGEMENT

While many challenges exist when dealing with big data, there are many ways that you can mitigate these risks. With technologies being developed and improved every day, the business opportunities for businesses armed with big data are growing rapidly.

1 ENCRYPT YOUR DATA

One of the most critical steps to better protect yourself and your customers is through encryption technology. One of the best ways to encrypt your data is through a virtual private network or VPN. This will give businesses peace of mind that their data cannot be accessed by just anyone who might come across it but only those authorized to do so - no matter where they're located or what device they're using at any given time.

A reliable and reputable [VPN](#) provider will encrypt all of your data so that it cannot be accessed if an outside party manages to get a hold of it. For those who have sensitive information stored on their system, this is a great way for businesses to protect themselves from liability and customers looking for protection over their data.



2 BACKUP DATA TO MULTIPLE LOCATIONS

A reliable backup system should always be in place. It is also important to note that backups should not be kept in the exact location as the original file or data set. A great place to back up data is a cloud-based storage warehouse. A few examples include [Amazon Redshift](#), [Google BigQuery](#), or [Microsoft Azure](#).

3 USE DATA PIPELINES IN THE TRANSFERRING PROCESS

Data movement between devices and platforms should also be handled by a secure pipeline that encrypts the information as it's being transferred so unauthorized parties cannot access private customer records during transmission.

[Data pipelines](#) are essentially a way of transferring data more securely, so sharing information is safe and reliable when passing from one point to another.

4 CLEAN THE DATA BEFORE A TRANSFER OCCURS

When data transfer from multiple databases into one centralized platform, you must clean the data before the transfer is complete. The best way to do this is to use an ETL, such as [Integrate.io](#). ETL's software works to transform and move data from one platform to another without errors or omissions.

This ensures all the information is properly formatted before making its way into a centralized location which reduces potential risks of having inaccurate customer data in your possession.

This could also be an opportunity for businesses to take their customers' experience up a notch by using big data analytics technologies such as predictive analysis, artificial intelligence (AI), machine learning, and natural language processing (NLP). These tools help organizations make more accurate predictions about what their customers might want, allowing them to provide much greater value while giving you better results with less effort on both sides, saving everyone's time and money.

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INTEGRATING A STREAMING ETL

When it comes to companies dealing with real-time data such as the travel industry, streaming ETL's may be the best option to help reduce costs and improve customer service and experience while being extremely efficient in your daily operations.

An ETL capable of streaming real-time data will allow companies to have a more hands-on approach with their customers by providing them the information they need at any given time - no matter what device or location they're using for access. This means there isn't any back and forth between businesses and customers over basic questions such as "where are you" or "what's your flight number."

The possibilities for bettering business through big data technologies like AI, predictive analytics, machine learning, NLP (natural language processing), etc., can be endless when it comes to transforming how we interact with travel experiences today.

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WHY INTEGRATE.IO IS THE SAFEST WAY TO TRANSFER YOUR DATA

With millions of data points being collected and real-time data analysis critical to travel business success, data transfers are becoming more constant, creating a lot of room for error.

Using STFP transfers combined with software such as Integrate.io, you can rest assured that your data is safe and secure because it allows customers to send them anywhere without the need for any technical knowledge.

This way, you don't have to worry about making a mistake that could impact how well your business does in the future, whether losing customer records or accidentally sending inaccurate information across various platforms.

Integrate.io also makes transferring large amounts of data very easy by allowing users access from anywhere at any time. Through their cloud platform interface with just a few clicks while simplifying even further what used to be an extremely complicated process down into something anyone can do when they choose. This helps reduce risks associated with errors during transfers so companies won't lose valuable time and money having to re-do these tasks.

If you are interested in securing the transfer of your data today, schedule a call with Integrate.io experts to see how they can help.