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The market for our product encompasses many business sectors and has far reaching implications. The primary goal is to address all instances in which private numerical data needs to be shared with another party for verification purposes. This objective is specifically aimed at scenarios in which the data doesn’t need to be revealed, but rather an aspect of it needs to be verified. For example, another party might need to confirm that a value is at least or no greater than a certain amount. In these cases, the actual value is not as important as whether it meets a particular requirement or not.

The primary markets that rely on this type of verification process includes the financial and real estate industries. These industries usually need to verify that a customer’s income or assets is at least a certain amount for qualification purposes. Therefore, our product aims to address these specific industries by providing a solution for the application process of their business transactions. These transactions include applications for mortgages, residential/commercial leases, business loans, and any other application that requires personal information such as income or assets to be verified for guideline requirements.

The economic activity within these industries is immense and, for the most part, collectively stable. In the real estate industry, over 5 million homes will be sold this year alone and most of those home owners will require a mortgage. Almost every mortgage application will require that the borrower provide income/asset documents in order to prove that they are financially qualified for the loan amount that they are requesting and that they have the means to pay their monthly mortgage payment.

Another massive sector within the real estate industry is the residential rental market. Over 2,600 new lease applications are signed every day. Nearly every one of those lease applications will require paystubs, tax returns or other income documents from the lessee. The landlord requests proof of income in order to verify that the renter makes enough to afford the monthly rent.

The customers for our innovative product are individuals who need to complete the types of applications that are outlined above and are at the same time very uneasy about sharing private documents such as tax returns and bank statements with other parties. Millions of consumers across the U.S. are very conscious about their personal data and yet most will have no choice but to share that private data with businesses during crucial transactions such as when applying for a mortgage or lease. Our product aims to address the privacy concerns of these consumers during these types of transactions by giving them the opportunity to use our application on a per verification basis. A verification will consist of any number of documents being uploaded to our database and shared with one other party for a single transaction. The application will allow the consumer to hide numerical data such as their income or account balance by encrypting it. This encrypted balance will be hidden from the party that needs to verify that it meets their minimum requirement, but the application will allow them to perform basic mathematical operations on the value in order to answer basic verification questions such as whether or not the value is at least a certain amount.

This unique product has no competition. There are currently no technologies available that offer anything remotely similar. Consumers have no choice but to simply reveal their personal information when submitting applications that require income or asset verification. Therefore, this innovative product will revolutionize the way applications are submitted within the financial and real estate industries.

The major risk in introducing our product to the market is acceptance by the institutions that require personal information verification. Businesses such as banks and mortgage companies set the guidelines on their application process, not the consumer. Acceptance and demand from the consumer alone will not be enough to successfully commercialize this product. It will take confidence in our technology and an openness to a new verification procedure from institutions that have been processing applications the same way for decades to make our product completely successful.

Our plan in successfully commercializing this product begins by making this product available online for personal use. Transactions may include verifying your income with a private landlord willing to use the technology for a lease agreement or sharing your bank statements with some unconventional party that is open to the idea of this technology. After receiving positive reviews from customers, we will start approaching large financial and real estate institutions and attempt to convince them to accept our verification process as a legitimate alternative to their standard application procedures. This would allow their customers to have the option of using our technology when submitting personal documents to them. By allowing their customers to use a verification process that keeps private data hidden, financial institutions will have a convincing selling point for apprehensive consumers who place a high value on data privacy.

This product is aimed at addressing consumer confidence when sharing personal information and data security. Many customers across the country are becoming increasingly aware of security issues that are arising with the advance of technology. Sharing personal information with a business is a security risk, regardless of how reputable that company is. There is always the possibility of unauthorized data access. Keeping a customer’s private data hidden will mitigate the effects of a security breach and give more confidence to consumers. In addition, giving consumers the option to hide personal information such as income or assets will make the private data verification process much more comfortable for customers.

This newfound confidence in sharing personal information with businesses will facilitate economic activity across the entire spectrum. A consumer’s confidence in sharing income or asset documents for a business loan will spawn new commercial activity and have downstream effects that will impact all industries. Apprehensive individuals that refuse to share personal documents and are forced to fund transactions such as home and auto purchases will have the confidence they need to provide their personal documents and obtain financing, maximizing leverage. Security breaches will have reduced effects, as information stored in databases will have less private information.

Developed properly and secured appropriately, this technology will only have a positive impact on the economy. However, without the proper security measures in place, this product could have adverse effects that would impact every industry. Modifying the data being verified by another party is the biggest concern. If the data being verified was fabricated, applications or transactions would be processed based on false data. The impact on the financial and real estate industries would be as grave as the 2008 financial crisis if this technology becomes the cornerstone of the application process within those sectors. Since the wellbeing of our economy relies on the security of this technology, fortifying this product is of paramount concern.

The most vulnerable area of our technology is the algorithm that encrypts the data intended to be kept private, as access and modification of this would allow the alteration of the data itself. We will take extensive measures to specifically ensure that this encryption process is done on a secure server. We will also have a mechanism that detects unauthorized access to secure areas of the application, which will allow us to shut down the entire platform in cases where a security breach has occurred. This will prevent transactions from being processed if there is a chance that the encryption algorithm was changed in any way. These measures will ensure a safe application that can be used confidently for any transaction.

Sources

SOURCES:

[HTTPS://WWW.STATISTA.COM/STATISTICS/275156/TOTAL-HOME-SALES-IN-THE-UNITED-STATES-FROM-2009/](https://www.statista.com/statistics/275156/total-home-sales-in-the-united-states-from-2009/)

[HTTP://WWW.RENTALPROTECTIONAGENCY.COM/RENTAL-STATISTICS.PHP](http://www.rentalprotectionagency.com/rental-statistics.php)