Data Privacy and Security Industry – Opportunities and Challenges

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Abstract – *Data Privacy and security with its Opportunities and challenges across the different domains in the outside world make the difference in individual perception for developing the business of any organization into next level. Key success for holding customer for a longer period.*

Key Words: Data Privacy, Data Security, Data Usage,

Customer Information privacy, Opportunities in Data protection. Challenges in Data Security, Block Chain Data Privacy.

1. INTRODUCTION

The Data Privacy and Security in Finance Industry is one of the key essential factor in any growing industry to make the customers more secure in terms of the details and confidential information of the customer data.

Data Privacy is to make the data hidden from the unauthorized users there is a necessity to maintain the data in private access instead of public to users who are not intended to view/modify/data the information.

Data Security for any information which is processed into statistical or analytical data need to provide security to use the data for comparison for future use, to make sure business will be done based on previous data.

1.1 Objectives of Data Privacy and Security in Industry:

To make the Data Privacy and Security stronger by implementing it across the different sectors of the industries from the ground level.

Need to use the multi-factor authentication to limit access to sensitive data in the systems

Use encryption algorithms to protect the data in transit

- Representations and warranties by the third party vendor concern the possibility of the information security issue.

- Create Secure Frameworks that involve senior management to improve the organization risks by prioritizing and fixing the available risks in the industry across the Line of businesses.

- Always choose a risk-based approach to select, engage and monitor the third party service providers.

- Create and deploy an easy and effective cyber intelligence program using all resources available to the entire organization.

- Periodically review the adequacy of an organizations timely and regular coverage of the threats identified will be properly reporting and closing them as priority based.

1.2 Opportunities of Data Privacy and Security:

Below are key factors to provide opportunities.

Protection of Valuable Information: Protection of data which is processed as key information for success of any business organization, it will be any form to maintain it in servers for long period of time without corrupting it.

Always there will be huge demand for information related to customers to take it as grant it hack or overtake privacy data.

Keeping Ahead of Hackers: Generally in the public and private sector banks have better security and data privacy standards are in the front ranks of the industry.
Expanding into multiple Markets: Adding security to typical applications is a way to expand the business into new markets

Caring about customers: When security is offered in software as a bonus, clients feel banks care about their well-being

Cost Optimization: Plugging security into application beforehand reduces development and support time

Bench Marking: In order to be reliable and up-to-date, software needs to follow latest standards.

Data Stability: Data, devices, algorithms, sensors and humans all from the future manufacturing landscape for developing across the industries across the globe.

2. Real life Example for Opportunities

The client is happy because if he gets quality product. Management is also happy because customer is happy.

If one was to introduce proper data privacy and security standards to such a situation it would probably decrease testing time a lot, it would produce a lot additional quality

and would in result decrease the cost. Chances of success in market will grow to higher level

2.1 Challenges of Data Privacy and Security:

Challenges are as described below

Protecting Privacy and Data Security: Protecting the customer data in a secure way for processing the valuable information to customers based upon business needs, which always been a key factor for analyzing the growth of business.

Controlling Third-Party Risk: Interacting with different vendors to make better reach of services always need to handle risk in optimal manner without exploiting the critical business tactics along with customer data.

Rising Expectations of customers by providing best service: Always it is great to provide better service for the customers who are expected to get better services from the different sectors of corporation.

Be ready with Emerging and Advanced Threats in Cyber world: As the cyber world is so strong to break the regular systems into problems, updating the software's is primary remedy to make sure each and every phase of an application going to hit the end users eye.

2.2 Role of Financial Service providers in Data Privacy and Security

- Financial Service providers for all types of industries are expanding their offerings to allow them on very globally acceptable threshold limit scale, save costs and improve customer experience with value added services.

- But as financial services evolve around organizations to process and need to ensure their information is safe and secure. So implementing information security solutions are truly able to protect sensitive data being collected and transmitted across the vertical and horizontal departments of the financial service provided organizations.

2.3 Block chain-Role in Data Security

Block chain name itself suggests that information which is passing from source to destination is divided into blocks to make sure entire data is not under the security threat for accessing the crucial information in a single point of time.

Block chain is a nothing but a software protocol which determines and captures the traffic between any two layers of the servers. It is also called as Meta-Technology.

Examples:

- Instead of handling files to companies like Amazon/Microsoft, one encrypts and distribute it across the network.

- Smart contracts can also be used with Block chains. It ensures that certain transactions happen when certain conditions are met.

Advantages:

Peer to peer networks can make download speeds lightning fast (similar to torrents).

Extra free space could be 'rent out' for money

The immutable nature of Block chain records helps to know if a file is accurate and unaltered

Data is distributed all over the world, so it is highly available whenever needed

Storage costs can be cheap –as low as $2 to $3 per TB per month

Dis-Advantages:

Complexity of block chain

Heavy power consumption

Uncertain regulatory status

3. CONCLUSIONS

Finally any web application is deployed across the globe to serve the people needs need to maintain the dynamic processing of data. Two techniques are there to protect the data privacy and data security is as listed below.

Encryption

Mathematically transforms plain text into cipher text for Making information in the form of raw data.
Scales to large data volumes for zipping the data into sensitive
 Level Used for structured and unstructured data for
Processing different kinds of data in unique way.

Tokenization

Randomly generates a token value for plain text and stores the mapping in a database in a dynamic way Difficult to scale securely and maintain performance of an application Used for structured data fields to maintain the expiration and unique for customers Difficult to exchange data without using the proper tokens The objectives of penetration testing is to discover any security flaws that can be exploited by an attacker in order to compromise application sensitive information, data, and authentication mechanisms and to identify any threat that puts the application at risk

BIOGRAPHIES

Performance Engineer working in fortune 500 company and author of the performance books

The authors of the below books in Amazon India:

Excellence in Performance Testing and Engineering Handy Book Dynatrace Performance Monitoring Tool and Real time performance issues