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## **Business Intelligence (BI)**

Business intelligence (BI) is a technology-driven process for analyzing data and delivering actionable information that helps executives, managers and workers make informed business

decisions. As part of the BI process, organizations collect data from internal IT systems and external sources, prepare it for analysis, run queries against the data and create data visualizations, BI dashboard and reports to make the analytics results available to business users for operational decision-making and strategic planning.

The ultimate goal of BI initiatives is to drive better business decisions that enable organizations to increase revenue, improve operational efficiency and gain competitive advantages over business rivals. To achieve that goal, BI incorporates a combination of analytics, data management and reporting tools, plus various methodologies for managing and analyzing data.

## **How the business intelligence process works**

A Business intelligence architecture includes more than just BI software. Business intelligence data is typically stored in a data warehouse built for an entire organization or in smaller data

marts that hold subsets of business information for individual departments and business units, often with ties to an enterprise data warehouse. In addition, data lakes based on Hadoop clusters or other big data systems are increasingly used as repositories or landing pads for BI and analytics data, especially for log files, sensor data, text and other types of unstructured or semiststructured data.

BI data can include historical information and real-time data gathered from source systems as it's generated, enabling BI tools to support both strategic and tactical decision - making processes. Before it's used in BI applications, raw data from different source systems generally must be integrated, consolidated and cleansed using data integration and data quality management tools to ensure that BI teams and business users are analyzing accurate and consistent information.

# **Why it is a key component. What strategies can be adopted to make e-commerce process secure and successful?**

## **First Why Peoples Adopted E-commerce:**

### **7 REASONS WHY PEOPLES SHOULD ADOPT E-COMMERCE**

E-commerce refers to buy and selling of products via electronic systems like the internet and online payment gateway. In order to stand ahead of the competitors' list appropriate Ecommerce SEO service are imperative. The latest statistics from Statista have confirmed that global e-commerce retail online sales will touch \$4.5 trillion in the next three-four years.

Most companies and sellers are making the best use of technology offering the most significant option for business firms to develop their outlets into a virtual retail store. Other interesting statistics from Statista B2B e-commerce sales are likely to touch \$7.7 trillion soon.

In the United States alone, more than 60% of consumers purchase goods directly from online retail stores from the comfort of their residence. It clearly reflects the growing popularity of e-commerce stores in the US and other areas worldwide. People also love the idea of shopping necessary things 24x7x365 anytime and anywhere at the best and the most convincing price.

**Easy Doing of Business:** The ecommerce listing services offer the most preferred way of doing business and carrying on their online retail trade in the most efficacious manner. The listing services facilitate the entrepreneur to showcase their products one by one on the site itself. The latest B2B Statistics revealed that 84% of online retail transaction and business will be generated from North America and Europe.

**Product Offers and Datasheet:** Online product listing will enable retailers to display their products on the site properly. The ecommerce product listing services will help the entrepreneurs get good ranking on the site. The latest report states that 57% of online shoppers purchase their products through companies based overseas.

**Higher Search Engine Ranking and Visibility:** Online retailing largely depends on the number of traffic a site can generate. It is well known that the brand having enhanced search engine visibility will perform great and boost sales as well.

**Warranty Disclosures:** One big advantage of e-commerce for retailers is that they appropriately disclose the warranty information with an apt description of the products and other information relating to warranty and guarantee that come with each of the products. Also, e-commerce sites properly provide detailed information relating to terms and conditions of the sales of the product.

**Less Inventory and Warehouse Cost:** In the last few years, e-commerce businesses have largely decreased the cost of inventory of goods through its automotive management inventory using web algorithm and other stockpiling techniques. Ecommerce service

provider greatly helps out the owners reduce cost and save some vital money for promoting their businesses.

**Well-Researched and Stay Focused:** The ecommerce SEO provider offers an essential service of providing the right information relating to changing buying trends of the customers to the online retail owners. It helps the traders to stay vigilant and fulfill customers' needs and requirements first. In a way, it helps to supply well research information to retailers and helps the firm owners stay focused and goal-oriented.

**Worldwide Sales of Products and Global Exposure:** The biggest advantage of online e-commerce business is its facilitation of the global sale of products. It also takes very less capital to start an e-commerce business than starting a traditional e-commerce business enterprise. Customers across the globe can easily buy these products from online e-commerce portals.

No doubt, for the effective and smooth transaction, sale, and purchase of e-commerce portal, online store management services are extremely essential. Those entrepreneurs who are able to get the same from an expert and experienced consultants are likely to get better sales boost and enhancement than others.

**why e-commerce process secure and successful?**

# Understanding eCommerce Digital Security

If we have to put it into simple terms, we can say that

eCommerce digital security is a set of guidelines.

These guidelines work towards ensuring that all the

transactions happening through the internet are safe.

Users who engage in online selling and buying goods and

services are protected by several protocols that are part of

these guidelines.

Any eCommerce business must have basic security in place to

win the customers' trust in the long run.

Such basic security includes - **Privacy, Integrity, Authentication, and Non-repudiation**. For an eCommerce business, taking care of these four pillars is as crucial as having a secure WiFi connection.

## **Privacy**

Prevention from all the activities that result in sharing customer data with unauthorized third parties is called Privacy. In the eCommerce business, you must ensure that customer data and account details stay between the retailer and the customer only, and no third party is included.

Most of the time, the sellers are responsible for the breach of confidentiality when they let others have access to private



data. As an online business, it is your job to enable at least a bare minimum of firewall, anti-virus, encryption, or other data protection. It will help you in ensuring your customers that their card and payment details are safe with you.

## **Integrity**

This is also a vital concept of security in eCommerce. Integrity means ensuring that whatever information the customers have shared on the internet remains unchanged. According to this principle, the information shared by the customer should be used only for the reason it was needed.

If you make even the slightest of alterations in the data entered by the customer, they'll start to lose faith in the security and integrity of your business.

## **Authentication**

The authentication principle is there to ensure that both the buyer and the seller are genuine. They must be who they claim to be. Businesses selling a product have to prove the authenticity of their existence, their product, and whether they deliver on their promises.

The same goes for the other side. Customers should also prove their identity to make the seller feel secure about the transaction. Authentication and identification are something

many eCommerce businesses are doing, so we know that it is a practical approach.

## **Non-Repudiation**

The word 'repudiation' means denial. And as the name suggests, the non-repudiation principle ensures that neither party can deny the actions they have performed throughout a transaction.

Both the seller and the customer should move forward with the transactions they have initiated. Many people, because of the virtual nature of transactions, feel eCommerce to be less

secure. In this situation, the non-repudiation principle acts as a layer of protection.

## **6 Reasons Why E-Commerce Secure and Successful**

### **1. Reduces Customer Churn**

For any business, customer retention is one of the top priorities, and it is not easy as many people consider it to be.

It takes an extraordinary approach to ensure that the customers who make a purchase once are interested in making it again and again.

A loyal customer who purchases the product and services, again and again, is fully invested in the company. In the same way, the company should also be invested in the customer.

To reduce the churn rate, it is essential to create a foundation of trust. To foster trust, you have to be very transparent and upfront with your data collection methods and procedures.

Consumers also expect to be able to reach your business whenever they need to with personalized support for a seamless customer journey.

You have to take the necessary steps and communicate the protocols. Moreover, you can make your customers feel more

secure by creating a publicly available document describing the precautions you are taking to protect them.

Making data privacy a priority will allow you to make your customers advocates for your services and products.

You can ask customers how they feel about the current privacy policy through various surveys and feedback forms.

## 2. Protects Corporate Assets

Your workforce must have skilled, responsible, and result-oriented individuals to manage the eCommerce business.

You'll need a diverse and knowledgeable team from multiple backgrounds and with unique talents to assist your customers and provide promising business continuity.

Suppose you wish to maintain a high level of efficiency and perform tasks optimally. In that case, you'll have to allow your employees to access a certain level of data from your customer database.

This can be data from support tickets, demographics, internal documents, financial statements, and much more.

However, you can't allow everyone to access this data. You must restrict its access from the ones who should not see it.

Balance out the risk associated with the misuse of your confidential and invaluable data, and ensure the database resources are used appropriately by asking users to verify their credentials.

### 3. Improves the User Experience

UX design and convenient navigation play an essential part in impressing a consumer and determining how they see your brand.

User-friendly and stylish sites go a long way in attracting customers and making it seamless to browse content and products.



On the other hand, poorly designed sites can make your customer leave the site and never revisit it in the future.

If your data collection notifications are not very clear, customers might not want to interact with your eCommerce site, which means you'll have a shortage in sales.

A digitally secured site will not bombard customers with many requests to accept cookies, user agreements, and complex data disclosure forms. Such policies take credibility away from your site and make it look less secure.

It is crucial to ensure that all the forms are presented neatly so that the customers don't get intimidated.

Good user experience and design can help improve the satisfaction of users, and more importantly, make them feel safer.

#### 4. Boosts Employee Competence

Training employees to understand threats and determine their level of seriousness is very crucial for the success of any eCommerce business.

When your employees are adequately educated about the best practices, they can act as the front line to prevent hackers and viruses from entering the enterprise.

Phishing agents send emails to tons of corporate emails at once. At first glance, these emails can appear legitimate as they address employees with their correct names and use relevant subject lines to lure them into opening them.

Once they open the email, the downloadable attachments that contain viruses can enter their system and compromise their data.

These agents are not complete professionals, though, which is why they leave sure signs which you can identify. Avoid downloading any content with an unknown origin.

## 5. Optimizes Business Processes

Companies are updating their software to increase functionality and make systems capable of completing required tasks.

Most of the updates contain vital improvements in terms of security. It can clear out bugs, which results in speeding up the process.

With time, the updates can pile up, so it is crucial for you to always keep an eye out for them. You should also update your eCommerce site and application to clear out any bugs and give your customers a better experience.

When you weave security into eCommerce optimization, everything will be running smoothly.

## 6. Protects from Ransomware

Another digital security threat for eCommerce businesses is ransomware, a type of malware that encrypts a business's data.

The data or system can only be unlocked in exchange for a considerable sum of money. Any data that you have stored in your system can be at risk from ransomware.

Not only can your device be affected, but there have also been some instances of ransomware attacks on cloud storage.

However, cloud storage is still considered by many to be a safer option and more and more businesses are opting to use it.

The only way to protect yourself from this type of attack is by being prepared for it. And how do you do this?

You can do prepare by creating a backup of your important files in multiple places. This shouldn't be limited to cloud services, but also locally and on portable storage devices.

## Biggest Security Threats to eCommerce Sites

There are numerous types of digital attacks you might face as an eCommerce business. And it is not possible to talk about even half of them in this blog post.

However, some attacks are happening more frequently, and everyone should know about them. Let's see what those are.

### Phishing

This is a type of social engineering method used by attackers to trick victims into providing personal and confidential information like accounts, passwords, social security numbers, and much more. It is typically done via email, phone calls, or texts.

Phishing is a form of digital security threat that evolves the most. In eCommerce, this data privacy attack can cause devastating damage to both businesses and customers.

There are numerous types of phishing too, but let's not get into that here. If not identified properly, phishing can ruin the reputation of brands.

## Malware and Ransomware

If your site is loaded with malware or ransomware, your customers might get their devices infected which can lock them out of their system and important data.

When your customers face an experience like this, the chances of revisiting your website are next to none.



Sometimes even your server can get infected, which can result in serious downtime. Downtime is expensive for any business, let alone eCommerce. But with regular site checks and maintenance, you can avoid a situation like this.

## SQL Injection

This is a type of digital attack in which hackers use SQL (Structured Query Language) code to tamper with the database and gain access to valuable pieces of information through it.

This type of attack is one of the most prevalent ones on the internet, and attackers can potentially use it against any web application or website that has used an SQL-based database.

Since SQL is used in most eCommerce sites, they are quite vulnerable to this attack.

## Cross-Site Scripting (XSS)

In cross-site scripting (XSS), several malicious scripts are injected into benign and trusted websites.

When an attacker uses a web application to inject malicious code to different end-users, generally it is in a side script.

An attacker can use XSS to send a malicious script to an unsuspecting user. The end-user will never know what the script contains, and when executed, it will do the harm it was meant to do.

## Final Words

Ecommerce digital security is a process that requires constant checks and eagle eyes to spot foul play.

Digital security is something that cannot be compromised in this world of severe cyberattacks. Once you take some measures to prevent it, your customers will feel secure when making purchases and transactions through your online store.

The reasons listed above should be enough for your eCommerce company to start working on securing it digitally.

***THE END***