



Enhancement of Brand Value through Anti-Counterfeit Technologies

CypHEME Whitepaper

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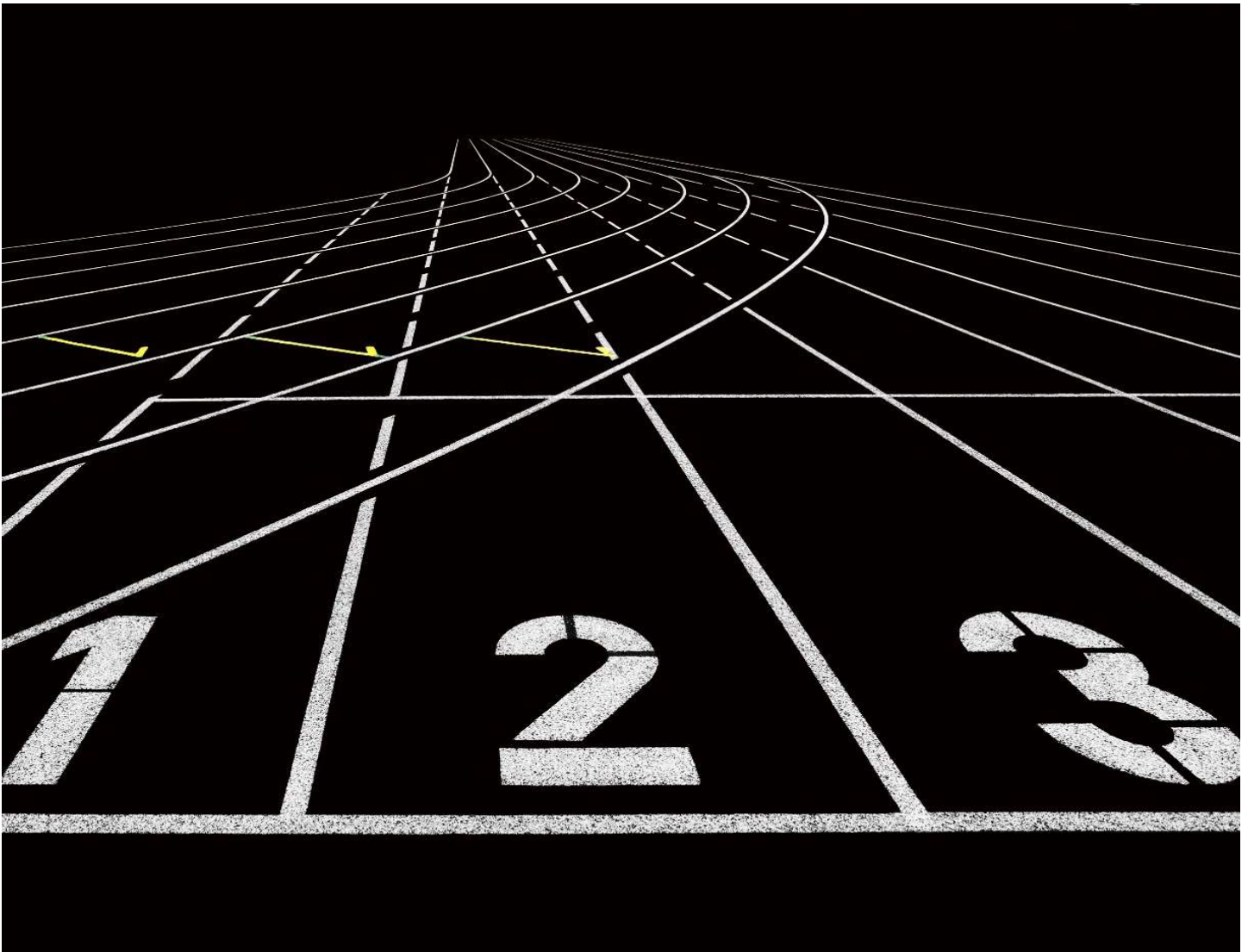
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ABSTRACT

Counterfeiting has become an epidemic in the global market. With brands incurring heavy losses due to counterfeiting, there has been an increasing awareness about anti-counterfeiting measures. This has led to a significant boom in Anti-Counterfeiting technologies.

There has been a thorough understanding of how these anti-counterfeiting technologies offset the adverse effects of counterfeiting, it has also been known that counterfeiting especially hampers brand value.

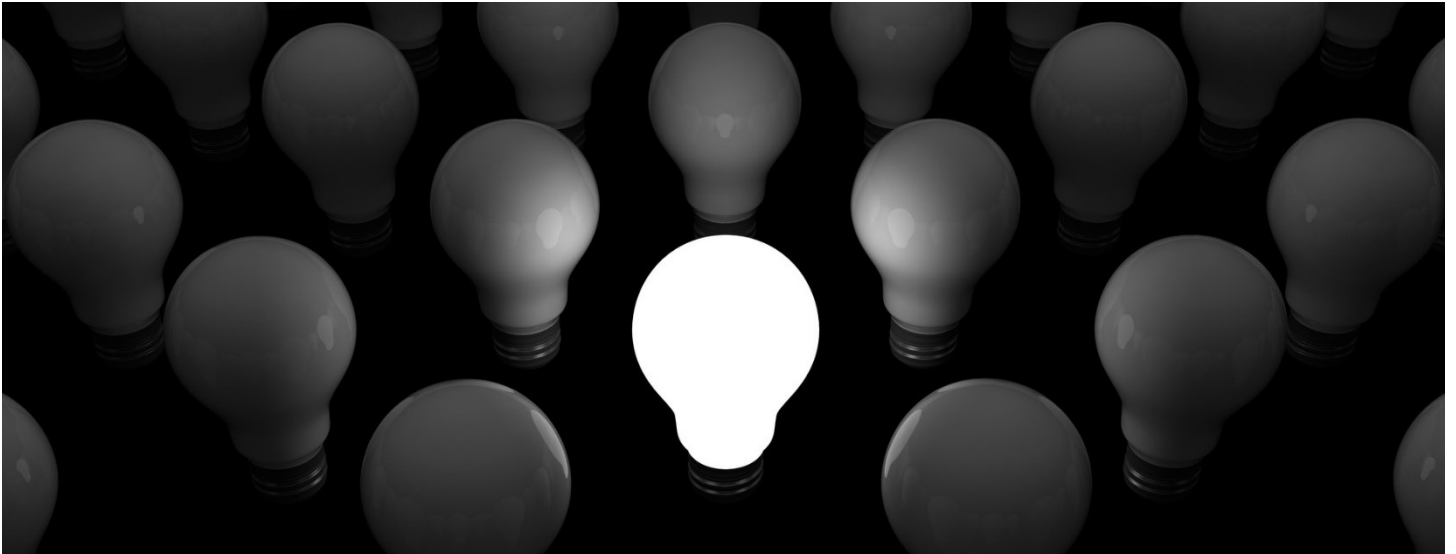
This paper further investigates the crucial relationship between anti-counterfeiting technologies and brand value. It strives to prove a positive relationship between the anti-counterfeiting technologies and brand value.

It assesses how anti-counterfeiting technologies propel an increase in brand value.

INTRODUCTION

Anti-counterfeiting technologies assist customers to differentiate false and cloned products from the original ones. As per authentication and validation prerequisites, the features in these products may be forensic, overt, or both. Implementing anti-counterfeiting technologies helps brands combat piracy, secure operations, and improve customer engagement.

However, Anti-Counterfeiting technologies just do not stop at that, they have a much larger impact apart from countering the adverse effects of counterfeiting. They not only protect brand value but also increase and enhance brand value.



DAMAGES CAUSED BY PRODUCT COUNTERFEITING

With the advent of globalization and the world market being accessed by all, counterfeiting has increasingly become a predominant threat to not only the manufacturers but to the consumers as well as the government. People have developed a cult following for branded products and this is gaining momentum with the rise of the e-Commerce industry.

Enthusiastic shoppers have been a driving force in helping to increase demand, and this has consequently created fertile ground for counterfeiters to ply their businesses.

Consumers' quest to purchase these products has seen them falling prey to the malicious intents of these counterfeiters. It is very arduous for a customer to differentiate the real from the fake just by the appearance.

According to the Global Brand Counterfeiting report 2018, the amount of total counterfeiting globally had reached 1.2 Trillion US Dollars in 2017 and was predicted to reach 1.82 Trillion US Dollars in 2020 (Soon & Manning, 2019).

These statistics turn more alarming as the report recorded that Luxury Brands incurred losses that accounted for 30.3 Billion US Dollars because of counterfeiting through the internet. Buyers, when they are purchasing products, do not have a clue what they are purchasing so it is a dread that one needs to adapt to, and the brands need to figure out how to reassure their new and returning loyal customers.



1.2 Trillion USD

Size of the counterfeit market as of 2017



1.82 Trillion USD

Size of the counterfeit market as of 2020



30.3 Billion USD

Amount that the Luxury goods industry alone has lost to counterfeiters

Since 2020, there has been a witnessing of the entrenched development of this underground market; the root of the counterfeiting industry is burrowing deep across industries, thereby creating a major headache for stakeholders.

The results are far-reaching and unsafe, so much so that different ventures, industries, and businesses are increasingly losing their brand credibility, brand image, and the trust of their customers. The difficulties involved in authenticating a product, identifying the genuineness of the brand and conducting legal proceedings against the counterfeiters are increasing every day. Billions of dollars are being cleared off economies worldwide. Globally, counterfeiters are making brisk profit by selling fake and substandard goods to unsuspecting consumers.

The results are far-reaching and unsafe, so much so that different ventures, industries, and businesses are increasingly losing their brand credibility, brand image, and the trust of their customers.

Research suggests that two-thirds of consumers who have unintentionally purchased counterfeit goods have lost their trust in a brand. A major difficulty in the recent security label market is choosing the right type of protection and assurance at the right worth. With a growing number of unique technologies flooding the market, it can be daunting to narrow the field and select the protection solutions which best fit the circumstance.

The United Nations issues the warning that forged goods are among the highest and noteworthy income sources for organized crime. An influx of fakes is deluging brands of all types and sizes from consumer products like footwear to life-saving medications. This jeopardizes the product's trustworthiness, negatively impacts brand value, and potentially causes loss of lives. It is more indispensable than any time in recent circumstances that brands become proactive in understanding the danger they face on both tangible and intangible levels.

Safeguarding brand value and protecting the brand's products against the counterfeiters is a global challenge spread across all the industries as the grey market exercises and falsification creates incidences of unpleasant consumer experience, negative product impression, low performance, and lost deals, all of which may hugely affect the market cost of the product, the market value of the brand, harm the brand elements and damaging the customer's trust.

Global brands perceive this and integrate specific brand protection solutions and strategies to control the dangers presented by the counterfeiters in a modern world. This is where Cypheme comes in to assist brands with the best protection solution on the market with its innovative AI-based neural network anti-counterfeit technology.

Cypheme's noise print technology labels are created with different and unique algorithms to solve counterfeiting and deal with forgery in various industry verticals. The Cypheme team through thorough Research and Development created a noise print certificate which interacts with the Cypheme AI solution via a smartphone and directly authenticates products.

To increase consumer safety and battle counterfeiters, Cypheme through conscientious efforts is using artificial intelligence (AI) to help make genuine products uniquely identifiable and making it easy for consumers to check a product's authenticity.

Cypheme has been on the top of the list when it comes to protecting brands from counterfeiting activities globally. Over the period, Cypheme has become the standard bearer when it comes to product trust and originality.

Cypheme's proprietary label tag carries Artificial intelligence-based technology which helps brands across the world to weed out the distribution of the imitated and fake products. Noise Print labels are the new symbols of originality and quality.

It is becoming the norm that customers get relieved anytime they spot a Cypheme Noise Print AI label on a product. Cypheme's artificial intelligence is capable of detecting counterfeit products by analyzing the product's packaging with a neural network, using only a smartphone camera.

CONSUMERS' VIEW ON THE EFFECTS OF COUNTERFEITING ON BRAND VALUE

CONSUMERS' VIEW

A recent research by the United States' Intellectual Property and Counterfeit Goods department carried out in February 2020 shows that as much as 88% of consumers believe that brands should do more and be proactive in fighting counterfeits.

It also reports that 68% are of the view that most brands are not taking the fight against counterfeits seriously and this has a significant impact on the premium they place on a brand and ultimately the purchasing decision; consumers tend to prefer brands that actively fight counterfeits.



THE EFFECTIVENESS OF CYPHEME'S AI ANTI-COUNTERFEIT TECHNOLOGY

Digital solutions for defeating the counterfeiters are enabling brands to guarantee product authenticity and secure their supply chain distribution network. The need for anti-counterfeiting solutions is becoming increasingly apparent, and the trend is expected to continue in the future.

Major brands around the world are now implementing secure anti-counterfeiting solutions to protect their products against fraud from production and throughout the supply chain to the point of sale. QR codes or RFIDs were the earliest attempts at solving counterfeit problems, but they have not proven to be the most reliable or utmost solution to combat counterfeiters. QR codes can be inefficient as it is easy to clone, while RFID tags on the other hand can be complex to set up.

Major brands around the world are now implementing secure anti-counterfeiting solutions to protect their products against fraud from production and throughout the supply chain to the point of sale. With Cypheme's modern microstructure analysis AI-based anti-counterfeiting technology, it is simple to defeat the fake products and the counterfeiters. All that one has to do is, take a picture of your brand's product label with a smartphone and the Cypheme system would analyze the authenticity of the product.

Cypheme's AI-based solution is the best approach to counterfeit protection. The Cypheme technology allows anyone, anywhere, to verify the authenticity of the products adopting the solution. Its layered technology analyses the microstructure of the product pretty much like a retina scan for your brand and distinguishes between genuine or fake.



UNDERSTANDING THE POSITIVE CORRELATION BETWEEN BRAND VALUE & ANTI-COUNTERFEIT TECHNOLOGY

Brand value authenticity and protection goes beyond a product's physical and monetary worth. It is established in priceless intangibles like purchasing confidence, consumer faith, or hard-earned reputation, and it is also rooted in the brand product's provision of status. It is these intangibles even more than your product's physical aspects that counterfeiters try to misuse to exploit the brand value. Understanding brand value protection is simple enough in theory, but many brands feel it may be excessively befuddling or difficult to execute.

Brand equity is created over years and it is an impression in the eyes of the customers about the brand. Manufacturers invest a lot in the efforts to differentiate their products on the market by creating a unique product concept to build a respected brand name. Counterfeiting attacks these differentiation efforts and strips away the product of its uniqueness. Brands these days are suffering a great loss in brand equity because of the ambiguity created in the market about the product being fake or real.

This is the point where Cypheme steps in, its popular AI-based noise print label is the new symbol of trust. No "QR Code", "RFID chips" or special hardware is required. Simply by scanning a Cypheme compatible package using a smartphone, customers can tell whether the item in front of them is genuine or not.

Customers are loyal to their favorite brands and brand-loving customers can help the company spot a fake product across the world and minimize counterfeiting. Branding is costly and very sensitive and counterfeiting directly hampers it.

Losses like the ones incurred by the luxury brands gravely impacts their revenue, which is tantamount to the company's brand value and equity. Brand value is built by customer loyalty and boosting the repeat purchase potential of the product, and both of these are based on how different the product is from the other products on the market.

These anti-counterfeiting solutions protect the differentiation efforts taken by the brands and therefore protects the brand value. However, Cypheme's Anti-counterfeiting technology does not just stop at that, it has a much larger impact apart from countering the adverse effects of counterfeiting. It does not only protect brand value but also increases and enhances brand value.

The Cypheme anti-counterfeit solution works for brands operating in various industry sectors like Wine and Spirit, Fashion and Accessories, Cosmetics and Perfumes, Jewellery and Horology, Food and Beverages, Industry, Medicine, and Documentation.

Cypheme's innovative technology includes unique AI-based digital codes that authenticate a particular product and detect a particular counterfeit product. The technology has proven to be useful to all three stakeholders - the manufacturers, government as well as consumers.

Cypheme's technical team specializes in developing algorithms that create several layers of neural networks which adds to product security, genuineness, and authentication. Usage of such advanced technology creates a hindrance for the counterfeiters to duplicate the product, and therefore helps in curbing counterfeiting completely.

Cypheme's Anti-counterfeiting technology further saves marketing investment made by the manufacturers by helping them maintain strong customer loyalty and a reputable brand image. This positively increases the worth of the product, thus its brand value. As the technology establishes the product's genuineness it offers security to the product and the brand.

Anti-counterfeiting technologies come in various forms that help improve the brand value of a product. They are majorly divided into two types, which are Overt and Covert. As the name suggests, overt technologies are easily visible and noticeable to the people.

There are various examples of overt technologies like the tamper-evident packaging which helps in easily detecting any unauthorized access to the product, and these devices can be in the form of breakable caps, markings, seals and bands, etc. The latent images formed on bills, banknotes, credit cards, etc. are also an example of an overt anti-counterfeiting technology (Gao, 2018).

Cypheme's AI stickers not only offer brand authentication but also provide evidence of tampering. This makes the product easily recognizable as authentic and therefore safeguards the reputation and the standard of quality that comes with it.

Covert anti-counterfeiting technologies are not visible and therefore it is not easy to detect or copy. Digital watermarks are one of the best examples of covert technologies. Digital information can be hidden in a digital carrier through the process of watermarking. Digital watermarks are used to display the identity of the owners.

Embedded images are also widely used for authentication purposes, which are very difficult to duplicate. Another such technique is using lasers to leave a mark or engrave an object, and it is called Laser coding, this is used a lot on printed cardboard, metals, etc. (Hoecht & Trott, 2014).

The invisible printing on the product surfaces has been allowed by the microscopic application of UV inks which is enabled by the nano-printing technologies, this is also an example of a covert technology. Cypheme's Anti-Counterfeiting AI-based technology not just authenticates the products but also ensures their secure movement through the entire supply chain. The anti-counterfeiting technology provides an exact location of the product which can prevent large-scale counterfeiting as well as product-specific information that can be tracked and traced in real-time.

These are famously known as tracking and traceability solutions. This solution is more often used in the pharmaceutical sector where it helps in capturing the product's status in the supply chain and verifying its path (Deisingh, 2005).

Also, the information that these codes provide has an added advantage of the manufacturers being able to efficiently anticipate the right quality for the next production. Cypheme has successfully solved the anti-counterfeiting case in the pharmaceuticals industry with its Geo Tracking solution.

These technologies work wonders in real life, such that they have also been adopted by governmental and intergovernmental organizations. The World Customs Organisation has developed

an anti-counterfeit tool called the interface Public Members that is a mobile application that enables the owners to provide customs with the real-time data on their product (Hoecht & Trott, 2014).

The custom officers assess this information which not only increases the security of the product, but once approved also gives legitimacy to the product on the market and that improves its brand value. Similarly, Cypheme helps to track and trace systems for the prevention of trade of counterfeit liquor on a very large scale across the world.

The distillers and manufacturers provide the bottles and the cases with unique AI label stickers, and this includes information like the date of manufacturing, best before the date, and the batch number. It does not only help in uniquely identifying the bottles but also helps in the automation of daily sales, tracking of liquor bottles, and inventory reporting which helps the authorities to know the exact location of the bottles.

As a result of powerful anti-counterfeiting measures, shoppers' loyalty, warranty, and various promotional programs are coming to the fore. Improved customer commitment, engagement, and brand loyalty solutions are an after-effect of the appropriate implementation of advanced innovative technologies.

Overall, battling fraudulent manufacturers, fighting against fake distributors and dealers has become simpler with Cypheme's unique noise print label tag which has to be affixed to any product, giving it a unique identifier, which is impossible to duplicate. Engaging with the buyers through smart tags promotes faith and assurance in a brand. Once the consumer can confirm that the product they are purchasing is legitimate with a valid history, they are likely to purchase from that brand again.

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