

Building a resilient brand integrity programme

World trends are driving global brand protection and brand integrity needs, but purely legal remedies are often insufficient. Instead, an integrated approach that utilises the right balance of legal elements, coupled with modern brand protection technology, is key

The problem of counterfeit products is international and cuts across multiple industries, affecting a wide range of products including pharmaceuticals, spirits, electronics, consumer products, personal care products, fashion, beverages, machine parts and more. It has been estimated that between 4% and 7% of world trade is counterfeit. While there is no silver bullet solution, there are strategies and options in common use across various industries for dealing with counterfeiting or brand protection issues.

For cost and other reasons, it is simply not possible for any company to mitigate all possible counterfeiting risks. The challenge is for individual firms to identify a comprehensive brand protection strategy which manages the counterfeiting risk unique to that firm. To do this, a brand protection strategy must provide the right balance of resources (legal, strategic and technical) to help mitigate risk and minimise the scope of any counterfeiting problems the firm may encounter.

This article attempts to dispel some misconceptions connected to this area and to summarise what firms need to know. The single most compelling piece of information to take away is that today, purely legal remedies alone are often insufficient.

Counterfeiting drivers

The issue of counterfeiting dates back thousands of years and includes the counterfeiting of wine and coins. Today, a major driver accelerating the problem is the ever-increasing levels of globalisation and expanding world trade. The global business landscape has changed drastically over the last 20 years in ways that have been swift, abrupt and dramatic. Countries and regions which once seemed unchanging and immutable have been largely reshaped. New and competitive markets have opened up; global marketplaces are proliferating, and with them counterfeiting.

AUTHOR
RICHARD P GILL

An example of the globalisation of world trade is the growth of internet pharmacies. While there are many legitimate sites, the US Food and Drug Administration (FDA) has reported that half of the approximately 400 sites now accessible to US-based consumers dispense medicine without a doctor's prescription or diagnosis, and half of these sites are located in foreign countries. The World Health Organisation has estimated that more than 50% of the medicines purchased online from illegal sites that "conceal their physical addresses" are counterfeit. Notably, all of these illicit products are available for delivery right to the purchaser's doorstep – sometimes overnight.

In parallel to these global changes, science and engineering have been transformed by rapid advances in the speed of communication and availability of data and data analysis. The world has moved rapidly to wireless internet communication and it is now possible to communicate easily with almost anyone anywhere in the world at the touch of a button. The convergence of these elements and the scale of these changes have given rise to rapid global economic growth – the most rapid and the most active in world history. Businesses now have easy access to new, large and growing markets. In turn, consumers have at their fingertips the ability to shop globally. The online shopping boom has been accompanied by a commensurate boom in counterfeit goods.

Every week there are stories about counterfeiting connected to products that touch our everyday lives, such as pharmaceuticals, fashion, electronics, DVDs, food and more.

Some of these products will be purchased by consumers complicit in the knowledge that they are counterfeit (eg, DVDs or music); but, more ominously, some will be purchased innocently and could pose serious health dangers (eg, pharmaceuticals, cosmetics,

infant formula and aircraft parts). Name the product or product type and it has been counterfeited – from big-ticket expensive products to small, inexpensive items such as teabags, glue sticks and car air fresheners.

The benefits of a global economy clearly go hand in hand with issues of mass product counterfeiting, adulteration and brand problems. These problems are exacerbated by weak international regulations and uneven enforcement of intellectual property, especially trademarks, and product safety laws by individual governments. The Internet is indeed a double-edged sword that can facilitate both legal and illegitimate trade.

Why brand protection and brand integrity?

From a brand protection (anti-counterfeiting efforts) and brand integrity (protecting a brand's marketplace image) standpoint, too many companies still manage their brands as they did in the 1980s and 1990s. Firms which do not see themselves as being tied into the world market may do a poor job of overseeing their product distribution networks and dealing with third-party suppliers and manufacturers – all areas where counterfeiting can originate. Given these global issues, to rely exclusively on legal protection is akin to being a home owner and putting a white picket fence around your house in the hope of keeping out burglars – it simply is not enough.

For a firm concerned about counterfeiting, the goal is to protect profits, the product and the marketplace brand image. Viewed in this way, it is clear that brand protection is much more than an optional insurance policy. Counterfeiting is connected to bottom-line corporate loss. Legal protections must be part of an integrated brand protection strategy, whose implementation is accompanied by the appropriate technology. Unfortunately, the scope of interdisciplinary knowledge required means there are few experts to consult with sufficient comprehensive knowledge. It is therefore valuable to understand the interplay of all elements involved.

Legal controls

Legal protections are typically coupled with legal enforcement and can include registration and documentation, cease and desist letters and takedown notices. As discussed, in most cases these are no longer sufficient by themselves, as they provide only a part of the programmatic control policies and operational processes required to keep products and firms out of harm's way.

Product and brand protection efforts must be centred and balanced around the product and brand, the company and the marketplace.

A brand protection plan must span the range from intellectual property and product manufacture to supply chain security, with no missing breaks or holes. The weakest link strategy applies here: any oversight or flaw will likely be found and exploited by criminal counterfeiters.

IP issues for products, brands and general company operations are different for each country and each product. However, the key IP questions for consideration are similar regardless of the country, region or product,

and should be addressed systematically:

- Trade secrets – is this the route to go (as opposed to patents), and how should these be handled and protected from theft?
- Patents – should you go to the difficulty and expense of creating patent portfolios?
- Trademarks – where, when and how should these be registered?
- Logos – where and how should these be registered? How should squatting and illegal use be dealt with?
- Copyrights – when and where should these be registered and how should they be protected?

The answers to these questions will vary from firm to firm, based on situational and regional circumstances. How these strategies and questions are addressed internally helps to set up the legal framework that best protects a firm's intellectual property and products. That said, these questions do not provide guidance as to the way in which products are developed, designed or sold, or the way that suppliers or third-party manufacturing sites are selected and monitored. The above questions only provide a framework to identify the firm's brand protection goals and priorities. In general, if a product is important enough to copyright or patent, it has value and therefore needs some level of protection.

A variety of legal options let you take action when and if you are attacked, but they do not prevent an attack any more than putting that proverbial picket fence around your home prevents intruders or burglars from breaking in. While they arguably provide some defensive hindrance, practically speaking, they provide little real value against a determined criminal counterfeiter or grey marketer who is not afraid of breaking in or skirting the law in the first place.



A variety of legal options let you take action if and when you are attacked, but they do not prevent an attack any more than putting that proverbial picket fence around your home prevents intruders or burglars from breaking in

Getting started

Many brand owners are put off by the perceived cost of brand protection, yet confusingly are willing to pay high insurance premiums on their factories, warehouses and businesses. The benefits that brand protection can provide are arguably a small investment considering the potential loss to brand reputation and bottom-line profits in the event that consumers lose trust in their product or brand.

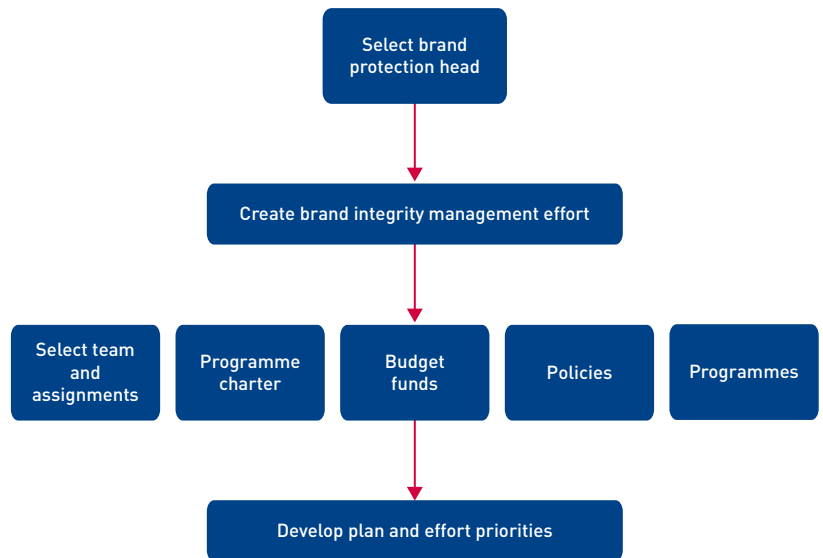
Selecting a brand protection path is daunting due to the many complex technologies that have proliferated in the past three decades and because many firms persist in believing that a simple magic bullet (technology or

approach) will solve all of their brand protection needs. A true magic bullet will likely never come, so a layered approach combining several technologies into one package or strategy is often advisable.

To aid in developing a good working brand protection effort, consider this list of factors when getting started:

- Understand the problem – look at the big picture and understand your brand’s particular situation. What are the threats? Are there counterfeiting, diversion or grey-market issues – or perhaps all of the above? What investment would mitigate or help to mitigate the problem? Are there other possible benefits to be obtained from a brand protection effort?
- Every brand protection situation is different – a strategy will be more effective if you put yourself in the shoes of the criminals. What are their motivations? What are the opportunities they see (eg, the weak links in your supply chain)? What lengths will they go to achieve their goals? How easily can they be put off their goals? Do not underestimate a counterfeiter’s level of knowledge and sophistication.
- Measure the urgency of the problem – is counterfeiting tarnishing your brand? Could a safety or health hazard cause loss of market? What are the worst-case scenarios? Can you prioritise the degree of damage to your brand in potential scenarios? What level of prevention or deterrence will protect your product and brand in the marketplace and help preserve consumer confidence and return on investment?
- Select prevention mode as opposed to just reacting – reacting to a past counterfeiting event means that you have already lost part of the battle. As a result, you can end up targeting a previous threat and wasting your investment in one area that would probably be better spent on a broader strategy. Counterfeiters are resilient and highly adaptable.
- Keep your programme expectations realistic – brand protection is more about deterrence than prevention. Deterrence is the key. The goal is to disrupt the nature of the crime and frustrate the motivations of the criminals, making the effort of the crime more trouble than it is worth.
- Quantify the value of a loss to your company – know what elements of your brand you own, both legally and in the minds of your customers, and their value. In foreign markets, selling a copycat or lookalike product might not legally be considered counterfeiting. Unfortunately, just by association, the lookalike can still do a great deal of damage to a legitimate brand’s reputation.
- Know the counterfeiter and the environment in which it operates – the concept of intellectual property can be very different in other countries from the norms in the United States and Europe, including what is considered a crime and what is not. It can be more helpful to think of the problem in the general context of fraud and as an attack on your firm.
- Consider the different possible types of counterfeiter – realise that most criminals are motivated by economic concerns and try to envision who exactly is threatening your brand. They might be part of an organised gang or sanctioned by an overseas

FIGURE 1: Brand integrity programme structure and development steps



government. They might be opportunists looking for a one-off quick return, or they could even be your own employees looking for monetary gain or to get back at your firm.

- Use a multi-disciplinary approach – this includes technology and science and supply chain management, as well as printing or package engineering (if applicable). This is necessary for several reasons. The more integrated elements in a brand protection solution, the more difficult the package or product will be to counterfeit. In addition, supply chains are growing in length and complexity, and companies may use suppliers without having once met face to face. You cannot control all of these factors, but you can apply a strategy that works despite the complexities – perhaps one that even takes advantage of complexities, as only you can see all the multi-faceted elements as a whole.
- Be cautious in believing all supplier claims or falling for the latest technology fad – technologies are always moving forward and sophisticated supply chain and new brand protection tools are trying to attack problems in new and unique ways. Some of these untested tactics and technologies are great solutions on paper, but most will fall short in the real world.
- Think twice before advertising your brand protection strategy – do not add a warning label on your package unless you are asking consumers to participate in your supply chain verification efforts or want those who are manufacturing your product as a third party to know you have the ability to check. The strategy to engage consumers regarding the potential of counterfeits and as product authenticators deserves careful consideration as consumers are notoriously bad at discerning fakes. Although there can be a deterrent effect by notifying the market that the brand owner is actively protecting its product(s), this strategy is just as likely

TABLE 1: Benefits of an on-package security approach

1	Low cost
2	Can be integrated into existing processes
3	Rapid yes/no determinations for in-field users or customs officials
4	Easily implemented
5	Number of features is easily scalable or layered

to chase away potential customers as it is to deter those who would commit fraud.

- Do not try to look ahead and anticipate future rules and regulations – California’s recent plan to have the pharmaceutical industry adopt its track and trace or e-pedigree requirements was derailed by the FDA, but only after some companies had already started to adopt them. Rather than jumping to expensive tactical solutions, a wait and see approach may be more sensible.

Role of technology

Anti-counterfeiting and brand protection technology (what goes on a product or its packaging) is a complicated but important aspect of a brand protection effort. White papers and books have been devoted to this topic and unfortunately a full treatment is beyond the scope of this article. Brand protection technology can include opto-electric readers, chemistry, physics, printing, security inks, taggants (ie, chemical or physical markers added to materials to allow various forms of testing) and the merits (positive and negative) of track and trace and radio frequency identification (RFID).

Despite what one might have read in the popular press, no one technology has totally revolutionised the marketplace. Past notoriety notwithstanding, the 2013 ISO 12931 standard (which specifies performance criteria for authentication) has deemed that track and trace alone is not an authentication solution. As a result, the most powerful strategy has been, and remains, a multi-faceted approach which combines several anti-counterfeiting technologies (eg, overt, semi-covert and covert approaches). These three categories of anti-counterfeiting technology are discussed shortly.

Technological choices for combating counterfeiting can be confusing with regard to selection, trade-offs and method of deployment, so it is worth considering partnering with an outside firm with experience in this arena. There are many good firms to select from, some of which have collectively spent years working on brand protection and anti-counterfeiting efforts with companies of all sizes. Brand protection supplier firms can bring a wealth of experience to a brand owner and some can offer a large brand protection technology portfolio to help address particular issues.

If your firm sells globally, consider employing a larger brand protection solution provider (as opposed to a small technology firm) whose global reach can provide both international support and a large portfolio. A broad portfolio should run the gamut from overt, semi-overt and covert solutions and its availability means that a solution can be more tailored or targeted to your firm’s individual needs. Whichever firm is selected, be sure that it provides a strong chain of custody for its security products – not only for what it manufactures, but also for how it safeguards the information relating to how it manufactures security product(s).

Returning to the important concept of a layered solution, an excellent example can be found in a person’s wallet in the form of paper currency. In many ways, a bank note can be thought of as packaging which covers a non-physical product. It is basically the visible outer wrapper (or packaging) for the intangible value represented by the denomination of the monetary note in question.

Often a currency note will have between six and 10 overt security features, with many more that are hidden (covert). Note that the number of security features in currency is extreme relative to the needs of standard products or packaging. The number and type of anti-counterfeiting technologies deployed on a given product (or its packaging) should be based on the given situation and the goals of the brand owner.

Anti-counterfeiting technology options

Drilling down a little further into technology choices, particularly as they relate to using a layered approach, security technology solutions can be categorised broadly into three basic types:

FIGURE 2: Technology security table

Level of security	Security technology examples		
	Overt	Colour shift ink, hologram ...	Visual field
	Semi-overt	Metachromic	Visual or reader
	Covert	IR optical taggants	Opto-electric reader
	Direct product testing	Laboratory	Laboratory or field analytical techniques
	Forensic	Forensic taggants	Laboratory analysis
	High		

- on-package based solutions, including on-product solutions;
- serialisation and/or track and trace, including bar coding and RFID; and
- direct product testing (eg, forensic analysis in either the field or the laboratory).

On-package based approaches are the most prevalent. Virtually the same technologies (with some exceptions) are also used for on-product solutions.

Serialisation refers to the process of identifying and possibly tracking at the unit level, using a number specific to each unit (an example is the serial number on currency). The number (often in the form of a standard bar code or QR type matrix bar code) might be given as an alphanumeric code or a data matrix.

Track and trace is another method which processes data, often in real time, as the item moves through the supply chain. It can require expensive infrastructure, including readers, scanners, data bases and personnel. Tracing is frequently used to find an item in case a recall is needed or to identify a product's history in the event of a counterfeiting or quality problem.

Direct product testing refers to the use of laboratory or field analytical techniques to determine product authenticity by chemical or physical analysis. Common analysis methods can include near-infrared (NIR Spectra), Raman spectroscopy, colourimetry tests, UV-visible spectroscopy and various chromatographic methods. Direct product testing is the least used anti-counterfeiting method, primarily because of the expense, but all of these methods come with trade-offs.

Arguably the most effective security solution (including cost effectiveness), is the on-package approach (as opposed to the on-product). Table 1 details the many benefits of using this approach.

'On-package' refers to the incorporation of anti-counterfeiting technology into a product's packaging. For an on-package based approach, sub-options can include a combination of overt, semi-overt and covert technologies. A number of firms offer a range of overt to covert security features that can be supplied as printing inks, and thus can even be incorporated into the packaging without the knowledge of the printer or converter.

What level of security?

Any brand protection strategy must also consider the level of security desired, whether low, intermediate or high.

High-level covert solutions offer increased security compared to overt solutions and are viewed as the second line (or higher level) of defence. High-level covert solutions will usually contain some form of taggant that is visible or detectable only through the use of a hand-held reader, which can range from a laser pen to a sophisticated dedicated opto-electric reader with controlled distribution.

In addition to providing authentication, taggants can allow global or regional monitoring to determine the extent of a firm's counterfeiting issues. Finally in this covert area, forensic markers can be incorporated into both products and packaging. Expensive laboratory analysis is required to detect forensic markers, but they can play an important role in identifying fakes

and (more importantly) can serve as solid evidence in courtroom situations.

Overt feature solutions offer lower security, but also ease of use and are clearly visible to the naked eye. For these reasons, they do not require a detector and can include holograms, colour-shifting inks which change colour depending on the view angle, metachromic inks that change colour based on the light source and thermochromic inks which change colour based on temperature.

First-level (low level) covert solutions include invisible fluorescent inks, which are invisible in daylight but exhibit distinct fluorescent shades on exposure to UV light. Coloured fluorescent inks are visible in normal light, but have a strong fluorescence under UV light. See Figure 2 for a brief summary of technology security levels.



Technological choices for combating counterfeiting can be confusing with regard to selection, trade-offs and method of deployment

Summary and final comments

The current lack of coordinated and effective worldwide legal sanctions against the manufacture and sale of counterfeit products, coupled with the anonymity that the Internet can provide, has allowed criminals to operate with a degree of impunity.

The international application of a uniform system of deterrents and punishments is required if the problem of counterfeiting is to be controlled effectively. Unfortunately, this is unlikely to happen in the short term. For this reason, the application of integrated brand protection methodology is the best and most effective approach for firms to combat their counterfeiting and brand integrity issues.

In most cases, Customs, police and authorities are paid and motivated to find and eliminate fakes, and are looking to obtain the necessary tools and methods to make their jobs more effective. By working with local and regional law enforcement or your own team of internal investigators (which can be preferable to relying on outsiders) and providing them with the tools and methods on how to identify your particular product, brand owners can go a long way towards solving their own issues.

However, the foundational key is to use an integrated approach that utilises the right balance of legal elements, coupled with modern brand protection technology, which in turn is linked to an overarching strategy. **WTR**



Richard P Gill is business development manager, brand protection at Sun Chemical
richard.gill@sunchemical.com