

A Total Business Approach to the Global Risk of Product Counterfeiting

By Jeremy M. Wilson and Rodney Kinghorn

Executive Briefing: Product counterfeiting is a growing, global risk that poses many negative consequences for businesses, consumers, governments, national security, the economy, and society. Research suggests that the first step in formulating effective strategies to combat such crime is to understand what shapes the nature of the criminal opportunity. Drawing from existing literature and our field experience, we seek to highlight for corporate leaders the dangers of product counterfeits and the value of considering product counterfeiting as a fundamental risk to the brand, brand protection as a total business solution, and making their brand protection programs more proactive.



Product counterfeiting is a growing risk to brands. Experts contend that brand owners who don't believe they have a counterfeiting problem either haven't looked or don't have a product worth "knocking off". Such a tongue-in-cheek statement is meant to underscore the fact that virtually every brand owner is a victim of product counterfeiting or, at least, they are at risk to it. Brand and product protection means different things to different companies, and its implementation varies considerably from one brand owner to the next. Through our outreach and research, we work with brand owners around the globe on a wide array of brand protection benchmarking, analysis, and training issues. In our experience, they tend to fall on a continuum, both within and across industries, relative to the effort and resources they allocate to this function. Some are very progressive, pushing industry standards for proactive strategy and tactics. Others either do not consider the problem, fail to look for or ignore potential red-flag indicators, or simply devote minimal resources and superficial attention to it when a problem arises. The bulk of companies falls somewhere in between these two extremes. In the remaining sections, we aim to raise awareness about the importance of brand protection, factors that give rise to product counterfeiting, and existing and promising approaches to building effective brand protection programs.

A function of numerous business conditions, product counterfeiting is a fundamental risk to the brand for most brand owners.

Protecting Brands Is Important

Reputation of a brand drives how the products will perform in the marketplace. A strong brand is what many consumers use to make the final purchasing decision. It represents a "contract of expectations" between the company and the consumer. Trademarks are used by

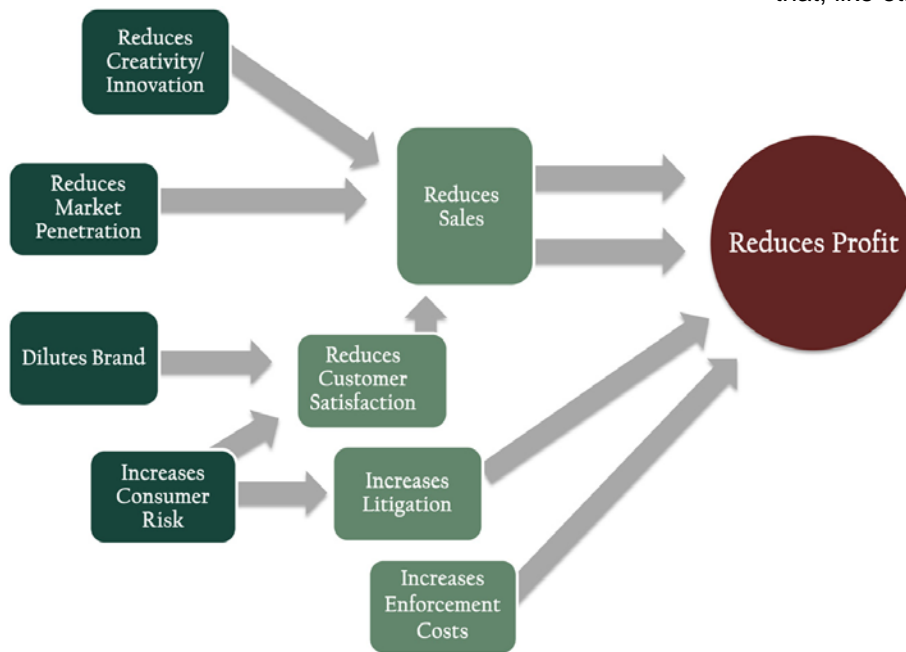
the consumer to identify the source of the product and counterfeit trademarks violate this expectation, directly damaging the brand. When the reputation of a brand is damaged, the consumer is less likely to trust that the "contract of expectations" will be satisfactorily met. Damage to a brand is usually more expensive to recover from than proactively taking steps to protect it.

In many instances, authenticating the brand has become the topic of standards created through professional certification organizations including SAE and ISO and even legislation. For example, SAE standards AS5553, AS6496, and AS6081 are intended for use in the aviation, space, defense and other high performance/reliability electronic equipment applications and includes establishing criteria for the control of suspect or confirmed counterfeit/fraudulent electrical parts and reporting to other potential users and authority having jurisdiction. ISO 12931 establishes specific performance criteria for authentication solutions used to establish authenticity throughout the good life cycle of a product.

The Drug Quality and Security Act will require serial numbers to be added to all pharmaceutical products. Such regulations are a means of tracing movement of product through the supply chain and to assist in protecting the integrity of product from company of origin to the retailer.

Finally, long-term financial success depends on protecting the brand. Consider specifically the risk of product counterfeits, which are a trademark violation and a fundamental threat to the brand. Through the production and sale of counterfeit product, the counterfeiter can be thought of as an "unseen competitor" that undermines corporate profit. As

depicted in Figure 1, this occurs both directly and indirectly. Through inferior and unreliable products (though some counterfeits are higher quality than others), counterfeits dilute the value of the brand, which reduces customer satisfaction with the branded product. These same products increase consumer health and safety risks, particularly as counterfeiters veer from using quality, safe materials and manufacturing products to specified standards. This, of course, is reason enough to combat product counterfeiters. Yet it also reduces customer satisfaction while simultaneously increasing the risk of litigation as a result of customers and others filing suit against the brand owner.



Product sales are reduced as a result of declining customer satisfaction with the brand, but this is not the only factor that begins to drive down sales due to counterfeits in the marketplace. The mere presence of counterfeits can serve to stifle creativity and innovation as there is less incentive to invest in research and development and to create new products when criminals are poised to immediately steal and profit from the hard-earned intellectual property of the company. Similarly, by flooding the market with counterfeits, the unseen competitor reduces the penetration of the authentic, branded product in the marketplace. Particularly when the counterfeits sold are deceptive and consumers are duped into buying a counterfeit instead of an authentic product (as opposed to nondeceptive when they understand they are purchasing counterfeit products), this reduces the probability that any given product purchased will actually be that of the brand owner. Of course, there is not a legal distinction between deceptive

and nondeceptive counterfeits—both are illegal and damage the trademark owner and result in other detrimental economic and social consequences.

By simple math, these detrimental consequences combine to reduce profits. As shown in Figure 1, profits are a function of (among other things) sales and litigation. The presence of counterfeits in the marketplace reduces sales and increases litigation, which inhibits profits. At the same time, it is necessary for brand owners to combat product counterfeiting through prevention, detection, investigation and enforcement. These costs, like the others, affect the bottom line. However, it is important to acknowledge that, like other risks, investment in preventing product counterfeiting can ultimately save the company far more than its cost while also protect the safety and well-being of its customers.

Many brand owners don't consider themselves at risk because they don't believe their products are being counterfeited, or they have taken the position that since they didn't create the counterfeits they are not responsible for correcting the problem. This is short-sighted. If a brand owner isn't aware of its products being counterfeited it's probably not looking. And even if they aren't being counterfeited currently they are likely at risk of it, and once counterfeits are in the market place the damage begins. While it is common to think that luxury or designer items are the most susceptible, the fact is virtually any product can be counterfeited. Automotive and electronic parts,

pharmaceuticals and medical products, food and beverages—everything from Christmas tree lights, toys, and toothpaste to aviation parts, nuclear power plant components, and pesticides, and everything in between. The more successful the brand is and the greater the demand for the product the more likely it is to be counterfeited, especially when there are few legitimate alternatives in the market place.

For the brand owner, the risk to profitability, and, indeed, sustainability, is a primary reason to take product counterfeiting seriously. However, there are many other reasons that brand owners, and indeed governments, consumers, and other stakeholders, need to work toward combating counterfeits. While systematic, reliable estimates are lacking (USGAO, 2010), available evidence indicates the crime is large and growing. Estimates of the costs of product counterfeiting have grown from less than \$30 billion in the early 1980s (Abbott & Sporn, 2002; Stern, 1985) to \$200 billion by

the end of the 1990s (IACC, 2005) to \$600 billion in recent years (Chaudry & Zimmerman, 2009; GAO, 2010), with some projecting the crime will soon cost nearly \$1.8 trillion BASCAP (2011). Trafficking of counterfeit goods has become one of the world's largest and most rapidly growing criminal enterprises (United Nations Interregional Crime and Justice Research Institute, 2003).

Additionally, the negative effects of product counterfeiting are many and wide-ranging. Beyond direct corporate interests, this crime undermines consumer health and safety. For example, counterfeit pharmaceuticals, which could contain incorrect and unsafe ingredients, or no or insufficient active ingredients, are thought to represent upwards of 15% of the world's drug supply (World Health Organization, 2008). Governments and the economy suffer as taxes aren't always paid on counterfeit purchases, which often supplant legitimate sales, thereby preventing taxes from being collected on those purchases as well, and governments must spend millions of dollars to investigate violations and enforce intellectual property rights (USGAO, 2010). Due to loss in revenue and incentives to innovate, the economy suffers from a significant loss of jobs and diminished economic growth. This is a considerable risk given that intellectual property-intensive industries directly and indirectly support 46% of private-sector jobs in the U.S. (*Global Intellectual Property Center, 2012*), and 2.5 million jobs have been lost to product counterfeiting and piracy worldwide (BASCAP, 2011). Counterfeits represent a risk to national security and public safety in that they enter the military supply chain (U.S. Department of Commerce, 2010; U.S. Attorney's Office, 2014), both terrorist groups and international crime syndicates have engaged in counterfeiting to fuel their enterprises (Sullivan, Chermak, Wilson, & Freilich, 2014; Heinonen & Wilson, 2012; U.S. Department of Justice, 2008), and many other crimes are associated with them (Hlavnicka, Keats, and Drimalla, 2013).

Much more systematic research needs to be done to understand the nature of product counterfeiting, and its scale and consequences. We know existing estimates are unreliable, and, in some ways, we don't know what we don't know. Yet, we know product counterfeiting is not a victimless crime. As described above it has multidimensional consequences and victims. We also know that virtually all brand owners are at risk—small and large. Small companies may have only a single or few products so the existence of counterfeits can be devastating to their survival. By contrast, large

companies may have many brands, a diverse portfolio of products and suppliers, etc., so the opportunity to penetrate the market with counterfeits is greater. All these reasons make product counterfeiting worth a concerted effort to address.

Business Conditions Create Product Counterfeit Opportunity

Understanding opportunity can help in tackling crime (e.g., Clarke, 1983; 1995; Cohen & Felson, 1979; Eck & Weisburd, 1994). By assessing the opportunity for crime, brand owners, law enforcement officials, legislators, and others can devise strategies to both respond to and prevent it. Opportunity-based theories and frameworks offer many insights for combating product counterfeiting (Hollis, Fejes, Fenoff, & Wilson, 2014; Hollis & Wilson, 2014).

There are many features that shape the opportunity for product counterfeiting. The expansion of the global economy, along with the accessibility of the Internet, provides product counterfeiters a firm foundation for operations. This is further fueled by consumer demand for goods they cannot afford (Schornstein, 2013), and by counterfeiters taking advantage of environments that offer low-cost manufacturing opportunities and little interest in protecting intellectual property. Counterfeiters can bolster their welcome in such an environment by offering local value such as employment and tax revenues.

Similar to a legitimate business, product counterfeiters seek high profits by controlling expenses

and seeking competitive advantage. Securing and presenting as new scrap, returned, obsolete, excess, reconditioned materials are some options as they are usually less than manufacturing and shipping

new product to the point of distribution. Counterfeits also take advantage of advances in technology, such as 3-D scanners and printers, that enables inexpensive production of components, products and packages. Likewise, the internet offers a low-cost form of communication and marketing to the global customer that is simultaneously instant and anonymous. Counterfeiters seek out distributors who look to maximize their profit by mixing less expensive counterfeit with authentic product, which increases their overall profit for each shipment. At the retail level, savvy counterfeiters keep the cost of their product close to the genuine so as to not alert brand owners, law-

While it is common to think that luxury or designer items are the most susceptible, the fact is virtually any product can be counterfeited.

enforcement officials, and sometimes consumers that the product is counterfeit.

Incentives for counterfeiting are created by the limited awareness consumers, law-enforcement officials, and even some brand owners have of this crime. Many of those in position to identify and respond to counterfeits do not think to question the authenticity of the products or even know what to do if they suspect a product is not authentic. This makes allocating resources to the problem difficult. Moreover, would-be offenders are lured by the reality that counterfeiters generally face low risk for detection, prosecution, or penalties (Albanese, 2011; IACC, 2005). Investigations are time consuming and expensive, and, given the complexity of cases, not all are eventually caught and then charged criminally or sued civilly. Further, the penalty levied against those that are convicted or receive a ruling against them may not be as great as the damage caused. Collectively, these circumstances result in low deterrence.

Typical Brand Protection Programs Are Weak

Historically, brand owners that could afford their own brand protection programs have made them enforcement-driven if not exclusively enforcement-based. This tends to coincide with a tactical emphasis, where, also, incidents are tackled individually after they occur. While effective to some degree, these reactive approaches limit opportunities for ongoing proactive practices that could mitigate a brand owner's risk of having a product counterfeited. Other brand owners that are unable to dedicate resources to an enforcement based program have virtually no brand protection program or take a minimalist approach to the problem. Unprepared, this places them in a reactionary stance when one of their products is counterfeited. They are left trying to make sense of the incident and responding as best they can without planning to control the damage. This results in an inefficient, piecemeal approach. To be sure, enforcement and tactics are critical components of an effective brand protection program, and they will help catch, prosecute and penalize offenders. However, they alone are not enough to minimize the risk of product counterfeits.

Criminal opportunity can be reduced in a number of ways, such as making the crime harder to commit, increasing the risk of apprehension, and reducing the reward the offender receives by committing the crime.

Effective Brand Protection Programs Emphasize Strategy

Research and field experience contend that the most effective brand protection programs are strategic, proactive, and holistic. A long history of research suggests the most effective crime interventions are data-driven and comprehensive (Goldstein, 1979; Cohen & Felson, 1979). The idea is to systematically assess the problem to illuminate the criminal opportunity, which can be used to inform the strategic response to it. Using evidence and analysis, the aim is to shrink the opportunity for the crime to occur, such as by increasing effort to carry out the crime and the risk of being apprehended. This approach has been shown to reduce many forms of crime. Moreover, leading law enforcement and brand protection experts routinely contend they cannot arrest and litigate their way out of the counterfeiting problem. As opposed to a purely enforcement approach, they call for partnerships, information sharing, research, awareness, education and training, and a total business solution. In other words, effective brand protection programs are evidence-based and strategic—they work to understand the risk of product counterfeiting and institute a plan to mitigate it. They are reactive as necessary, but as proactive as possible, with emphasis on prevention, awareness, education and partnerships. Importantly, they recognize the brand protection function must be integrated throughout the organization to be efficient and effective.

Many Parts of the Organization Relate to Brand Protection

As explained above, effective brand protection is achieved from an interdisciplinary understanding of the problem and the development of an informed response. This requires a total business solution that incorporates virtually all functions of the organization. With its emphasis on the protection of people, products, and facilities, security obviously plays a prominent role in brand protection. Likewise, through its enforcement capabilities and ability to promote the integrity of partners through contracts the legal function is critical to the brand protection mission. Unfortunately, many companies relegate their entire brand protection operation within one of these functions. This is like trying to build a puzzle with only half of the pieces.

To be successful, all of the pieces are necessary so it is important to incorporate the other functions that can bolster brand protection. Consider just a few other functions and their contribution to brand protection and the prevention and response to counterfeits:

- Market monitoring (which includes but is not limited to internet monitoring) by sales and marketing employees looks for counterfeit or diverted product in the marketplace, compares sales levels and product life cycles with prediction models, audits distributor purchasing/return practices, and actively tracks company business practices related to excess and obsolete material, scrap, multiple sales/price practices and back order cause and effects. Marketing and sales strategies related to advertising and geographic distribution influence if and when they are targeted by the counterfeiter.
- Packaging incorporates features that allow positive product authentication, indicate tampering, increase difficulty of replication, and permit product track and trace.
- Quality assurance identifies instances of product problems/returns.
- Procurement works to vet reliable and legitimate suppliers, and to ensure authentic product is sourced.
- Warehousing facilities must properly secure product.
- Human resources screens employees by conducting background checks, and facilitates training and awareness of staff.
- Supply chain management administers the flow of goods and services from point of origin to point of consumption.

To be sure, virtually every part of the organization plays some role in brand protection. Organizations on the more progressive end of the continuum work to learn and integrate their functions as part of a total business solution to brand protection.

Conclusion

Product counterfeiting is a complex, global crime, facilitated by many trends, conditions, and other influences. A function of numerous business conditions, product counterfeiting is a fundamental risk to the brand

for most brand owners. It reduces corporate profitability, but also causes many public health and safety, economic, social and national security problems. Many brand owners take a minimalist response, either doing little to protect themselves or by taking a solely reactive, enforcement-based approach that simply addresses problems as they occur. Those on the cutting-edge of brand protection understand that a more strategic, proactive, holistic, and evidence-based approach is required to minimize the risk to product counterfeits. A first step in prevention and response is to understand how its opportunities are shaped. Situational crime prevention contends that criminal opportunity can be reduced in a number of ways, such as making the crime harder to commit, increasing the risk of apprehension, and reducing the reward the offender receives by committing the crime (Clarke, 1995). Drawing from research and practice, brand owners and law-enforcement agencies seeking to combat product counterfeiting should consider how they can minimize the opportunity for its occurrence. This involves the integration of all functions in the corporate brand protection strategy. Brand owners seeking to improve the protection of their brand from product counterfeits should consider what more they can do to create a total business solution.

References

- Abbott, G., and Sporn, L. (2002). *Trademark Counterfeiting*, New York: Aspen Publishers.
- Albanese, J.S. (2011). *Transnational Crime and the 21st Century: Criminal Enterprises, Corruption, and Opportunity*. New York, NY: Oxford University Press.
- Chaudry, P., and Zimmerman, A. (2009). *The Economics of Counterfeit Trade: Governments, Pirates and Intellectual Property Rights*. Heidelberg: Springer-Verlag.
- BASCAP (Business Action to Stop Counterfeiting and Piracy) (2011). *Estimating the Global Economic and Social Impacts of Counterfeiting and Piracy*, London: Frontier Economics.
- Bate, R. (2008). *Making a Killing: The Deadly Implication of the Counterfeit Drug Trade*, Washington, D.C.: AEI Press.
- Clarke, R. V. (1983). *Situational Crime Prevention: Its Theoretical Basis and Practical Scope*. *Crime and Justice: An Annual Review of Research*, 4, 225-256.
- Clarke, R. V. (1995). *Situational Crime Prevention*. *Crime and Justice*, 19, (Building a Safer Society: Strategic Approaches to Crime Prevention), 91-150.
- Cohen, L.E. and Felson, M. (1979). *Social Change and Crime Rate Trends: A Routine Activity Approach*. *American Sociological Review*, 44(4): 588-608.
- Eck, J.E. and Weisburd, D. (eds.) (1994). *Crime and Place*, Vol. 4, *Crime Prevention Studies*. Monsey, NY: Criminal Justice Press.

- Federal Bureau of Investigation (2014, June 2). Member of Largest Counterfeit Goods Conspiracy Ever Charged Sentenced to 46 Months in Prison. Available at <https://www.fbi.gov/newark/press-releases/2014/member-of-largest-counterfeit-goods-conspiracy-ever-charged-sentenced-to-46-months-in-prison>
- Global Intellectual Property Center (2012). IP Creates Jobs for America, NDP Consulting.
- Goldstein, H. 1979. *Problem-Oriented Policing*. Philadelphia: Temple University Press
- Heinonen, J., & Wilson, J. M. (2012). Product Counterfeiting at the State-Level: A Risk Assessment of Michigan, *International Journal of Comparative and Applied Criminal Justice*, 36(4): 273-290.
- Hlavnicka, P., Keats, A., and Drimalla, R. (2013). *Protecting the Brand, Counterfeiting and Gray Markets*. New York: Law Journal Press.
- Hollis, M., Fejes, Z-L., Fenoff, R., & Wilson, J. M. (2014). Routine Activities and Product Counterfeiting: A Research Note. *International Journal of Comparative and Applied Criminal Justice*. DOI: 10.1080/01924036.2014.973055.
- Hollis, M., & Wilson, J. M. (2014). Who Are the Guardians in Product Counterfeiting: A Theoretical Application of Routine Activities Theory. *Crime Prevention and Community Safety*, 16(3): 169-188.
- International Anti-Counterfeiting Coalition (IACC). (2005). *The Negative Consequences of International Intellectual Property Theft: Economic Harm, Threats to the Public Health and Safety, and Links to Organized Crime and Terrorist Organizations*, Washington, D.C.: IACC.
- Jackson, G., Patel, S., & Khan, S. (2012). Assessing the Problem of Counterfeit Medications in the United Kingdom. *International Journal of Clinical Practice*, 66(3): 229-231.
- Organisation for Economic Cooperation and Development. (2008). *The Economic Impact of Counterfeiting and Piracy*, Paris: OECD.
- Schorstein, S. L. (2013). *Criminal Enforcement of Intellectual Property Rights: U.S. Perspective*, Providence, N.J.: Matthew Bender & Co, Inc.
- Stern, P. (1985). Speech on Foreign Counterfeiting delivered at the National Conference on Counterfeiting, Washington, D.C.
- Sullivan, B., Chermak, S., Wilson, J. M., & Freilich, J. D. (2014). "The Nexus Between Terrorism and Product Counterfeiting in the United States." *Global Crime*, DOI: 10.1080/17440572.2014.919227.
- United Nations Interregional Crime and Justice Research Institute. (2003). 'Global Counterfeiting: Background Document,' available at <http://counterfeiting.unicri.it/docs/Global%20counterfeiting%20background.pdf> (accessed February 2013).
- United Nations Interregional Crime and Justice Research Institute. (2008). 'Counterfeiting: A Global Spread, A Global Threat', available at http://web2012.unicri.it/news/article/0712-3_counterfeiting_crt_foundation (accessed February 2013).
- U.S. Attorney's Office (2014, April 17). 'Pennsylvania Man Who Sold Counterfeit Military Goods Sentenced To 21 Months In Prison', available at <http://www.justice.gov/usao/md/news/2014/PennsylvaniaManWhoSoldCounterfeitMilitaryGoodsSentenceTo21MonthsInPrison.html>
- U.S. Department of Commerce (2010). *Defense Industrial Base Assessment: Counterfeit Electronics*. Washington, DC: Bureau of Industry and Security, Office of Technology and Evaluation.
- Wilson, J. M., & Kinghorn, R. (2015). *The Global Risk of Product Counterfeiting: Facilitators of the Criminal Opportunity*. Center for Anti-Counterfeiting and Product Protection Backgrounder Series. Lansing, MI: Michigan State University, available at http://a-capp.msu.edu/sites/default/files/PC_Opportunity_Background_02.18.15FINAL.pdf
- World Health Organization, IMPACT. (2008). Counterfeit drugs kill! Retrieved September 28, 2009, from <http://www.who.int/impact/FinalBrochureWHA2008a.pdf>
- U.S. General Accountability Office (USGAO). (2010). *Intellectual Property: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods*. Washington DC: US General Accountability Office.
- U.S. Department of Justice. (2008). *Overview of the Law Enforcement Strategy to Combat International Organized Crime*, Washington, D.C.: U.S. Department of Justice.

About the Authors

Jeremy M. Wilson, Ph.D., is a Professor of Criminal Justice and the Director of the Center for Anti-Counterfeiting and Product Protection at Michigan State University. He can be reached at jwilson@msu.edu.

Rodney Kinghorn is the Outreach Specialist of the Center for Anti-Counterfeiting and Product Protection at Michigan State University, and a former Global Security Director of General Motors. He can be reached at kinghor3@msu.edu.