



CONTENTS

EXECUTIVE SUMMARY	04
Extraordinary growth	07
Pharma worst affected	07
Enter the dragon: the role of China	07
Cost and convenience drive consumers to counterfeits	O _z
The heavy toll on brands	O
New technologies create new risks	O
Action is essential	O
INTRODUCTION	06
An evolving challenge	0
Defend your domain	07
COUNTERFEITING: A GLOBAL PANDEMIC	08
	30
Counterfeiting is big business Counterfeiting and the digital revolution	08
The forces driving counterfeiting	10
THE WORST-AFFECTED SECTORS	12
Financial services	12
Entertainment	13
Luxury brands	13
Technology	14
Retail and FMCG	15
Pharmaceuticals	1!

WHERE IN THE WORLD?	16	THE FUTURE OF COUNTERFEITING	29
United Kingdom	16	The digital world	29
Europe	17	Social media	30
Germany	18	Live streaming	30
France	18	Mobile apps	30
Italy	18	3D printing	3
Nordics	19	Countering the counterfeiters	3
China	19	RFID	3
United States	20	Digital authentication	32
Australasia	21	Online	32
India	21		
		CONCLUSION	33
CONSUMER PERSPECTIVES	22	10 tips to combat counterfeiting	34
Attitudes to counterfeiting	22	About NetNames	35
Willing partners or accidental victims?	22		
Reasons for counterfeit consumption	23	REFERENCES	36
Do they know the risks?	24		
What can be done?	24		
RISKS FOR BRAND OWNERS	25		
Financial risks	25		
The cost of combatting counterfeiting	26		
Reputational risks	27		
Fake products, real risks	28		

EXECUTIVE SUMMARY

Today, the ease and reach of digital commerce presents extraordinary opportunities and serious threats to businesses, brands and consumers alike. The collision of counterfeiting, globalization and the fast-growing digital world has created a perfect storm, allowing the supply and demand for fake goods to converge.

EXTRAORDINARY GROWTH

In an environment where counterfeiting is as profitable as illegal drugs, but remains far less risky for criminals, we are seeing explosive growth. Expanding by over 15% every year, counterfeiting now costs more than 2% of total global economic output, or around \$1.8 trillion per year.

There is little doubt as to the crucial role played by the digital world in this meteoric rise, with a 15% increase in sales of counterfeit goods online last year. The internet has made counterfeiting a shifting problem that is difficult to combat. Rogue websites, online auctions and digital piracy all give counterfeiters lucrative and anonymous channels for their activities.

PHARMA WORST AFFECTED

While counterfeiting is a major challenge for every industry, pharma is the worst affected sector by any metric. Counterfeiters have claimed around a third of the entire market – worth some \$200 billion – and are implicated in the deaths of up to one million people each year due to toxic or ineffective drugs.

ENTER THE DRAGON: THE ROLE OF CHINA

The United States, Europe and Australasia – the largest markets for fake goods – are all attempting to harmonize and intensify their multi-pronged strategy to combat counterfeiting and digital piracy. However, the tidal wave of counterfeit and grey-market goods from China shows little sign of being stemmed, remaining responsible for 70% of worldwide seizures. While global companies depend on Chinese manufacturing, this same ecosystem provides a haven of cheap labor and raw materials for counterfeiters.



COST AND CONVENIENCE DRIVE CONSUMERS TO COUNTERFEITS

Consumers remain largely innocent victims in this struggle, with 90% seeing counterfeiting as morally wrong. However, the demand for branded goods and the desire to find lower prices online mean that 28 consumers unknowingly buy fake goods for every person that does so intentionally.

When consumers do deliberately consume counterfeit and pirated goods, cost and convenience are the major factors in their decision: 19% purchase fake products when the original is too expensive, while 22% will turn to digital piracy when there is no legal alternative.

THE HEAVY TOLL ON BRANDS

Counterfeiting creates a heavy financial burden for brands — eroding profitability, market share and outside investment. While fake goods destroy around 10% of top-line revenues, they also force brands to make further investments in combatting the problem, and leave them less able to invest in future innovations.

Even more insidious are the risks to both brand reputations and customers. Online, reputations can be instantly damaged in front of a global audience: 78% of consumers would shun a brand if they found themselves on a bogus website, even though the company itself was not negligent. Meanwhile, the risks to customers are not just financial, but also physical. G20 countries now see an estimated 3,000 deaths annually due to counterfeit consumer goods alone.

NEW TECHNOLOGIES CREATE NEW RISKS

Counterfeiters will continue to exploit the potential of new technologies and the digital world to further their reach, profitability and anonymity. The rise of mobile and social is fragmenting the online landscape – exposing brands not just to counterfeiting, but also to evolving threats such as phishing, cybersquatting, traffic diversion and other forms of online fraud.

ACTION IS ESSENTIAL

New technologies will also be critical to the fight against counterfeiting, with RFID, digital authentication and new generic top-level domains (gTLDs) all allowing brands to strengthen their posture against fraudsters. In particular, given the skyrocketing risks from the combination of digital channels and fake goods, a proactive and effective online anti-counterfeiting strategy is now essential for every brand to safeguard customers, revenues and reputation.



INTRODUCTION

Whenever we look at the online opportunity, it is easy to start talking about billions — billions of customers, spending billions of hours and billions of dollars on goods and services every year. Forward-looking brands raced to seize the internet's untapped potential, and those most able to flex and adapt to new business models are thriving.

However, brands were not the only ones to notice the enormous online opportunity. Counterfeiting has been with us for centuries, and today it too is exploiting the high-growth potential of the internet. Counterfeiters have proven every bit as adaptable and creative as big business, with the internet allowing them to refine approaches, increase reach, and target the lucrative world of digital commerce.

While some consumers inevitably turn to e-commerce to buy lower-cost counterfeit goods, many more are tricked into inadvertently purchasing fake products by increasingly sophisticated tactics — particularly on marketplace websites and social media channels. In most cases, the first contact legitimate brands have with those who have been conned is a customer complaint.



AN EVOLVING CHALLENGE

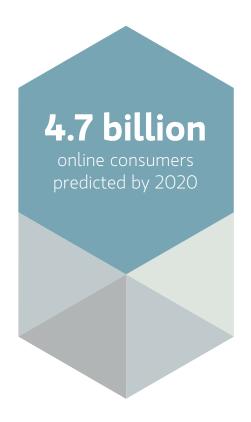
Today's brands are actors on a global stage, and the rise of the internet has made it easier than ever for criminals to cash in on brand aspiration, loyalty and trust worldwide.

From counterfeit goods and grey-market products that use the internet as a shop window, to fake components and ingredients infiltrating global supply chains, or digital piracy and illegal downloads, modern counterfeiting represents an evolving landscape that can take many forms. It is also a problem spanning every industry — from finance, entertainment and electronics to software, consumer goods and pharmaceuticals. Today, no brand is immune.

The word "counterfeit" might traditionally summon up an image of "Prado" handbags, but today's fraudsters are just as likely to be producing fake medicines, computer chips, or aircraft parts. Well-made fakes can be virtually indistinguishable from the real thing, yet present extreme safety hazards at the same time. Counterfeits are no longer just cheap imitations suited to the black market. Many criminals source genuine packaging or security measures, such as holograms, to create sophisticated counterfeit items and sell them on authentic-looking websites.

DEFEND YOUR DOMAIN

With 4.7 billion online consumers predicted by 2020¹, the explosion of the internet as a core channel for customer engagement has created huge opportunities, but also serious and continually evolving threats that cost companies worldwide billions of dollars in revenue every year. Today, it is essential for every brand to defend its digital domain. Simply put, maximizing the potential of the internet means safeguarding genuine customer traffic and protecting legitimate routes to market.



With fraudsters enjoying low operating costs, easy and immediate access to a global customer base, and almost complete anonymity, online channels are the perfect mechanism for the sale of counterfeit goods. The only viable response is a proactive and effective anti-counterfeiting strategy to preserve customer confidence and brand equity, and to safeguard revenues.

This report brings together multiple studies from around the world to reveal the scale of the problem, the industries and countries worst affected, and the impact on brands and consumers, as well as how we can fight back against the ever-changing tactics of modern counterfeiters.

We welcome your views, thoughts and feedback to **marketing@netnames.com**.

COUNTERFEITING: A GLOBAL PANDEMIC

COUNTERFEITING IS BIG BUSINESS

"Counterfeiting has become a shared problem that touches all corners of the world, across industries, commodities and countries." There is no doubt that the world is seeing a meteoric rise in counterfeiting, with the economic toll on governments, businesses and individuals now reaching into the trillions on an annual basis. Counterfeiting has grown in scope, scale and complexity in the past three decades, and this looks set to continue with future double-digit growth predicted.

- Counterfeit goods now make up 10% of global trade³, with \$1.7 trillion in counterfeit goods estimated to have infiltrated international markets.⁴
- Counterfeiting and piracy are estimated to cost G20 governments and consumers over \$125 billion every year and have destroyed 2.5m jobs worldwide.⁵
- Worldwide counterfeiting continues to grow by 15.6% every year.⁶

Michael Ellis



THE SURGING COST OF COUNTERFEITING: 1980s \$30 billion⁷ 1990s \$200 billion 2000s \$600 billion 2010s potentially \$1.8 trillion – more than 2% of total global economic output.⁸

"The online sale of pirated and counterfeit hard goods... will soon surpass the volume of such goods sold by street vendors and in other physical markets."

Office of the United States Trade Representative⁹

COUNTERFEITING AND THE DIGITAL REVOLUTION

Counterfeiters have been quick to exploit the high-growth potential of the digital world. The internet allows them to refine approaches, increase reach, and target the lucrative world of e-commerce via rogue websites and content that mimics those of genuine brands. Equally, the rise of auction sites has allowed criminals to sell huge volumes of goods directly to the B2B or B2C market with ease. Online piracy has also exploded, with digital content proving so straightforward to copy, distribute and monetize that pirates can outmaneuver global brands.

- 2014: 15% increase in the sale of counterfeit goods online.¹⁰
- 1,829 internet domain names seized by Europol for selling counterfeit products since 2012.¹¹
- Operation In Our Sites, a joint effort by Europol and US ICE to tackle websites selling counterfeit products, has led to the seizure of more than 2,600 domain names since the operation started in June 2010.¹²
- 87m IP-infringing product listings removed by auction site Taobao in 2012 alone.¹³
- Alibaba recently confirmed that it took down 114m websites over a period of just 10 months.¹⁴
- 72% of all EU customs seizures in 2013 were related to postal and courier traffic – the typical delivery channel for e-commerce.¹⁵
- Piracy of films, music, video games and television programs now makes up 23.8% of total internet bandwidth.¹⁶
- 432m internet users and 13.9 billion website views sought pirated content during January 2013.¹⁷
- 98% of data transferred by peer-to-peer networks is copyrighted.¹⁸
- Business managers feel the evolving web will contribute to increased trademark infringements (26%), fraud (29%) or cybersquatting and domain name hijacking (36%).¹⁹

"It's a very profitable business... you can get into business at very low cost, and the penalties if you get caught are very small compared to other illegal activities."

Alan Zimmerman

Professor of International Business and Marketing, The City University of New York²⁰

THE FORCES DRIVING COUNTERFEITING

With counterfeiters eyeing huge potential profits, cheap labor and raw materials, and a low risk of being caught, it is no surprise that the industry is booming. Just as for reputable businesses, online channels make it far easier for them to access vast numbers of consumers with low overheads, minimal investment and little regulatory control. Furthermore, in a world where consumers desire big brand names but want to seek out bargains following the economic crisis, it is all too easy for counterfeiters to step in.

Profitability:

- © Counterfeit goods are as profitable for criminal gangs as illegal drugs, 21 bringing returns of up to 900%. 22
- Content theft websites make \$227m in ad revenue annually,²³ and the profit margins from digital content theft are 80–94%.²⁴



Cheap labor and raw materials in the Far East:

- 67% of counterfeit goods are estimated to originate from China.²⁵
- Around \$24.4 billion in counterfeit goods come from the East Asia Pacific region to Europe and the US annually.²⁶

A growing global marketplace:

- 40% of the world's population is now online,²⁷ and online sales are growing by 20% or more annually.²⁸
- The proportion of internet users engaged in piracy rose by more than 33% from 2011 to 2013.²⁹

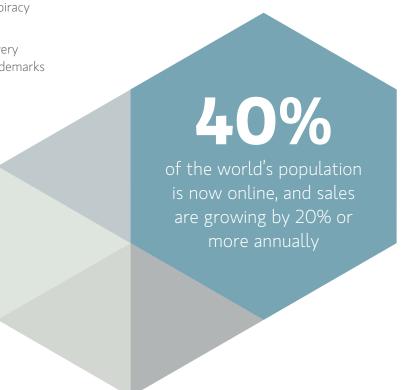
■ 41% of business managers are extremely or very concerned about keeping their brand and trademarks protected in the evolving web landscape.³⁰

Recession-driven bargain hunters:

- One in five US and European bargain hunters landed on sites selling counterfeits.³¹
- 28 consumers unknowingly buy lower-cost counterfeit goods online for every one that does so intentionally.³²

Catch me if you can:

■ Globally, customs officials seize less than 1% of total imports.³³



THE WORST-AFFECTED SECTORS

"The scale and scope of IP crime at home and abroad means partnerships between industry, law enforcement and government are essential."

Baroness Neville-Rolfe

speaking to the Anti-Counterfeiting Group³⁴



FINANCIAL SERVICES

Instead of masks and guns, today's bank robbers use the web. From fake websites to phishing emails, fraudsters are increasingly counterfeiting the look and feel of banking and insurance brands to trick users into compromising their information. While the internet is proving extremely lucrative for the financial services market, fraudsters are clearly having a severe impact on both customer trust and brand reputation.

- 40% of business managers in the finance industry are extremely or very concerned about keeping their brand and trademarks protected in the evolving web landscape.³⁵
- 31.5% of all phishing attacks in 2013 targeted financial institutions, and 22.2% of all attacks involved fake bank websites.³⁶
- 59.5% of banking phishing attacks exploited the names of just 25 international banks.³⁷
- In 2013, the number of cyberattacks involving malware designed to steal financial data rose by 27.6% to reach 28.4m.³⁸
- Nearly 20% of consumers lack confidence that their financial institution can protect them against fraud.³⁹
- 23% of customers changed financial institutions due to dissatisfaction after experiencing fraud.⁴⁰

ENTERTAINMENT

Reputations and revenues in the entertainment industry are suffering severely at the hands of counterfeiters. Poor quality bootleg CDs and DVDs remain commonplace, but their impact pales in comparison with that of online piracy. Digital content can be shared rapidly, for free, across a wide range of ecosystems from peer-to-peer file-sharing to content-streaming websites — creating the perception that such content is valueless, as well as potentially infecting consumers and businesses with dangerous malware. Content owners face a real dilemma: how to serve the best content, in the best way to global consumers, whilst piracy continues to erode revenues.

- The global cost of digitally pirated music, films and software is \$80 billion per year.⁴¹
- The music industry alone has lost more than £7 billion (\$10.9 billion) because of global copyright infringement.⁴²
- Digital piracy and counterfeit DVDs cost the film industry £500m⁴³ in the UK and \$2bn-3bn in the US each year.⁴⁴
- In 2013, one-third of counterfeit software contained malware.⁴⁵
- Piracy in entertainment industries currently costs the US economy 373,375 jobs and \$16.3 billion in earnings per year.⁴⁶

LUXURY BRANDS

With skyrocketing consumer demand for luxury goods at the cheapest prices, fakes are flooding auction sites and rogue websites. While the harm done to revenues is significant, this is not simply a financial problem; counterfeiting can damage a brand's reputation to such an extent that it loses its luxury status entirely. Customers who unknowingly bought fake products may attribute their lack of quality and durability to the brand itself, and even more severe reputational damage can occur if counterfeit products are found to have been manufactured unethically – for example, in sweatshops.

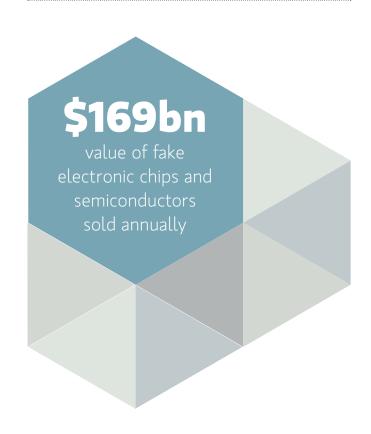
- ▼ 70% of luxury brand owners consider loss of revenue from counterfeit goods to be the biggest challenge facing them on the internet today.⁴⁷
- Almost one-third of paid search adverts for designer handbags lead to fraudulent sellers.⁴⁸
- Counterfeit goods are often offered at 25–50% discounts, comparable to end-of-season sales.⁴⁹
- The economic loss due to counterfeit Swiss watches is estimated to be 4% of annual sales.⁵⁰
- Counterfeit designer clothing was the most common article detained by EU Customs for infringing intellectual property rights in 2013, making up 12% of all seizures.⁵¹

TECHNOLOGY

The technology industry's complex supply chains and reliance on manufacturing in the Far East make it extremely vulnerable to counterfeiters and grey-market profiteers. Counterfeit technology does not just endanger revenues and reputations, it also endangers customers — with instances of everything from exploding laptop batteries to substandard, fake aircraft parts on the rise. Today, counterfeit products and components are a particular challenge for the telecoms industry, given surging global demand.

- Counterfeit electronic chips and semiconductors cause losses of up to \$169 billion a year to the electronics industry.⁵³
- Electronics manufacturers see counterfeits as affecting product reliability (84%), brand reputation (71%), and customer satisfaction (62%).⁵⁴
- Counterfeiting is a \$6 billion+ problem for the telecoms industry,⁵⁵ and 8% (148m) of all mobile devices sold worldwide in 2013 were substandard or counterfeits,⁵⁶
- 57% of business managers in the telecoms industry are extremely or very concerned about keeping their brand and trademarks protected in the evolving web landscape.⁵⁷
- Asia Pacific, including China, is the largest gray-handset market in the world, purchasing 103m units in 2013.58
- Counterfeit mobile phones can contain 35 to 40 times the accepted limit for hazardous substances such as lead.⁵⁹

In 2014, two people pleaded guilty to a charge of importing counterfeit microchips from factories in China and selling them as military-grade components to the US Navy.⁵²



RETAIL AND FMCG

Counterfeit FMCG goods can put customers' lives at risk, making retailers well-motivated to fight back against fraudsters and defend their reputations. However, with retailers depending on broad supply and distribution chains — and counterfeiters often able to replicate labeling with ease — FMCG goods have become a prominent target. Meanwhile, online, safeguarding genuine customer traffic and protecting legitimate routes to market is of paramount importance if retailers are to maximize revenues from the rise in e-commerce.

- Top five most counterfeited items: watches, handbags, perfume, sunglasses, footwear.⁶⁰
- Retailers lose between \$300m and \$400m annually to copycats and counterfeiters.⁶¹
- Fake food products account for as much as 15% of all the illegal goods seized in six leading global markets.⁶²
- In 2013, £350,000 (\$550,000) worth of counterfeit wine and spirits was seized by Interpol and Europol.⁶³
- In 2013's OPSON III operation, 34 countries seized more than 1,200 tons of fake or substandard food, and nearly 430,000 liters of counterfeit drinks.⁶⁴
- The illicit trade in cigarettes costs the EU and member states over €10 billion each year in lost tax and customs revenue; and about 65% of cigarettes seized in the EU are counterfeit.⁶⁵
- 34% of business managers in the retail industry are extremely or very concerned about keeping their brand and trademarks protected in the evolving web landscape.⁶⁶

PHARMACEUTICALS

Counterfeiting is rife in the pharmaceutical industry, with fraudsters holding up to a third of the potential market. Counterfeiters have exploited the growing trend of consumers purchasing medicines online, as well as the skyrocketing demand for drugs only available under prescription. Although counterfeiting initially focused on "lifestyle" drugs — such as those to control obesity and baldness — it now targets high-value, high-demand, life-saving medicines. Since counterfeits can result in treatment failure or even death, it is essential for pharmaceutical companies to take immediate action to protect their brand assets from irreparable damage.

- Prescription drugs are the largest market for counterfeit goods, worth \$200 billion annually.⁶⁷
- 10–30% of pharmaceutical drugs in circulation in the world are counterfeit.⁶⁸
- Up to one million people die annually from counterfeit pharmaceuticals.⁶⁹
- The European Commission (DG TAXUD) reports that, in 2013, more than 25% of the products detained were for daily use and would be potentially dangerous to the health and safety of consumers.⁷⁰
- The EU faces projected baseline costs of €1.8–22bn to 2020 for hospitalizations as a consequence of treatment using counterfeit medicines.⁷¹
- In 2013, almost 14,000 websites hosted by illegal online pharmacies were identified and shut down.⁷²
- An illicit online pharmaceutical network dismantled by US authorities had earned \$55m in just two years.⁷³
- 50% of websites worldwide that hide their physical address are selling illicit pharmaceuticals, including those labeled with counterfeit trademarks.⁷⁴

WHERE In the world

"Today we are experiencing global 'perfect storm conditions' for the supply of, and demand for, counterfeited and pirated products."

Brian Monks

Vice-President of Anti-Counterfeiting Operations, Underwriters Laboratories⁷⁵



UNITED KINGDOM

The manufacture, importation and availability of counterfeit goods remains at a high level in the UK, despite strict IP laws and robust enforcement. Across the country, IP crime offences are often linked to organized crime, drug dealing and money laundering, while the most commonly counterfeited goods are clothing, tobacco and alcohol. Ordinary shops are still the most likely place to find counterfeit products; however, criminals are increasingly moving online, through auction sites and social media.

- Counterfeiting and piracy cost the UK economy £30 billion and 14,800 jobs.⁷⁶
- The UK ranks number one in the world for IP enforcement.⁷⁷
- The City of London's police intellectual property crime unit (Pipcu) shut down more than 2,500 websites selling counterfeit goods from September 2013 to April 2014.⁷⁸
- In 2013–14, UK Customs detained more than 21,000 consignments of "IP infringing" goods.⁷⁹
- The top five counterfeit items across the UK are: clothing, tobacco, alcohol, footwear and DVDs.⁸⁰
- 17% of UK internet users aged 12+ access digital content illegally, and 4% exclusively consume content illegally.⁸¹
- UK Trading Standards has seen a 15% increase in the sale of counterfeit goods online.⁸²
- 21% of UK business managers believe that the internet of 2020 will be a more dangerous place, while 26% believe the evolving web will expose customers to fraud.⁸³

EUROPE

Globalization and developments in trade (including the rise of the internet) have made counterfeiting more prevalent throughout Europe. Today, Europe is attempting to harmonize and intensify its cross-border fight against counterfeiting. Governments have responded by strengthening IP enforcement laws and the penalties facing counterfeiters, with many also focusing heavily on combatting the rising threat of online counterfeiting and digital piracy.

- 35% of EU employment, 39% of GDP, and 90% of external trade depends on IP-intensive industries.⁸⁴
- In the European Union as a whole, some 40m counterfeit articles were seized by Customs in 2012, with a value of close to €1 billion.⁸⁵
- China remains the most prominent source country from which counterfeit products are entering the EU. In 2013, 19.2m articles were detained, with a value of over €500m 86

Toys, games and sporting articles 3.7%

Mobile phones and electrical/ electronic equipment 8.2%

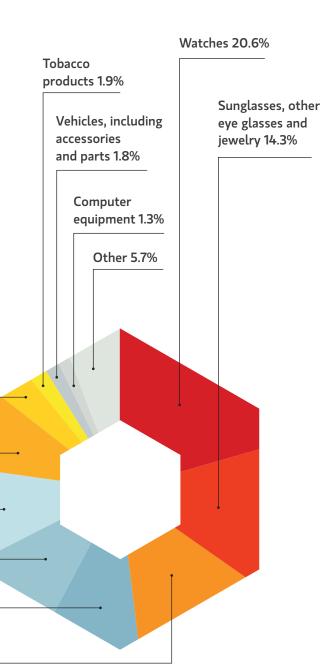
Medical products and body care 9.7%

Bags, wallets, purses and similar items 9.7%

Shoes, including parts and accessories 9.9%

Clothing and accessories 13.3%

BREAKDOWN OF THE EU COUNTERFEIT MARKET⁸⁷



GERMANY

- Counterfeit goods in Germany cause losses of €20bn–30bn and up to 70,000 jobs.⁸⁸
- The value of more than 3.2m counterfeit products seized by German Customs in 2012 amounted to almost €130m.⁸⁹
- Counterfeiters now face tougher laws and prison sentences of three months.⁹⁰
- In May 2009, a centralized database system for the protection of German IP rights, ZGR-Online, was introduced.⁹¹
- In 2013, 446 rights holders sent 109,000 threat letters seeking €90.3m in compensation for digital content piracy.⁹²
- 51% of German business managers believe that the internet of 2020 will be a more dangerous place, while 27% believe the evolving web will expose customers to fraud.⁹³



FRANCE

- The French economy loses up to €6 billion to counterfeit goods each year.⁹⁴
- Counterfeiters in France face two-year prison sentences and fines of €150,000, as opposed to the ten-year prison terms and €7.5m fines for drug dealers.⁹⁵
- In March 2009, the dedicated Cybercustoms Operations
 Unit was set up by French Customs, tasked with fighting
 the online sale of counterfeit goods.⁹⁶
- More than 600 IP rights infringements were punished by the French criminal courts during 2011, including 148 with actual or suspended prison sentences.⁹⁷
- 20% of French business managers believe that the internet of 2020 will be a more dangerous place, while 30% believe the evolving web will expose customers to fraud 98

ITALY

- Counterfeit goods cost the Italian economy
 €6.9 billion each year.⁹⁹
- Counterfeit clothing in Italy makes up 60% of the total counterfeit goods market in the country.¹⁰⁰
- The counterfeit goods trade caused the loss of 40,000 jobs in Italy over the past decade.¹⁰¹
- Counterfeiters face a prison term of up to two years, plus a fine of up to €20,000.¹⁰²

NORDICS

Nordic economic losses to counterfeiting:

- Sweden \$596m
- Norway \$289m
- Denmark \$222m
- Finland £210m.¹⁰³

Online piracy in the Nordics:

Appropriately for the region that gave birth to The Pirate Bay, attitudes to online piracy are relaxed in the Nordics.

- 4% of Norwegians under 30 are now using illegal file-sharing platforms to obtain music; down from 70% in 2009.¹⁰⁴
- On average, each Finnish person that downloaded pirated content has about 2,900 illegal music files and 90 illegal films.¹⁰⁵
- Swedish anti-piracy legislation (IPRED) decreased internet traffic by 16% and increased music sales by 36% during the first six months after implementation.¹⁰⁶
- 70% of online users in Denmark believe there is nothing wrong with piracy.¹⁰⁷

CHINA

Today, China is the world's workshop. Most global western companies depend on Chinese manufacturing, and each uses hundreds or thousands of suppliers. Unfortunately, this same ecosystem supports Chinese counterfeiters, who are currently flooding the US and EU with fake or gray-market goods. Historically Chinese regulators have been criticized for not doing enough to combat counterfeiting, although Beijing is now stepping up its efforts – including proposed laws to govern online commerce.¹⁰⁸

- 70% of the counterfeit goods seized worldwide come from China.¹⁰⁹
- 1,260 organized crime gangs involved in counterfeiting were broken up during 2013.¹¹⁰
- Over 90m tons of counterfeit goods were seized by security services across China in 2013.¹¹¹
- Security services in China arrested nearly 60,000 people for violating intellectual property in 2013.
- The estimated value of counterfeits and fakes seized by China in 2013 was 173 billion yuan (\$28 billion).¹¹³

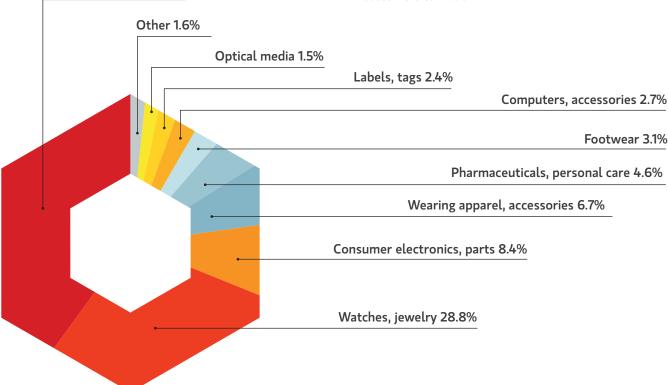


UNITED STATES

Given its dependence on IP-intensive industries, the United States takes a tough stance on the manufacture, import, export, transit, and distribution of pirated and counterfeit goods. Alongside robust criminal and border enforcement, it also continues to urge its global trading partners to bolster their efforts against counterfeiting. Like Europe, the US is inundated with counterfeit goods from the East Asia Pacific region, and is also actively responding to the growing threat of online counterfeiting and digital piracy.

BREAKDOWN OF THE US COUNTERFEIT MARKET¹²³

Handbags, wallets 40.2%



- The US economy loses \$225 billion to counterfeit goods, 114 with 55.7m jobs dependent on IP-intensive industries. 115
- US companies lose 15–20% of their sales to counterfeit goods.¹¹⁶
- 62% of the counterfeit goods seized in the US come from China,¹¹⁷ with an estimated value of \$1.61 billion.¹¹⁸
- In 2013, the Department of Homeland Security seized 24,361 counterfeit goods, ¹¹⁹ and shutdown 1,413 domain names distributing counterfeit merchandise. ¹²⁰
- The number of users involved in digital piracy in North America grew by 40.5% from 45.4m in 2011 to 63.8m in 2013.¹²¹
- 26% of US business managers believe that the internet of 2020 will be a more dangerous place, while 33% believe the evolving web will expose customers to fraud.¹²²

AUSTRALASIA

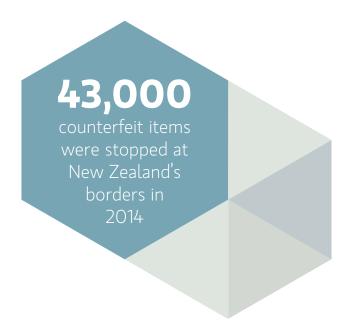
Given Australasia's proximity to Asian markets, counterfeiting poses a growing challenge, despite robust anti-counterfeiting legislation and customs control. From the small number of federal prosecutions, 124 Australia itself seems to experience relatively low levels of piracy and counterfeiting compared with other countries. However, counterfeiting in the region is becoming more sophisticated and organized, with almost any type of commodity at risk of being faked by professional criminals. The most commonly counterfeited items include electrical goods, fragrances, cosmetics and footwear.

- Losses of \$2.9 billion to counterfeiting in Australia and \$134m in New Zealand.¹²⁵
- Individuals to be fined up to AUS \$50,000 for counterfeiting and piracy.¹²⁶
- The Australian Customs and Border Protection Service seized more than 500,000 suspected counterfeit goods in 2012–13, with an estimated retail value of over AUS \$43m.¹²⁷
- 43,000 counterfeit items were stopped at New Zealand's borders in 2014.¹²⁸
- Counterfeiters face five years' imprisonment or a \$150,000 fine in New Zealand.¹²⁹

INDIA

Counterfeiting is widespread in India across various sectors — most prominently cosmetics and pharmaceuticals. The impact on Indian companies is severe, with many innovators struggling to enforce patents. Poor regulatory controls and a weak legal framework have been to blame, but India has recently started making some progress to curtail counterfeiting and educate consumers on the dangers.

- Counterfeiting causes sales losses of 21.7%
 (\$11.9 billion) for Indian companies,¹³⁰ and steals around 25% of their market share.¹³¹
- Indian counterfeiting has a market size of Rs 55,000 crore (\$11 billion), and drains around Rs 5,000 crore (\$1 billion) in exchequer revenue annually.¹³²
- Delhi is the hub of counterfeit products in India; nearly 75% counterfeit products originate there.¹³³
- Customer attraction to counterfeit products is directly proportional to their price, which are often 40–45% cheaper.¹³⁴



CONSUMERPERSPECTIVES

"Intellectual property crime is not only a threat to legitimate business and our economy, but also to the public through the sale of unsafe counterfeit goods."

The Rt Hon Theresa May MP

UK Home Secretary¹³⁵

ATTITUDES TO COUNTERFEITING

The vast majority of consumers not only regard counterfeiting as inherently wrong, they also understand that it damages economies, industries and individuals — as well as being linked to funding for organized crime and terrorism.

- 90% of consumers see counterfeiting as morally wrong.¹³⁶
- Only 4% of consumers see counterfeiting as a "victimless crime".¹³⁷

Consumers believe IP is important because it:

- supports innovation and creativity by rewarding inventors, creators and artists (96%)¹³⁸
- improves the quality of products and services (86%)¹³⁹
- contributes to the creation of jobs and economic wellbeing (69%).¹⁴⁰

WILLING PARTNERS OR ACCIDENTAL VICTIMS?

While a minority of consumers seek out counterfeit goods deliberately, many more are duped into purchasing them. Ironically, price is a major factor in both cases — either because consumers are more likely to be tricked into purchasing a fake by low prices, or because they see the genuine goods as unaffordable. Whether consumers are seeking fakes or low-price goods, these purchases are increasingly being made online.

- 4% of the EU citizens have purchased counterfeit goods intentionally, and 6% as a result of being misled.¹⁴²
- 40% of consumers turn to online channels including web search engines, marketplace sites and social media – to source and purchase fake products.¹⁴³
- 72% of French consumers would shun a brand if they found themselves on a bogus website pertaining to it higher than the number in Britain (53%), the US (53%) and Germany (44%).¹⁴⁴
- One in six online shoppers is duped by counterfeit goods, and 28 consumers unknowingly buy lower-cost counterfeit goods online for every one that does so intentionally.¹⁴⁵

REASONS FOR COUNTERFEIT CONSUMPTION

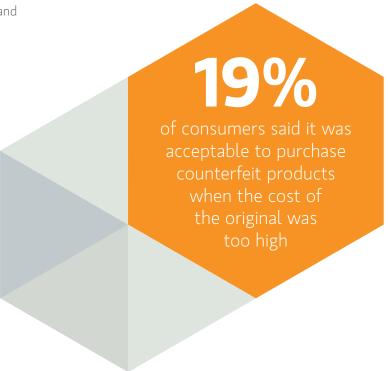
Of those that do intentionally consume counterfeit and pirated goods, the majority cite cost as the major factor in their decision — whether because of a lack of money, or because they see the official retail price as too high. However, the desire for convenience also plays a major role — for instance, some consumers will turn to online piracy when legal alternatives are not readily available.

- 19% of consumers said it was acceptable to purchase counterfeit products when the cost of the original was too high.¹⁴⁶
- 34% of Europeans think that buying counterfeit goods can be justified to save money, while 38% say it can be justified as an act of protest against a marketdriven economy.¹⁴⁷
- The most commonly cited reasons for IP infringement are because it is free (49%), convenient (44%) and quick (36%).¹⁴⁸
- 22% of consumers think illegal downloading is acceptable when there is no legal alternative.¹⁴⁹

"Developments in technology have allowed for better quality printing and packaging, resulting in much higher quality counterfeits."

Michael Ellis

Head of INTERPOL's Trafficking in Illicit Goods and Counterfeiting program¹⁴¹



DO THEY KNOW THE RISKS?

"Counterfeiters don't give a damn about the public."

Ken Taylor

Trademark Investigation Services, Australia. 150

Consumers seem to be largely unaware of the risks posed by counterfeit goods — from the financial losses due to malware and fraud, through to physical injury and even death. Despite the fact that health risks would turn the majority of consumers away from counterfeit purchases, sizeable numbers continue to buy high-risk items — including medications, alcohol and cosmetics.

- 75% of consumers would be put off buying counterfeit goods by health and safety concerns, but 18% have bought fake alcohol and 16% fake medicines.¹⁵¹
- 32% of consumers would be unconcerned if they found themselves on a bogus website pretending to be a well-known company.¹⁵²
- 10% of consumers would take the risk of seriously injuring their partner through buying fake make-up or perfume.¹⁵³

WHAT CAN BE DONE?

Consumers favor harsher penalties for counterfeiters, but also suggest that penalties would be ineffective at changing their own behavior. Counterfeiting is seen as a criminal problem, with the responsibility for change placed on police and governments, rather than on consumers themselves.

The clear challenge is to educate consumers so that they can both avoid counterfeit goods and understand why it is a critical responsibility for them to do so. A new narrative is needed — one that links counterfeiting to criminal activities and encourages consumers to make purchases through legitimate channels, and brand owners need to contribute to this. This is especially important in the evolving online world, where the glut of counterfeit goods makes unintentional fraudulent purchases much more common.

From high to low, consumers see preventing counterfeiting as the responsibility of:

- 1. Police
- 2. Government
- **3.** Consumers
- 4. Online marketplaces
- 5. Manufacturers. 154
- The majority of consumers favor harsher penalties for counterfeiters.¹⁵⁵
- Only 35% of consumers would be put off buying counterfeits by being caught.¹⁵⁶
- The top three factors that infringers said would encourage them to stop accessing content illegally online included the availability of cheaper legal services (32%), if everything they wanted was available legally (27%), and if it was clearer what is legal and what is not (24%).¹⁵⁷
- 41% of consumers believe it will be easier to find what they are looking for online by 2020, and 17% think the internet will become a safer place.¹⁵⁸

RISKS FOR Brand owners

FINANCIAL RISKS

Counterfeiting presents a myriad of financial dangers for brands — directly affecting sales volumes, prices, costs, investment and the brand equity of firms. Brand investment in the entire product life cycle — from R&D to marketing and aftersales support — must be recouped. Thus, the sales lost to counterfeiters directly translate into lower wages and lost jobs, as well as higher prices for consumers — eroding brand profitability, outside investment and market share. Brands are also left less able to invest in future innovations as a result, and shareholders are less likely to support brands that are over-exposed.

- Multinational brand owners lose approximately 10% of their top-line revenue to counterfeiters.¹⁵⁹
- G20 job losses due to counterfeiting: 2.5m.¹⁶⁰
- Short-sellers can use counterfeiting to directly impact share prices. Security firm G4S saw its share price plummet by more than 3.5% after a false G4S website claimed that the company had overstated profits by £400m.¹⁶¹
- Cybersquatting costs trademark holders more than \$1m (approximately £640,000) per brand, every year.¹⁶²

Estimated value of the global counterfeiting market by sector (\$):163

- Aircraft parts 2 billion
- Alcohol 1 billion
- Auto parts 45 billion
- Batteries 23m
- Clothing 12 billion
- Cosmetics 3 billion
- Drugs 200 billion
- Electronics 169 billion
- Fake diplomas and degrees 1 billion
- IDs and passports 100m
- Lighters 42m
- Money 182m
- Pesticides 735m
- Purses 70m
- Shoes 12 billion

 Control

 Control
- Sporting goods 6.5 billion
- Tobacco 4 billion
- Toys 34 billion
- Watches 1 billion
- Weapons 1.8 billion.

THE COST OF COMBATTING COUNTERFEITING

Alongside lost revenue, brands also face higher costs to fight counterfeiters and defend their market share, whether through auditing supply and distribution chains, adding anti-counterfeiting technologies to products, or safeguarding their online presence. Meanwhile, brands must also fight legitimate items being sold in an illegal manner – the so-called gray market.

- The global anti-counterfeit packaging market was worth about \$57 billion in 2013 and could grow to \$143 billion by 2020.¹⁶⁴
- Worldwide security printing (barcodes, holograms, special inks, etc) could become a \$35.3 billion market by 2018.¹⁶⁵
- The global anti-counterfeiting technologies market is estimated at \$1.1 billion for the pharmaceutical industry alone.¹⁶⁶
- 32% of business managers believe the evolving web will increase the cost of managing domain name portfolios.¹⁶⁷

"Millions of dollars and many years are spent developing brand equity. Counterfeits quickly diminish this investment by chipping away at the consumer's experience with the brand."

Tzachi Weintraub

Founder of Real EyeD¹⁶⁸



REPUTATIONAL RISKS

Considerable investment is required to build a brand's reputation for value and quality — and counterfeiters seek to profit from it. Counterfeiting can rapidly erode brand perception in the marketplace if consumers are disappointed with an unwittingly purchased counterfeit product. Worse, if they infiltrate the complex supply chains of large companies, counterfeit ingredients or components increase the probability of expensive and reputation-damaging product recalls and liability claims. Meanwhile, the online world also means that bad news travels everywhere, fast — with consumers sharing their experiences via social media or peer reviews in real time.

- 78% of consumers would shun a brand if they found themselves on a bogus website pertaining to that brand even though the company itself was not negligent – and 54% felt certain about this.¹⁶⁹
- In 2014, Aston Martin saw its reputation tarnished after a recall of more than 17,000 cars in Europe and the US due to safety fears caused by counterfeit parts in the supply chain.¹⁷⁰
- Consumers will avoid a brand for two years after a bad experience, and 45% of them share bad experiences on social media.¹⁷¹
- 77% of consumers look at online reviews before making a purchase.¹⁷²

The speed and ease with which fake websites can be created means brand reputations can be tarnished in front of a global audience at little cost or risk to counterfeiters:

- Shell was recently attacked by Greenpeace, which launched a fake Shell website praising oil exploration at the expense of the ecosystem, damaging the brand's efforts to be seen as environmentally responsible.¹⁷⁴
- In 2015 a false "bbc-news.co.uk" site claimed that video footage of the Charlie Hebdo attack was fake, damaging the brand's reputation for accurate reporting.¹⁷⁵
- A fake statement purporting to be from the ANZ bank caused an AUS \$314m drop in Whitehaven Coal's market value, causing a loss of faith in the company and severe financial damage to shareholders.¹⁷⁶

"Cyber criminals are wellversed in building copycat websites that look identical to the authentic versions and can cause serious damage to company valuations and hard-won reputations."

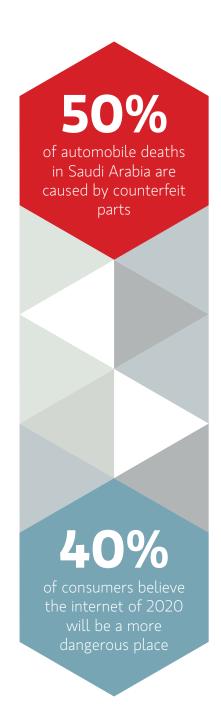
Haydn Simpson

Head of Brand Protection, NetNames¹⁷³

FAKE PRODUCTS, REAL RISKS

In many industries, there are also stark health and safety concerns due to counterfeiting. From rogue e-commerce websites that put sensitive customer information at risk, to the risk of death from tainted goods or counterfeit parts, it is increasingly critical for brands to protect customers from fakes.

- During 2014, UK consumers alone lost £110m to e-commerce fraud up 23% from 2013.¹⁷⁷
- Forensic analysis of 206 computers purchased in 11 countries with pirated software on them showed 61% were infected with dangerous malware.¹⁷⁸
- G20 countries see an estimated 3,000 deaths annually due to counterfeit consumer goods.
- The United States' top counterfeit seizures for safety concerns:
 - ► Pharmaceuticals
 - ► Consumer electronics
 - ► Critical technology components
 - ► Batteries.¹⁸⁰
- 50% of automobile deaths in Saudi Arabia are caused by counterfeit parts.¹⁸¹
- In 2012, 38 people in the Czech Republic and 4 people in Poland died as a result of methanol poisoning from counterfeit alcohol ¹⁸²
- Fake make-up containing up to 200 times the safe limit of chemicals – including arsenic, lead, mercury, copper and cadmium – was recently seized in the UK.¹⁸³
- 40% of consumers believe the internet of 2020 will be a more dangerous place.¹⁸⁴



THE FUTURE OF COUNTERFEITING

"Counterfeiters quickly adopt any new fabrication and packaging technologies that assist their illicit activities."

Zurich, Risk Nexus 2014

Counterfeit products: new risks in global value chains

Counterfeiters will continue to exploit the potential of new technologies and the digital world to further their reach, profitability and anonymity.

THE DIGITAL WORLD

Today, the meteoric rise of mobile, social media and new generic top-level domains (gTLDs) is fragmenting the online landscape — exposing brands not just to counterfeiting, but also evolving threats such as phishing, cybersquatting, traffic diversion and other forms of online fraud

- 30% of business managers believe the internet of 2020 will be a more dangerous place.¹⁸⁵
- 87% of business managers admitted that they would be worried about keeping their brand and trademarks protected with the introduction of new gTLDs.¹⁸⁶

Meanwhile, counterfeit sites are increasingly exploiting pay-per-click (PPC) and SEO fraud to attract consumers, using the same methodologies as brand owners to drive lucrative traffic to their content. Fraudsters are also using social networks, blog entries and review sites to divert consumers to rogue e-commerce websites, even creating bogus product reviews to bolster the legitimacy of their products.

87%
of business managers
admitted that they would
be worried about keeping
their brand and trademarks
protected with the
introduction of
new gTLDs

SOCIAL MEDIA

- Sale of counterfeit goods via social media: up 15%.¹⁸⁷
- Sale of counterfeit goods via online auction sites: up 2%.¹⁸⁸
- 524m ads were disabled by Google in 2014, up from 350m in 2013, for promoting counterfeit goods, malware and other violations of its policies.¹⁸⁹
- More than 7,000 advertisers were banned by Google for promoting counterfeit goods in 2014.¹⁹⁰
- Facebook took down over 3,000 fraudulent listings in a 2.5 day period.¹⁹¹
- 32% of consumers and 33% of business managers believe the internet of 2020 will be dominated by social media sites.¹⁹²

LIVE STREAMING

- Live streaming sites are the fastest-growing online piracy platform.¹⁹³
- Game of Thrones is the world's most pirated show, with 5.2m downloads per episode.¹⁹⁴

"Given the low cost of investment and the high returns that counterfeiters can make on fraudulent apps, I have no doubt we're going to see more of this."

Howard S. Hogan

Partner at Gibson, Dunn & Crutcher¹⁹⁵

MOBILE APPS

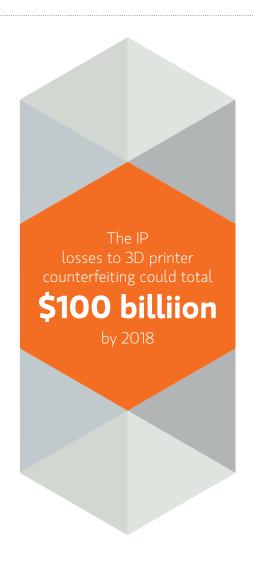
Mobile apps are a fast-growing area of concern for counterfeiting. Copycat apps in legitimate global marketplaces or black market sites can be directly purchased, or lead consumers to purchase counterfeit goods, watch pirated content, and expose their personal information to theft.

- In 2014, app downloads were expected to top 179 billion.¹⁹⁶
- The number of malicious Android applications designed to steal financial data rose almost fivefold in the second half of 2013.¹⁹⁷
- \$700,000 profit was made from the fake app download website Appbucket. 198
- 15% of business managers now see mobile apps as strategically important.¹⁹⁹

"3D printing will be a counterfeiter's best friend."

Thomas A. Campbell and William J. Cass

Scientific American²⁰⁰



3D PRINTING

In the future, the lines between physical and digital counterfeiting may start to blur. 3D printers will make it possible to transfer physical objects as digital files, which can then be fabricated layer by layer at the point of receipt by anyone with a 3D printer. In principle, this could empower counterfeiters with an easy way to access new markets and bypass customs.

■ The IP losses due to 3D printer counterfeiting could total \$100 billion by 2018.²⁰¹

COUNTERING THE COUNTERFEITERS

Of course, new technologies will also be critical to the fight against counterfeiting. However, in this ongoing arms race, it typically only takes counterfeiters 18 months to find their way around new safeguards²⁰². While some brands are already experimenting with advanced "nanoscale barcodes"²⁰³ and "quantum dots",²⁰⁴ below we examine some more mature, mainstream approaches.

RFID

The use of RFID tracking chips in supply and distribution chains can help the struggle against counterfeit and grey-market goods infiltrating legitimate manufacturers and retailers.

■ Track and trace RFIDs could grow 20% annually through 2019 and become a \$35.2 billion market.²⁰⁵

Digital authentication

While counterfeiters are exploiting mobile apps so are those fighting them. Apps and handset technologies are now arriving that can spot counterfeit goods at the point of purchase — either through high-resolution photos that are compared with cloud databases or by ciphered QR codes on the products themselves.

■ NEC aims to commercialize "object fingerprint authentication technology" by 2016.²⁰⁶

Online

The arrival of many new gTLDs is both a threat and an opportunity. While cybercriminals will be poised to take advantage of well-known brands by exploiting new domain names, brands also have the chance to use gTLDs to strengthen their online presence against fraudsters. With domain names becoming as valuable as any other business asset, a holistic domain strategy is essential to maximize benefits and minimize risks online.

By adopting a .BRAND domain name, companies will be able to manage their own space on the internet by effectively controlling their own domain name registry and making it easier for customers to find them. This ring-fencing of their online entity will ensure that their brand's reputation, customers, trademarks and, ultimately, revenues are protected.

- The number of gTLDs has exploded from 22 to over 1,300 in recent years.²⁰⁷
- Over 20,000 trademarks are already recorded in ICANN's "Trademark Clearinghouse".²⁰⁸ Within 24 hours of a valid complaint, any infringing domain will be locked.²⁰⁹
- 89% of businesses think that gTLDs will make it easier for consumers to find their legitimate website, but only 41% of consumers agree.²¹⁰
- 80% of people who shop online on a daily basis said that the introduction of the new gTLDs will make them more likely to enter a company's web address into their internet browser to get to a website, rather than using a search engine.²¹¹
- 41% of CEOs/MDs/business owners believe that new gTLDs will increase consumer trust in companies and the value of their business.²¹²



CONCLUSION

Although we are undoubtedly seeing an explosion of counterfeiting in many forms worldwide, it is the collision of counterfeiting and the online world that is pouring the most fuel onto the fire.

Today's brand owners find themselves confronted by online counterfeiters and gray-market sellers on a daily basis. Rogue e-commerce websites regularly infringe trademarks and logos to copy the look and feel of genuine outlets while selling fake goods that harm revenues, reputations and customers. Auction sites and online marketplaces also offer counterfeiters an easy route to sell their goods online in vast numbers, with almost complete anonymity.

Meanwhile, counterfeiters are constantly adapting their tactics to exploit trust in the ever-changing online environment. From cybersquatting, typosquatting, and SEO manipulation that diverts genuine traffic to illicit websites, to harnessing the rise of social media and mobile apps as new avenues for illegal sales, counterfeiters have their fingers on the pulse of the evolving internet — and they're ready to exploit the next opportunity.

The arrival of new gTLD web addresses means brands can now create trusted environments for their customers, helping to defend their reputation and revenues, as well as unlocking new strategies to combat online counterfeiting and reduce costs. However, counterfeiters will also try to exploit new gTLDs for their own ends — seeking to obtain apparently reputable domains, such as dotShop, dotDeal, or dotDiscount, to lure in unwitting customers.

"By 2020, it will become the norm for companies to manage their own space on the internet... online criminals will quickly turn their attention to the brands without their own namespace."

NetNames

INTERNET 2020 report²¹³

In this fast-changing environment, it is more crucial than ever for brand owners to manage their online presence carefully. Domain names are a brand's visibility on the internet, making them one of the most vital and valuable assets a business can own. By proactively defending their digital assets, brand owners can safeguard not only their IP, but also legitimate traffic and online revenues. Marketers, meanwhile, should be at the forefront of encouraging customer engagement and promoting education in order to mitigate the risk from online counterfeits.

When it comes to counterfeiting, imitation isn't the highest form of flattery. Taking the right preventative measures can, at least, reduce the issue. Unfortunately, curing the disease is a much more complex challenge, and counterfeiting will likely stay with us until consumers stop demanding branded goods at any cost.

10 TIPS TO COMBAT

COUNTERFEITING

- 1. Proactively educate your customers on how to identify and avoid fakes, as well as any known counterfeit operations they may be exposed to.
- 2. Consider appointing a dedicated brand protection manager to raise awareness of the challenge of counterfeiting internally and externally, and also to liaise with law enforcement agencies on the problem.
- **3.** Join forces with other brands and industry bodies to pool your resources, influence and intelligence.
- **4.** Exploit new anti-counterfeiting technologies and systems overtly or covertly, including product identification and tracking, as part of a multi-layered approach.
- **5.** Set up dedicated webpages to help consumers determine whether a product they have bought is a fake and report where they purchased it.
- **6.** Take centralized control over your domain names to rapidly respond to cybersquatters, typosquatters, and rogue e-tailers.
- **7.** Actively monitor online reseller prices. If prices are significantly lower than the RRP, it is a strong indicator of counterfeit activity.
- **8.** Engage consumers by developing a proactive gTLD strategy to ensure that your legitimate brand channels are easy to find.
- **9.** Audit online threats and profile key infringers to make an informed choice about how best to protect your brand and measure the success of your efforts. Then take action using tried and trusted enforcement methodologies.
- **10.** Consider bringing in outside experts with the experience and advanced technologies to monitor for threats and rapidly enforce against infringements across all your online channels, worldwide.

Now is the time to develop and deploy a proactive and effective anti-counterfeiting strategy to safeguard customer confidence, brand equity, sales and revenues.

With market-leading monitoring technology and specialized anti-counterfeit analysis and enforcement teams, NetNames has the expert, global capabilities to defend your digital domain and lead the fight-back against fraudsters.

To learn more about how we can help, please call +44 (0)20 7015 1777 or email marketing@netnames.com.

ABOUT NETNAMES

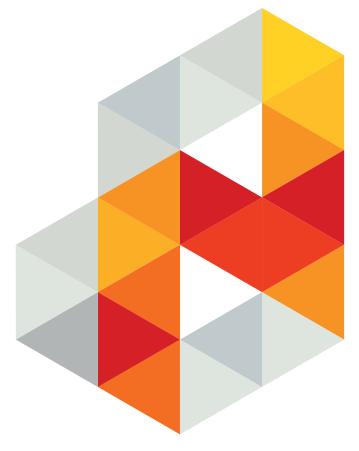
NetNames is part of Corporation Service Company® (CSC®) – a privately held company headquartered in Wilmington, Delaware, USA.

CSC is the leading and most respected global provider of corporate domain management and online brand protection services.

We give global brands the advantage by keeping them one step ahead online. Our market leading technology, global industry expertise and commitment to outstanding client service, means you can be confident in the knowledge that your brand is in safe hands, both today and tomorrow.

Our services include brand protection, online security, anti-piracy, domain acquisition, new gTLDs and corporate domain name management.

We have offices across four continents allowing us to deliver global solutions and online brand strategies with localized support and execution.



REFERENCES

- PwC, The rise of Generation C, 2010: http://www.strategyand.pwc. com/media/file/Strategyand_Rise-of-Generation-C.pdf.pdf
- 2. Quoted in: Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- IP Crime Group, IP Crime Annual Report 2013/14, 2014: https:// www.gov.uk/government/uploads/system/uploads/attachment_ data/file/374283/ipcreport13.PDF
- 4. International Chamber of Commerce, quoted by World IP Review, Sinking the counterfeit ship: brand owners and online retailers respond, 2014: http://www.worldipreview.com/article/sinking-thecounterfeit-ship-brand-owners-and-online-retailers-respond
- Frontier Economics, Global Impacts Study, 2011: http://www. iccwbo.org/Advocacy-Codes-and-Rules/BASCAP/BASCAP-Research/ Economic-impact/Global-Impacts-Study/
- **6.** International Chamber of Commerce, quoted by Research and Markets, Anti-counterfeit and Brand Protection Luxury Products, Beauty Products and Apparel, 2015: http://www.researchandmarkets.com/research/ckscmk/anticounterfeit
- 7. \$ always refers to US dollars unless otherwise stated.
- 8. Michigan University, Center for anti-counterfeiting and product protection, The Global Risk of Product Counterfeiting: Facilitators of the Criminal Opportunity, 2015: http://www.jeremywilson.org/sites/default/files/PC_Opportunity_Backgrounder_FINAL.pdf
- The Office of the United States Trade Representative, Special 301 Report, 2013: https://ustr.gov/sites/default/files/05012013%20 2013%20Special%20301%20Report.pdf
- IP Crime Group, IP Crime Annual Report 2013/14, 2014: https:// www.gov.uk/government/uploads/system/uploads/attachment_ data/file/374283/ipcreport13.PDF
- Europol, 292 Internet Domain Names Seized For Selling Counterfeit Products, 2014: https://www.europol.europa.eu/ content/292-Internet-domain-names-seized-selling-counterfeitproducts
- 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.36
- **13.** World IP Review, Sinking the counterfeit ship: brand owners and online retailers respond, 2014: http://www.worldipreview.com/article/sinking-the-counterfeit-ship-brand-owners-and-online-retailers-respond

- **14.** 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.36
- **15.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **16.** NetNames, Sizing the piracy universe, 2013: https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- NetNames, Sizing the piracy universe, 2013: https:// copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- **18.** NetNames, Sizing the piracy universe, 2013: https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- **19.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **20.** Fortune magazine, 2013: http://fortune.com/2013/08/27/how-companies-can-beat-the-counterfeiters
- **21.** United Nations Office on Drugs and Crime, Transnational Organized Crime in East Asia and the Pacific, 2013: http://www.unodc.org/documents/data-and-analysis/Studies/TOCTA_EAP_web.pdf (p. 128).
- 22. FICCI and EY, Counterfeiting, Piracy & Smuggling Growing threat to national security, 2013: http://www.ey.com/Publication/vwLUAssets/EY-Government-and-Public-Sector-Growing-threat-to-national-security-an-analysis/\$FILE/EY-Counterfeiting-piracy-and-smuggling-Growing-threat-to-national-security.pdf
- **23.** Digital Citizens Alliance, Good Money Gone Bad, 2014: http://media.digitalcitizensactionalliance.org/314A5A5A9ABBBBC5E3BD8 24CF47C46EF4B9D3A76/4af7db7f-03e7-49cb-aeb8-ad0671a4e1c7. pdf
- **24.** Digital Citizens Alliance, Good Money Gone Bad, 2014: http://media.digitalcitizensactionalliance.org/314A5A5A9ABBBBC5E3BD8 24CF47C46EF4B9D3A76/4af7db7f-03e7-49cb-aeb8-ad0671a4e1c7.pdf
- **25.** United Nations Office on Drugs and Crime, Transnational Organized Crime in East Asia and the Pacific, 2013: http://www.unodc.org/documents/data-and-analysis/Studies/TOCTA_EAP_web.pdf (p. 123).
- **26.** United Nations Office on Drugs and Crime, Transnational Organized Crime in East Asia and the Pacific, 2013: http://www.unodc.org/documents/data-and-analysis/Studies/TOCTA_EAP_web.pdf (p. 128).
- 27. ITU, ITU releases 2014 ICT figures, 2014: https://www.itu.int/net/pressoffice/press_releases/2014/23.aspx

- 28. Davis Wright Tremaine LLP, Anti-counterfeiting in the fashion and luxury sectors: trends and strategies, 2013: http://www.worldtrademarkreview.com/Intelligence/Anti-Counterfeiting/2013/Industry-insight/Anti-counterfeiting-in-the-fashion-and-luxury-sectors-trends-and-strategies
- **29.** NetNames, Sizing the piracy universe, 2013: https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- **30.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **31.** Research from MarkMonitor, quoted in Apparel, Is Your Brand Prepared to Battle the Online Counterfeiters?, 2014: http://apparel.edgl.com/news/is-your-brand-prepared-to-battle-the-online-counterfeiters-90611
- **32.** Research from MarkMonitor, quoted in Retail Fraud, Number of online shoppers looking for counterfeit goods on the rise, 2014: http://www.retailfraud.com/online-shoppers-looking-counterfeit-goods-rise
- **33.** Wiser, Counterfeiting, 2013: http://www.wiser.com/infographic-counterfeit
- **34.** Department for Business, Innovation & Skills, Intellectual property enforcement, 2014: https://www.gov.uk/government/speeches/intellectual-property-enforcement
- NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **36.** Kaspersky Lab report, Financial cyber threats in 2013, 2014: http://media.kaspersky.com/en/Kaspersky-Lab-KSN-report-Financial-cyber-threats-in-2013-eng-final.pdf
- 37. Kaspersky Lab report, Financial cyber threats in 2013, 2014: http://media.kaspersky.com/en/Kaspersky-Lab-KSN-report-Financial-cyber-threats-in-2013-eng-final.pdf
- 38. Bl Intelligence, 2014: http://www.businessinsider.com/the-us-accounts-for-over-half-of-global-payment-card-fraud-sai-2014-
- **39.** ACI Worldwide and Aite Group, Worldwide Global Consumer Fraud Survey, 2014: http://www.retailsolutionsonline.com/doc/globally-victimized-card-fraud-0001
- ACI Worldwide and Aite Group, Worldwide Global Consumer Fraud Survey, 2014: http://www.retailsolutionsonline.com/doc/ globally-victimized-card-fraud-0001
- **41.** NetNames, Sizing the piracy universe, 2013: https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf

- **42.** Department for Business, Innovation & Skills, Government welcomes Creative Content UK which will warn Internet users whose connections are being used to illegally share films and music, 2014: https://www.gov.uk/government/news/new-education-programme-launched-to-combat-online-piracy
- **43.** Ipsos MORI, 2014: http://www.theguardian.com/film/2014/jul/17/digital-piracy-film-online-counterfeit-dvds
- **44.** The Wall Street Journal, Studios Struggle for Focus on Film Pirates' Booty, 2013: http://www.wsj.com/articles/SB100014241278 87324600704578402850894445768
- **45.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **46.** Davis Wright Tremaine LLP, Global IP defence tactics for software and entertainment sectors, 2014: http://www.worldtrademarkreview.com/Intelligence/Anti-Counterfeiting/2014/Industry-insight/Global-IP-defence-tactics-for-software-and-entertainment-sectors
- **47.** Research from NetNames, 2015: http://www.netnames.com/solutions/industry/luxury-brands
- **48.** Research from NetNames, 2015: http://www.netnames.com/solutions/industry/luxury-brands
- **49.** Apparel, Is Your Brand Prepared to Battle the Online Counterfeiters?, 2014: http://apparel.edgl.com/news/is-your-brand-prepared-to-battle-the-online-counterfeiters-90611
- **50.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- EU Commission, 2013: http://ec.europa.eu/taxation_customs/ customs/customs_controls/counterfeit_piracy/statistics
- **52.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **53.** IHS, Top 5 Most Counterfeited Parts Represent a \$169 Billion Potential Challenge for Global Semiconductor Market, http://press.ihs.com/press-release/design-supply-chain/top-5-most-counterfeited-parts-represent-169-billion-potential-cha
- **54.** IHS, Counterfeit components: mitigating the risk, 2014: http://www.slideshare.net/rorykingihs/ihs-electronics-conference-rory-king-october
- **55.** Mobile Manufacturers Forum, Counterfeit/Substandard Mobile Phones, 2014: http://spotafakephone.com//docs/eng/MMF_CounterfeitPhones_EN.pdf

- **56.** Mobile Manufacturers Forum, Counterfeit/Substandard Mobile Phones, 2014: http://spotafakephone.com//docs/eng/MMF_CounterfeitPhones_EN.pdf
- **57.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- IHS, Cellphone Gray Market Goes Legit, As Sales Continue to Decline, 2013: http://press.ihs.com/press-release/design-supplychain/cellphone-gray-market-goes-legit-sales-continue-decline
- **59.** Mobile Manufacturers Forum, Counterfeit/Substandard Mobile Phones, 2014: http://spotafakephone.com//docs/eng/MMF_CounterfeitPhones_EN.pdf
- **60.** KPMG, Counterfeit Christmas, 2013: http://www.kpmg.com/ UK/en/images2/Counterfeit%20Christmas%20information%20 infographic%2012.12.13.jpg
- Forrester Research: http://www.netnames.com/solutions/industry/ fmcg-retail
- **62.** Datamonitor, Anti-Counterfeiting Strategies for FMCG Companies, 2013: http://www.datamonitor.com/store/Product/anti_counterfeiting_strategies_for_fmcg_companies?productid=CM00234-019
- **63.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- **64.** International IP Enforcement Summit, Summit Report, 2014: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_ohim/press_releases/IP_summit_report_en.pdf
- **65.** International IP Enforcement Summit, Summit Report, 2014: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/contentPdfs/about_ohim/press_releases/IP_summit_report_en.pdf
- **66.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wpcontent/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- **68.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf

- **69.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.13
- 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.36
- 72. AmerisourceBergen, Securing the Global Pharmaceutical Supply Chain against the Threat of Counterfeit Drugs, 2014: http://www.worldcourier.com/insights-events/market-insights/detail/securing-global-pharmaceutical-supply-chain
- 73. 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.11
- The World Trade Organisation, 2015: http://www.netnames.com/ blog/2015/03/us-urges-icann-and-global-governments-to-tackleonline-counterfeit-goods/
- 75. ISO, Crackdown on counterfeiting, 2014: http://www.iso.org/iso/news.htm?refid=Ref1809
- **76.** PWC, Counterfeit goods in the UK, 2013: https://www.pwc. co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-survey-october-2013.pdf
- US Chamber of Commerce, International IP Index, 2015: https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/pipcu/pipcu-update/pipcu-update-issuefour/Pages/uk-ranks-number-one-in-the-world-for-ip-enforcement.aspx
- 78. The Guardian, Counterfeit goods crackdown sees 2,500 websites shut down, 2014: http://www.theguardian.com/money/2014/apr/28/counterfeit-goods-crackdown-websites-shut-down-pipcu
- IP Crime Group, IP Crime Annual Report 2013/14, 2014: https:// www.gov.uk/government/uploads/system/uploads/attachment_ data/file/374283/ipcreport13.PDF
- **80.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- 81. Kantar Media & Ofcom, Online Copyright Infringement Tracker, 2013: http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/oci-wave4
- **82.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF

- **83.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- 84. International IP Enforcement Summit, Summit Report, 2014: https://oami.europa.eu/tunnel-web/secure/webdav/guest/ document_library/contentPdfs/about_ohim/press_releases/ IP_summit_report_en.pdf
- **85.** World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4-078d63a2e
- **86.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- **87.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **88.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- 89. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- **90.** Wilde Beuger Solmecke: https://www.wbs-law.de/eng/trademark-law/piracy-increased-penalties-for-counterfeiters-ingermany-42580/
- 91. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- 92. IGGDAW, 2014: http://www.iggdaw.de/cms/?id=1
- NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **94.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- **95.** FICCI and EY, Counterfeiting, Piracy & Smuggling Growing threat to national security, 2013: http://www.ey.com/Publication/vwLUAssets/EY-Government-and-Public-Sector-Growing-threat-to-national-security-an-analysis/\$FILE/EY-Counterfeiting-piracy-and-smuggling-Growing-threat-to-national-security.pdf

- 96. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- 97. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- **98.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **99.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- **100.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- **101.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- 102. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww.worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- **103.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- 104. Nordic Innovation, Unprecedented Music Piracy Collapse In Norway Fails To Boost Revenues, 2015: http://nordicinnovation. nu/unprecedented-music-piracy-collapse-in-norway-fails-to-boost-revenues/
- 105. The Guardian, Piracy study shows illegal downloaders more likely to pay for films than music, 2014: http://www.theguardian.com/technology/2014/may/06/piracy-film-music-study-pay-illegal-download-damage
- 106. Digital Trends, Swedish anti-piracy law resulted in boost of music sales, drop in Internet traffic, 2014: http://www.digitaltrends.com/computing/swedish-anti-piracy-law-boost-of-music-sales-drop-in-Internet-traffic/#ixzz3WGRrKLgq
- 107. Global Post, 11 numbers that show how prolific illegal downloading is right now, 2014: http://www.globalpost.com/dispatch/news/business/technology/140411/11-number-show-how-prolific-illegal-downloading-right-now
- 108. Wall Street Journal, China Tries to Clean Up E-Commerce, 2015: http://www.wsj.com/articles/china-tries-to-clean-up-ecommerce-1427894413

- 109. IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- **110.** Havocscope, 2013: http://www.havocscope.com/?s=china%2C+counterfeit
- **111.** Havocscope, 2013: http://www.havocscope.com/?s=china%2C+counterfeit
- **112.** Havocscope, 2013: http://www.havocscope.com/?s=china%2C+counterfeit
- **113.** Havocscope, 2013: http://www.havocscope.com/?s=china%2C+counterfeit
- Havocscope, 2015: http://www.havocscope.com/losses-tocounterfeit-goods-by-country/
- International Anti-Counterfeiting Coalition, 2015: http://www.iacc. org/counterfeiting-statistics
- **116.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- 117. IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- International Anti-Counterfeiting Coalition, 2015: http://www.iacc. org/counterfeiting-statistics
- International Anti-Counterfeiting Coalition, 2015: http://www.iacc. org/counterfeiting-statistics
- **120.** US Department of Homeland Security, Intellectual Property Rights Seizures Statistics Fiscal Year 2013, 2014: http://www.cbp.gov/sites/default/files/documents/2013%20IPR%20Stats.pdf
- **121.** NetNames, Sizing the piracy universe, 2013: https://copyrightalliance.org/sites/default/files/2013-netnames-piracy.pdf
- **122.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- 123. Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_media/dbe/corporate/docs/ whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **124.** Australian Institute of Criminology, Foreword, Intellectual property crime and enforcement in Australia, 2008: http://www.aic.gov.au/documents/B/D/O/%7BBDOBC4E6-0599-467A-8F64-38D13B5C0EEB%7Drpp94.pdf

- **125.** Havocscope, 2015: http://www.havocscope.com/losses-to-counterfeit-goods-by-country/
- **126.** Australian Government, 2015: http://www.ipaustralia.gov.au/ip-infringement/counterfeiting-and-piracy/
- 127. The Sydney Morning Herald, Value of 'more sophisticated' counterfeit goods increases by millions, 2014: http://www.smh.com.au/nsw/value-of-more-sophisticated-counterfeit-goods-increases-by-millions-20140504-zqzu8.html
- **128.** New Zealand Herald, Thousands of counterfeit items stoppped at New Zealand borders, 2015: http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11383720
- **129.** New Zealand Herald, Thousands of counterfeit items stoppped at New Zealand borders, 2015: http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11383720
- **130.** The Office of the United States Trade Representative, 2014 Special 301 Report, 2014: https://ustr.gov/sites/default/files/USTR%20 2014%20Special%20301%20Report%20to%20Congress%20 FINAL.pdf
- **131.** Associated Chambers of Commerce and Industry of India, Times of India, Fake products sale is likely to touch over Rs 55,000 cr by 2013, 2012: http://timesofindia.indiatimes.com/city/chennai/Fake-products-sale-is-likely-to-touch-over-Rs-55000-cr-by-2013/articleshow/15375395.cms
- **132.** Associated Chambers of Commerce and Industry of India, Times of India, Fake products sale is likely to touch over Rs 55,000 cr by 2013, 2012: http://timesofindia.indiatimes.com/city/chennai/Fake-products-sale-is-likely-to-touch-over-Rs-55000-cr-by-2013/articleshow/15375395.cms
- **133.** Associated Chambers of Commerce and Industry of India, Times of India, Fake products sale is likely to touch over Rs 55,000 cr by 2013, 2012: http://timesofindia.indiatimes.com/city/chennai/Fake-products-sale-is-likely-to-touch-over-Rs-55000-cr-by-2013/articleshow/15375395.cms
- **134.** Associated Chambers of Commerce and Industry of India, Times of India, Fake products sale is likely to touch over Rs 55,000 cr by 2013, 2012: http://timesofindia.indiatimes.com/city/chennai/Fake-products-sale-is-likely-to-touch-over-Rs-55000-cr-by-2013/articleshow/15375395.cms
- **135.** 2014, https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/pipcu/pipcu-news/Pages/home-secretary-visits-pipcu.aspx

- 136. IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- PWC, Counterfeit goods in the UK, 2013: https://www.pwc. co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-surveyoctober-2013.pdf
- 138. OHIM, European Citizens And Intellectual Property: Perception, Awareness And Behaviour, 2013: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/25-11-2013/executiveSummary/executive_summary_en.pdf
- **139.** OHIM, European Citizens And Intellectual Property: Perception, Awareness And Behaviour, 2013: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/25-11-2013/executiveSummary/executive_summary_en.pdf
- **140.** OHIM, European Citizens And Intellectual Property: Perception, Awareness And Behaviour, 2013: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/25-11-2013/executiveSummary/executive_summary_en.pdf
- **141.** Quoted in: Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- 142. World Trademark Review, Anti-counterfeiting report, 2014: http://www.worldtrademarkreview.com/account/ register/?Reason=FREEVIEWEXPIRED&ReturnUrl=http%3a%2f%2fwww. worldtrademarkreview.com%2fMagazine%2fDownload%3fissueGuid%3d 7b2bfba6-9d42-468a-bb86-ca4078d63a2e
- **143.** NetNames omnibus poll, 2015 NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **144.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **145.** MarkMonitor, 2014 MarkMonitor Shopping Report, 2014: https://go.markmonitor.com/2014ShoppingReport
- **146.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF

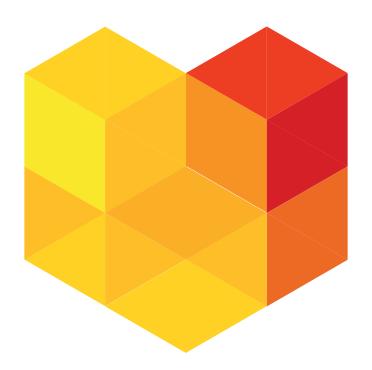
- **147.** OHIM, European Citizens And Intellectual Property: Perception, Awareness And Behaviour, 2013: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/25-11-2013/executiveSummary/executive_summary_en.pdf
- **148.** Kantar Media & Ofcom, Online Copyright Infringement Tracker, 2013: http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/oci-wave4
- **149.** OHIM, European Citizens And Intellectual Property: Perception, Awareness And Behaviour, 2013: https://oami.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/IPContributionStudy/25-11-2013/executiveSummary/executive_summary_en.pdf
- **150.** The Sydney Morning Herald, Value of 'more sophisticated' counterfeit goods increases by millions, 2014: http://www.smh.com.au/nsw/value-of-more-sophisticated-counterfeit-goods-increases-by-millions-20140504-zqzu8.html
- **151.** PWC, Counterfeit goods in the UK, 2013: https://www.pwc. co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-surveyoctober-2013.pdf
- **152.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **153.** NetNames omnibus poll, 2015
- **154.** PWC, Counterfeit goods in the UK, 2013: https://www.pwc.co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-survey-october-2013.pdf
- **155.** PWC, Counterfeit goods in the UK, 2013: https://www.pwc. co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-survey-october-2013.pdf
- **156.** PWC, Counterfeit goods in the UK, 2013: https://www.pwc. co.uk/en_UK/uk/assets/pdf/anti-counterfeiting-consumer-surveyoctober-2013.pdf
- **157.** Kantar Media & Ofcom, Online Copyright Infringement Tracker, 2013: http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/oci-wave4

- **158.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **159.** International Chamber of Commerce, quoted in World Trademark Review, Anti-counterfeiting in the fashion and luxury sectors: trends and strategies, 2013: http://www.worldtrademarkreview.com/Intelligence/Anti-Counterfeiting/2013/Industry-insight/Anti-counterfeiting-in-the-fashion-and-luxury-sectors-trends-and-strategies
- **160.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- **161.** City AM, G4S share price plummets after fake press release "reveals" £400m profit overstatement, 2014: http://www.cityam.com/1415847089/g4s-rocked-fake-statement-and-website
- **162.** NetNames, 2015: http://www.netnames.com/solutions/industry/luxury-brands
- 163. FICCI and EY, Counterfeiting, Piracy & Smuggling Growing threat to national security, 2013: http://www.ey.com/Publication/vwLUAssets/EY-Government-and-Public-Sector-Growing-threat-to-national-security-an-analysis/\$FILE/EY-Counterfeiting-piracy-and-smuggling-Growing-threat-to-national-security.pdf FICCI and EY, Counterfeiting, Piracy & Smuggling Growing threat to national security, 2013: http://www.ey.com/Publication/vwLUAssets/EY-Government-and-Public-Sector-Growing-threat-to-national-security-an-analysis/\$FILE/EY-Counterfeiting-piracy-and-smuggling-Growing-threat-to-national-security.pdf
- **164.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- **165.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- **166.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- **167.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **168.** Luxury Daily, 2014: http://www.luxurydaily.com/luxury-brands-look-to-courts-crowdsourcing-to-fight-counterfeits/
- **169.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- 170. Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf

- 171. Dimensional Research, Customer Service And Business Results, 2013: https://d16cvnquvjw7pr.cloudfront.net/resources/ whitepapers/Zendesk_WP_Customer_Service_and_Business_ Results.pdf
- 172. Google, Zero Moment of Truth, 2011: https://www.thinkwithgoogle.com/research-studies/2011-winning-zmot-ebook.html
- **173.** Professional security magazine, G4S web hoax, 2014: http://www.professionalsecurity.co.uk/products/guarding/g4s-web-hoax/
- 174. Forbes, Was Greenpeace's Shell Hoax Brilliant Or 'Villainous'?, 2012: http://www.forbes.com/sites/kashmirhill/2012/07/19/greenpeaces-shell-hoax/
- **175.** World Trademark Review, Hoax news site operator vows 'more to come'; creates another brand headache, 2015: http://www.worldtrademarkreview.com/Blog/detail.aspx?g=ecf67754-c83f-493f-96b2-3ec0c595c46c
- **176.** ABC news, ANZ hoaxer Jonathan Moylan avoids jail over fake press release, 2014: http://www.abc.net.au/news/2014-07-25/jonathanmoylan-judgement-for-fake-anz-press-release/5624542
- 177. Financial Fraud Action UK, Customers Urged To Be Vigilant As Fraudsters Increase Scam Attacks, 2014: http://www.financialfraudaction.org.uk/cms/assets/1/2014%20h1%20fraud%20figures%20-%20final.pdf
- 178. IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- 179. European Journal of Business and Management, The Impact of Trading Counterfeited Vehicle Spare Parts across the Local Supply Chain: Case of Moshi Municipality, 2014: http://www.iiste.org/Journals/index.php/EJBM/article/viewFile/18705/18861
- **180.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- 181. HH Global, Counterfeiting: A global epidemic, 2015: http://www. hhglobal.com/uploads/pages/HHG_Infographic_Counterfeiting_V3_ Green-01.png
- **182.** BBC News online, Czechs ban spirits after bootleg alcohol poisoning, 2012: http://www.bbc.co.uk/news/world-europe-19608461
- **183.** The Daily Mail, Fake make-up on sale containing up to 200 TIMES the safe limit of chemicals including arsenic, lead, mercury, copper and cadmium, 2015: http://www.dailymail.co.uk/news/article-2939936/High-Street-make-sale-containing-200-TIMES-safe-limit-chemicals-including-arsenic-lead-mercury-copper-cadmium. html#ixzz3WXuSehjq

- **184.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **185.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **186.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- 187. IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- **188.** IP Crime Group, IP Crime Annual Report 2013/14, 2014: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374283/ipcreport13.PDF
- **189.** Google, Fighting Bad Advertising Practices on the Web 2014 Year in Review, 2014: http://adwords.blogspot.co.uk/2015/02/fighting-bad-advertising-practices-on.html
- 190. Google, Fighting Bad Advertising Practices on the Web 2014 Year in Review, 2014: http://adwords.blogspot.co.uk/2015/02/ fighting-bad-advertising-practices-on.html
- 191. 2015 Situation Report on Counterfeiting in the European Union, Europol and the Office for Harmonization in the Internal Market, April 2015, p.34
- **192.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- 193. Department for Business, Innovation & Skills, Government welcomes Creative Content UK which will warn Internet users whose connections are being used to illegally share films and music, 2014: https://www.gov.uk/government/news/new-education-programme-launched-to-combat-online-piracy
- **194.** The Hollywood Reporter, Game of Thrones Tops List of Most Pirated TV Shows, 2013: http://www.hollywoodreporter.com/live-feed/game-thrones-tops-list-pirated-573678
- **195.** Law360, 2014: http://www.law360.com/articles/515464/mobile-apps-the-new-frontier-for-counterfeiting
- **196.** Forbes, Mobile App Usage By The Numbers, 2014: http://www.forbes.com/sites/niallmccarthy/2014/10/29/mobile-app-usage-by-the-numbers-infographic/
- 197. BI Intelligence, 2014: http://www.businessinsider.com/the-us-accounts-for-over-half-of-global-payment-card-fraud-sai-2014-3?IR=T
- **198.** The Inquirer, Four plead guilty to selling \$700,000 of counterfeit Android apps, 2014: http://www.theinquirer.net/inquirer/news/2336204/four-plead-guilty-to-selling-usd700-000-of-counterfeit-android-apps

- **199.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, Background research, 2014.
- **200.** Scientific American, 2013: http://www.scientificamerican.com/article/3-d-printing-will-be-a-counterfeiters-best-friend/
- 201. Gartner, Gartner Says Uses of 3D Printing Will Ignite Major Debate on Ethics and Regulation, 2014: http://www.gartner.com/newsroom/id/2658315
- **202.** Zurich, Risk Nexus: Counterfeit products: new risks in global value chains, 2014: https://www.zurich.com/_/media/dbe/corporate/docs/whitepapers/risk-nexus-november-2014-counterfeit-products.pdf
- 203. See http://nanotechweb.org/cws/article/lab/56519
- **204.** See http://www.prnewswire.com/news-releases/quantum-materials-secures-uncloneable-anti-counterfeiting-3d-printing-technology-265182861.html
- **205.** Sophic Capital, Counterfeiting, 2014: http://sophiccapital.com/wp-content/uploads/2014/10/Download-Full-Counterfeiting-Report-Here.pdf
- **206.** Computerworld, NEC smartphone tech can spot counterfeit goods, 2014: http://www.computerworld.com/article/2844963/gadgets/nec-smartphone-tech-can-spot-counterfeit-goods.html
- **207.** ICANN, The Internet is Expanding, 2014: http://www.slideshare.net/icannpresentations/full-size-infographic
- **208.** ICANN, The Internet is Expanding, 2014: http://www.slideshare.net/icannpresentations/full-size-infographic
- **209.** ICANN, The Internet is Expanding, 2014: http://www.slideshare.net/icannpresentations/full-size-infographic
- **210.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **211.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **212.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.
- **213.** NetNames, Internet 2020: an analysis of how new gTLDs will transform the Internet, 2014.



NetNames UK

25 Canada Square London E14 5LQ Tel: +44 207 015 9200

NetNames UK - Cambridge

Betjeman House 104 Hills Road Cambridge CB2 1LQ Tel: +44 1223 372 400

NetNames USA - East Coast

140 Broadway 22nd Floor New York NY 10005 Tel: +1 212 627 4599

NetNames USA – West Coast

530 Lytton Avenue Palo Alto 94301

NetNames France

13 Boulevard Haussmann 75009 Paris Tel: +33 (0) 1 48 01 83 60

NetNames Denmark

Ørestads Boulevard 108, 10. sal, th, 2300 København S Tel: + 45 33 88 63 00

NetNames Germany

Landshuter Allee 12-14 4. OG Nord 80637 München Tel: +49 89 20 400 78 0

NetNames Switzerland

Löwenstrasse 29 CH-8001 Zürich Tel: +41 44 204 16 80

NetNames Sweden

Sveavägen 33 3rd floor 111 34 Stockholm Tel: +46 8 5050 1450

NetNames Australia

Suite 309 546 Collins St Melbourne VIC 3000 Tel: +61 3 8610 4600

NetNames Singapore

750A Chai Chee Road #07-10 Technopark@ChaiChee Singapore 469001 Tel: +65 6441 8863

www.netnames.domains www.netnames.com marketing@netnames.com