
SIIA WHITE PAPER

Geolocation Tools and Geographical Market Segmentation

MARKET SEGMENTATION

**Software & Information
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Introduction

Websites and online content providers often use technical means to ascertain the geographical location of potential visitors. They do this for a variety of socially beneficial purposes, including localizing content, fighting online fraud and complying with local laws and regulations. Proposed bans on these geolocation techniques would halt these uses. It would also vitiate the efficiency and equity advantages of geographical market segmentation for digital goods and services. The economic losses would be considerable, but there would also be repercussions for Internet freedom. Without the ability to localize content, firms that want to comply with local laws would have to restrict their offerings to those that would be approved by the most restrictive global speech regimes.

This paper offers an overview of some of the socially beneficial uses of geolocation tools in online content. It goes on to discuss the economic importance of one of the most important reasons online content providers use geolocation techniques: geographical market segmentation. SIIA hopes this guide will help give a balanced perspective to policymakers regarding geolocation uses in online content.

Benefits of Geolocation Tools

Geolocation can be performed relatively easily, with varying degrees of accuracy, relying on the HTML5 geolocation API, end-user-provided address information, GPS data delivered via a mobile OS to a mobile app, a credit card billing address, or a reverse-IP lookup. It has been used for many years for a variety of purposes detailed in the next section and is entirely consistent with the Internet architecture, including new security protocols.

Geolocation technologies can identify the location of a user's wireless device or computer location via a Global Positioning System (GPS) chip or triangulation of nearby wireless network towers. The user's device then transmits this information when the website or content provider asks for it. Other geolocation services obtain information from the user's device that does not immediately identify the user's location such as an IP address; then they consult external databases that associate that data with location information such as country and state and pass this information on to website. In both case, this allows the website or content provider to have reasonably good information about the location of its user before deciding whether and what to display to the visitor or whether to redirect the use to another site. ¹ The accuracy of these services has been estimated as high as 95 -99% for IP-based geolocation services identifying the country involved. ² The World Wide Web Consortium has released a recommended standard for a geolocation API that allows websites to ask users to provide their location information.³

Some policymakers seem to think that this technique is intrinsically suspect and should be subject to government regulation. For instance, a report from a standing committee of the Australian parliament contains the following two recommendations:

- Recommendation 9: The Committee recommends that the Australian Government consider enacting a ban on geoblocking⁴ as an option of last resort, should persistent market failure exist in spite of the changes to the Competition and Consumer Act and the Copyright Act recommended in this report.
- Recommendation 10: That the Australian Government investigate the feasibility of amending the Competition and Consumer Act so that contracts or terms of service which seek to enforce geoblocking are considered void.⁵

Given the many beneficial uses to which the technique of geoblocking can be put, this attempt to ban it is misguided. Banning geoblocking would also prevent websites and online content providers from localizing and customizing content, taking effective action against online fraud and complying with national laws. Geoblocking restrictions would also have the perverse impact of restricting free speech, effectively exporting the most restrictive legal standards from particular countries to the entire globe.

Local News

It is important for online news providers to be able to adjust content and advertising to the locality of their visitors. National news is critical, but visitors often want to keep up with the developments in their own local community. Advertisers are able to provide more effective messages when they are assured that the people who view them are located in a specific community. This kind of business model is being used by a news site based in Denver that provides a digital news service to visitors from across the United States. It uses geolocation software to display local news and advertising to more than two million monthly visitors from 57 local U.S. markets. They use the geolocation technique of IP address lookup to determine the location of a visitor and serve the local edition of their news service based on that determination. Advertisers can then choose the local editions in which they want their ads to appear.⁶

Digital Content Distribution

Goods and services of all kinds are often distributed on a geographic basis. For example, a company may have one distributor for its widgets in Country A, and another distributor in a Country B. Such distribution arrangements typically enable businesses to choose the most effective distributor on a per-market basis, resulting in a better consumer experience in each country and maximizing revenue.

Movies, music, games, and software are among the Internet-delivered products typically that use geolocation to control distribution. Geoblocking is necessary for an online retailer to ensure that it only sells its products and services in regions in which it is contractually permitted to do so. For instance, the terms of service for the U.S. iTunes store say: “The iTunes Service is available to you only in the United States, its territories, and possessions. You agree not to use or attempt to use the iTunes Service from outside these locations. Apple may use technologies to verify your compliance.”⁷ Apple verifies that a user is in the United States by asking prospective users seeking to open an account for a physical address with a correct zip code and the account details for a payment card issued by a U.S. bank.⁸

Localized Advertising and Search

Websites want to run ads that are relevant to the interests and needs of their users and so often want to ascertain the location of their users so as to serve more relevant ads. Google, for instance, does this in its search site and for its ad network: “...in searching for relevant advertisements to display, Google often utilized... technology to ascertain the user’s geographic location and thereby to assist it in displaying the most geographically pertinent ads...”⁹ Some consulting firms provide websites and advertisers with strategic geotargeting advice on how to use geolocation to their own advantage in the attempt to deliver relevant ads.¹⁰

Search engines want to return results to their users that are responsive to their questions and often this means providing results that depend on the user’s location, even if the user does not put a location in the search query itself. Various geolocation tools enable search engines to do this.¹¹

Regional Sports Distribution

Major League Baseball has a contractual obligation to ensure that broadcasts of local games are blacked out in the team's home market. This is done as a way to ensure that fans will have an incentive to attend the game in person. But streaming games live is obviously a large potential source of income. How could this be done without streaming the games into the local team's home market? MLB uses geolocation software that prevents users in the team's home market from watching a live webcast of the game and allows users outside the home market to see the games."¹²

Fraud Prevention

Online retailers frequently use IP-based geolocation tools to detect and block potentially fraudulent transactions. Online retailers typically use IP-based geolocation services to identify the country and state of its visitors. Before a user can complete a transaction, the online retailer typically asks for the user's credit card billing address, and then sees if the state in the billing address matches the state derived from the geolocation service. Since the overwhelming majority (73%) of mismatches is fraudulent, this provides a basis for the online retailer to ask further questions or deny the transaction. Such geolocation-based security measures are an important tool in the struggle against online fraud.¹³

Compliance with Local Laws

Geolocation technology has the potential to allow website owners to comply with local law. As one legal commentator put it:

"...as the provided content can be adjusted depending on the access seekers' geographical location, geo-identification has the advantage of providing the Web site operator with the means to comply with multiple, varying, and even contradictory, local regulations. The value of this cannot be emphasized enough in a world where substantive laws vary considerably from state to state, but materials may be accessible from every state where Internet connection is possible."¹⁴

Online Gambling

Online gambling websites typically use geolocation software to screen their customers. Blackjack Tour LLC of Las Vegas allows their subscribers to play blackjack and poker online. But only people in the 38 states that allow it can compete for prizes. It uses geolocation software to separate customers, allowing those in the 38 states that allow it to compete for prizes, but providing a prize-free version of the service to the visitors from the remaining 12 states.¹⁵

New Jersey, Delaware and Nevada allow online gambling, but restrict availability to individuals who are physically located within the state. They require online gambling sites to use geo-location technology to verify that the user is physically present in the state. In New Jersey, for instance, the rules applicable to internet gambling patrons include: "prohibition

from engaging in Internet or mobile wagering activity, unless they are physically present in New Jersey; and consent to the monitoring and recording by the operator and/or the Division of any wagering communications and geographic location information.”¹⁶ Potential online gamblers are told that “you must be physically located within the state borders while playing...once you physically leave the state of New Jersey you will no longer be able to access online sites.” Online gambling operators must check “a player’s identity, age and location through the use of public databases and other identity verification methods such as credit reporting agencies.” In addition, they are required to use “a combination of IP verification and geo-location tracking” to determine a person’s current location.¹⁷

The European Union’s rules on Internet gambling are in a state of flux, with some countries banning it, others restricting it to national monopolies and others regulating it.¹⁸ Geolocation technology is the technique gambling sites use to conform to these conflicting laws.

Several countries attempt to control excessive online gaming through mandated blackout times. South Korea, for example, imposes an overnight six-hour gaming “blackout” period for minors.¹⁹ Administering blackout times for online gaming is challenging in light of the need for age verification for game providers such as Microsoft and Sony.²⁰ But an essential part of compliance is identifying the location of the user. Geoblocking is a key tool necessary to administer the rules, since knowledge of a user’s location and time zone is necessary to comply.

Export Control

Some countries strictly enforce embargo rules, which prohibit companies from making payments to companies or citizens in certain countries. For example, the Office of Foreign Assets Control (OFAC) in the U.S. Department of the Treasury administers a number of different sanctions programs. The sanctions can be either comprehensive or selective, using the blocking of assets and trade restrictions to accomplish foreign policy and national security goals. Under this program, the United States currently bars its citizens from conducting business with Iran, Cuba, Syria, Sudan and North Korea.²¹ Companies subject to these restrictions have policies and procedures in place designed to make sure that they do not sell to consumers located in these countries. In addition, they typically impose contractual restrictions on their authorized distribution partners banning them from selling into these markets.²²

Geo-location technology is typically used to verify the location of potential customers and to block shipment of physical or digital goods to customers in embargoed countries. CyberSource, for example, offers its business customers an export compliance service that “that uses shipping address, IP address, and email domain geo-location to help prevent digital or physical product delivery to parties with whom the U.S. government has prohibited trade.”²³

Restricting Distribution of Offensive Material

Many countries restrict content that might be deemed offensive or against local standards. Thailand restricts insults to the monarchy.²⁴ Turkey bans insults to Atatürk.²⁵ France does not allow the distribution of Nazi memorabilia.²⁶ Germany restricts materials compiled by the Federal Department for Media that is determined to be harmful to minors.²⁷ Saudi Arabia restricts the availability of sexually suggestive material.²⁸

Conditioning access to certain material based on geolocation is the tool companies use to minimize the global impact of particular national censorship laws—blocking access to content only in countries in which that content is illegal, while leaving it available and accessible in countries where it is not. For instance, in the case of the videos containing the movie “Innocence of Muslims” which were posted on YouTube, Google received inquiries from 20 countries and “restricted videos from view in Indonesia, India, Jordan, Malaysia, Russia, Saudi Arabia, Singapore and Turkey. Due to difficult circumstances, we temporarily restricted videos from view in Egypt and Libya.”²⁹ Without the ability to conditioning access to these videos based on geolocation, this kind of measured response to controversial content would not be possible.

Advertising Restrictions

Some countries do not allow advertising in publicly supported domestic media, but permit these media to contain advertising when distributed abroad. In 2007, BBC Worldwide launched its international news site bbc.com. The site is available only to users outside the UK and is supported by advertising. The audience was estimated at 29 million unique users, which amounts to 1.4 billion page impressions per month. The challenge was to make sure that the website and its advertising was available to all external visitors, but not to domestic visitors, since UK law ensures that UK-users, who pay license fees to the BBC, are not subjected to advertising. BBC Worldwide uses IP geo-location technology to identify the location of its users and target advertising accordingly.

National laws vary significantly in whether advertising for tobacco is allowed, what the restrictions are on content and format, and what precise warnings must be displayed. These restrictions will grow even more common in the future, since the World Health Organization has called for an outright ban on tobacco advertising and sponsorships that promote tobacco use.³⁰ Without geoblocking, Internet companies and firms that distribute products via the Internet would have no way of complying with these often-conflicting national laws regarding tobacco advertising.

Some countries permit alcohol ads, but many do not. Online advertising companies must ensure that their ads appear to users in conformity with these local restrictions. Google, for instance, restricts branding or informational ads promoting alcoholic beverages and has a positive list of countries where they allow these ads. They also restrict ads for the online sale of alcoholic beverages and provide a positive list of countries where they allow these ads.³¹ They have technical protection measures to enforce these measures. For instance, they forbid YouTube developers to “circumvent or render ineffective any geographical restrictions, including IP address-based restrictions”³²

National laws vary with respect to advertising to children under the age of 12. For example, it is illegal in Quebec, Norway, and Sweden, and highly restricted in various European countries.³³ Geoblocking enables online services providers to observe these legal restrictions on children's advertising content that vary by market.

Consumer Protection and Privacy laws

Privacy laws vary by location.³⁴ For instance, Europe has a comprehensive data protection regime, while the United States has sector-by-sector privacy laws. The requirements vary in terms of what constitutes personal data, what notices are required for consumers, and which companies are required to registration with data protection authorities. Geoblocking is necessary to ensure that the correct privacy notices are displayed to consumers and that data is not inadvertently collected from a consumer in a country in which a company does not intend to offer a product or service.

Consumer protection rules also vary by country. Warranty terms, remedies, refund rights, what can be disclaimed, the choice of law and jurisdiction are highly variable globally, as are many other provisions of consumer protection law. Geoblocking is necessary to ensure that the correct warranty provisions and other consumer protections are offered in each market. The conflicts among consumer protection rules were one reason for the recent adoption in the European Union of a single consumer protection directive, aimed at harmonizing consumer protection rules in the single European market.³⁵

Restricting transactions based on the location of the potential customer is another reaction to conflicting consumer protection laws. Merchants often refuse to sell goods to web visitors from countries whose consumer protection laws apply to the transaction for fear of incurring legal liabilities. A recent EC study showed that 60% of attempted cross border transactions failed, primarily because the merchant did not want to ship the merchandise across borders.³⁶

This is a very brief survey of the uses of geolocation technology that conditions access to websites based on user location. It is now a mainstream function of virtually all websites, retailers, content providers, software distributors, online information services, online broadcasters and banks to integrate these tools with the way their sites interact with end users.³⁷

Benefits of Geographical Market Segmentation

In addition to the uses described above, firms often use geolocation tools to engage in economically rational pricing strategies in the distribution of their digital goods and services to different markets around the world. This strategy of pricing digital goods to market might be the real target to attempts to ban or restrict the use of geolocation tools. This section provides some background on the benefits of market segmentation in general and geographical market segmentation in particular and argues that the attempt to ban geolocation tools would vitiate the efficiency and equity advantages of this common business practice.

Benefits of Market Segmentation in General

Firms often offer their products and services at different prices for different customers. The benefits of this strategy of differential pricing are widely recognized by economists. For instance, Carl Shapiro and Hal Varian argue in their book *Information Rules*³⁸ that differential pricing in IT makes these products available to more people and maximizes revenue to companies, which, in turn, drives R&D and innovation.

Hal Varian connects differential pricing with efficiency, noting that “...differential pricing can provide very significant efficiency gains since it allows markets to be served that would otherwise not be served at all.”³⁹ Different prices for different versions of the same good, or for different categories of users, usually leads to an increase in output, either by serving markets that would otherwise not be served or by increasing consumption above what would be allowed by a uniform price. This pricing strategy grows the economy, makes beneficial products more widely available, and benefits consumers.

This strategy is especially valuable for software, content and other IP-intensive industries that are economically quite different from the typical manufacturing industry. With software and digital content firms, there are enormous up-front fixed costs for research and development and very low marginal costs. The digital products provided by software and digital content are “information goods.” Shapiro and Varian list the special economic characteristics of these goods:

- Information is costly to produce but cheap to reproduce
- Once the first copy of an information good has been produced, most costs are sunk and cannot be recovered
- Multiple copies can be produced at roughly constant per-unit costs
- There are no natural capacity limits for additional copies.⁴⁰

Publishers and pharmaceutical companies are other IP-intensive industries that share this same basic business model in which the R&D costs are high but the manufacturing costs are usually low.

Businesses that share the characteristic of fixed up-front costs and low marginal costs have flexibility in terms of how they recover costs and earn a profit. They typically seek to find the optimum selling price in each market, taking into account price elasticity of demand as well as local costs. The result is that products are priced differently for different customers in different markets.

This kind of pricing strategy is a common business model of many companies in a broad range of industries as they seek to provide their products and service to customers around the world. Market segmentation is an accepted practice in all forms of commerce, and is undertaken for many reasons. Restaurants may give discounts to senior citizens, for example. Governments may discount or waive parking meter fees for the handicapped. Software companies commonly offer discounts to upgraders and students. Health insurers negotiate discounts with medical providers that are not available to individuals. Consumer product companies make their goods available at lower prices to wholesale stores, than in their regular distribution channels. In short, market segmentation is an everyday phenomenon, and ubiquitous.

To sell its output to different customers at different prices, a firm needs to be able to identify those customers who are willing and able to pay more and must be able to restrict the ability of the different customer groups to sell to each other.⁴¹

For SIIA members, market segmentation is especially critical. The Internet has permanently changed the relationship between users and the software industry. Electronic commerce has provided users with more options, more alternatives and more opportunities than ever before. The richness and inherent value of electronic commerce and high-tech products to consumers is derived from the wide availability of software and content and the ease by which these products and services can be accessed and used by people with new high-tech products. For users of products and services that incorporate software and/or information, electronic commerce facilitated through licensing provides a robust new delivery channel. The advantage of licensing is that it is so flexible. Think about a student, for instance, that might prefer to rent, rather than buy, a textbook. Renting is going to become more and more common in the Internet age. Such a model requires the ability to effectively practice market segmentation.

Some commentators and government officials implicitly, or explicitly, express a preference for cost-based pricing as a norm.⁴² But in markets where differential pricing is a practical strategy, cost-based pricing is not the only or even the best pricing model. Differential pricing is a common strategy where firms face high up-front costs and low variable costs and where buyers value the products differently. In the presence of these economies of scale and variations in demand pricing is typically based on the value of the product or service being offered, not on its cost. The prices charged to all customers must recover the costs of producing the product or service, but not every customer has to be charged the same amount for the same service. Trying to force all firms to make all users face the same price equal to marginal cost can easily fail to be efficient.⁴³

Perhaps for these reasons, explicit prohibitions on market segmentation are rare. Australia, for example, repealed its price discrimination ban in 1995, citing concerns that it operated to outlaw discounting practices.⁴⁴ A recent review recommended against reintroducing a ban on price discrimination.⁴⁵

Some argue that charging customers different prices for the same product is unfair.⁴⁶ But differential pricing typically requires those who are better off to pay more than those who are less well off. So the effect of differential pricing is to reduce pre-existing inequalities. In industries where large fixed costs have to be allocated among different customers, it seems fair to ask those who are best positioned to pay more than others.

Airlines

The airline industry is a good example of an industry that segments its markets. Their industry is characterized by very high up-front costs and very low marginal costs. It is expensive to purchase a fleet of planes and to fly one from one destination to another, but the marginal cost of adding another passenger to the plane is very low. Moreover, people have very different reasons for traveling, some more urgent than others, and this means different people are willing to pay different amounts for the same trip. Business travelers typically are willing to pay more to fly than leisure travelers.

As a result, say Shapiro and Varian, airlines "...are masters of differential pricing; they often have dozens of different fare classes on a particular flight. Your fare may depend on when you book, what restrictions you are willing to accept and what your travel history has been."⁴⁷

The purpose of these self-selection tools is to enable airlines to identify passengers who are willing to pay more and charge them a higher price, particular business travelers who are likely to be insensitive to higher prices. As legal scholar Guy Rub says, "...buyers who purchase tickets at the last minute or those who choose not to stay at their destination for a weekend indicate that they are probably business travelers and will be charged more...the differences in the prices of the tickets sold to those travelers are attributed primarily to the differences in their willingness to pay and not to the costs to the airline."⁴⁸ The airlines practice value-based pricing, not cost based pricing.

The GAO looked at this industry in 2001 and found that attempts to regulate price differentials would likely increase fares and decrease service to smaller communities and increase fares for leisure travelers.⁴⁹

Benefits of Geographical Market Segmentation

In geographical market segmentation, firms set different prices for the same product in different countries. It is not surprising to people who travel to different countries to find the same products for sale there at different prices. These differences often reflect different cost of production and distribution and different market conditions, including the strength of demand for the product in these countries.

Companies in a range of industries, including software and digital content firms, typically do not operate on the model of a single global market. They segment markets globally, and charge an appropriate price in each market, based on a range of factors. Market forces constrain their ability to set prices at will – if the firms set prices too high in a particular country, people will simply not buy the product.

As noted above, as information goods, the digital products goods provided by software and digital content companies domestically and on a cross-border basis have a cost structure that lends itself naturally to differential pricing – there are high fixed costs and relatively low marginal costs. In addition, the value that people place on information goods varies widely, often by region or country. As a result, geographical market segmentation is a price strategy that many firms have chosen for the distribution of their digital products.

Geographical market segmentation is also a good strategy when these digital products and services are provided over the Internet. This trade “has grown exponentially over the past two decades as part of the broader transformation in global economic activity associated with the Internet.”⁵⁰ Software-and-information-based services, consisting of computer software, computer and data processing and database and other information services are an “increasingly important dimension of US trade in services...”⁵¹

It is crucial to the business plans of these firms selling intellectual goods to set differential prices and to vary access terms. Rules governing trademarks, patents and copyright create a legal framework governing the distribution of intellectual goods, generally giving the rights holder the ability to control distribution and set access terms. But at some point these rights are exhausted and the rights holder can no longer control distribution. The first sale doctrine ends the rights holders’ exclusive distribution right after the first sale of the copy of the product. However, software and some other digital products are typically distributed under licenses which prevent further distribution by the licensee. In international trade, a possible way around a distributor’s exclusive distribution control is through parallel imports, whereby an independent distributor will obtain a product sold in a different country, usually at a lower price, and then resell it in the domestic market in competition with the rights holders’ own authorized distribution channels. The importing country’s exhaustion rules determine whether the rights holder can limit parallel imports.⁵²

Like market segmentation generally, geographical market segmentation has efficiency advantages. It enables products to be made available to consumers in some countries where demand would not support a uniform global price. The extra revenue from sales to these markets help fund the costly development activities that are needed to create intellectual goods and so increases the amount and variety of these goods. Conversely, eliminating market segmentation means that these goods will not be available at all in some countries and the providers of the information good will be denied a revenue stream that market segmentation gives them. This will decrease incentives to provide the good or service and thereby adversely affect the amount and quality of products and services provided.⁵³

Some argue that geographical price differences are unfair. But geographical market segmentation seems especially likely to advance the progressive goal of reducing global inequalities. As of 2012, according to the World Bank, the United States ranks 10th in Gross Domestic Product per Capita, behind Luxembourg, Norway, Switzerland, Australia, Denmark, Sweden, and Canada and just barely ahead of Singapore and Japan.⁵⁴ The effect of geographical market segmentation is that those in the wealthier countries pay more and those in the developing countries pay less. Discounts for purchasers in developing countries allow them access to products and services that would not be available to them at all under a uniform global price.

College Text Books

The market for college textbooks is a good example of geographical market segmentation.⁵⁵ In 2005, a GAO report on the industry found that “college textbook prices in the United States may exceed prices in other countries because textbook publishers assign prices that reflect the market conditions found in each country.”

Demand for textbooks varies in large part because of differences in income levels in different countries. At the same time, the college textbook industry is a high fixed cost, low marginal cost industry, where “...publishers typically incur substantial costs in order to develop textbooks, but once these development costs have been undertaken, the additional cost of producing more copies is quite low.”⁵⁶

So differential pricing is an attractive business model for this industry. GAO described the pricing this way:

“In some cases, international prices may be substantially lower than prices at which the textbook is sold in the United States, while in other cases, they may be the same as or higher than U.S. prices. For example, publishers told us that in many developing countries, incomes are generally too low for students to buy textbooks at U.S. prices. However, in areas where the cost of living is generally higher than in the United States, such as in Scandinavian countries, textbook prices may be higher.”

This international pricing system functioned efficiently and fairly. It provided high-quality textbooks to student in developing countries at prices they were able to afford and it allocated the fixed costs of developing textbooks to those best able to bear them, namely, to the relatively well-off students in the wealthier developed world. As Daniel Castro said, geographical price differentiation in the college textbook market, “...benefits both the publishers who can sell more books and the consumers in other countries who otherwise would not be able to afford the higher prices.”⁵⁷

How did college textbook publishers maintain international price differences? Historically, it was the combination of geographical separation and effective copyright law. The development of cross-border electronic commerce eroded the barrier of geographical separation, making it easier for arbitragers to buy college textbooks overseas and reimport them back into the U.S. Publishers took steps allowed under the U.S. copyright law to limit this re-importation.

But the recent case of *Kirtsaeng v. John Wiley & Sons, Inc.*⁵⁸ upset the balance in this system.

The background to the case is this. Wiley practiced the standard international business practice of geographical market segmentation, selling textbooks in the Thailand at a lower price than similar textbooks were sold for in the United States. They thought that U.S. copyright law protected this practice by allowing them to control importation into the United States of textbooks that were manufactured abroad. Kirtsaeng took advantage of Wiley’s geographical price differences to engage in a profitable international arbitrage scheme. He had family and friends buy low-priced Wiley textbooks manufactured abroad and sold in Thailand. They mailed the purchased textbooks to him in the United States, where he resold

them at a price above the foreign purchase price but lower than the prevailing U.S. retail price. The scheme netted him substantial arbitrage revenue.

Wiley sued for copyright infringement and Kirtsaeng countered that his actions were protected by U.S. copyright law's first sale doctrine, which generally allows the owner of a physical copy of copyrighted work to resell it in the U.S. without the copyright owner's permission. The Supreme Court held that the first sale doctrine protected Kirtsaeng's international arbitrage scheme.

In reaching this conclusion, the Court "concede[d]" that its decision would "make it difficult, perhaps impossible, for publishers (and other copyright holders) to divide foreign and domestic markets" and that a "publisher may find it more difficult to charge different prices for the same book in different geographic markets."⁵⁹

The *Kirtsaeng* decision destroyed the ability of textbook publishers to practice geographical price differentiation. If developing-market-priced international editions can be freely imported and sold into the United States, then differential pricing for developing-markets becomes unsustainable, and legitimate copies of some of the world's best pedagogy becomes unavailable within those developing markets

One response to the result in the *Kirtsaeng* decision has been changed business models from price-differentiation by market to a uniform pricing model, because textbooks developed for the United States can no longer be discounted for sale in developing countries without the risk of those lower-priced copies – intended only for developing countries – being exported into the United States to compete with the U.S. versions.⁶⁰ Needless to say, the uniform price is much closer to the higher U.S. price than the discounted, developing-country price.

In this new post-*Kirtsaeng* world, everyone loses. The uniform pricing of textbooks will in many cases make it impractical for students in foreign countries to obtain these textbooks legitimately. This will result in publishers selling fewer textbooks abroad which in turn diminishes publishers' opportunity to serve students and teachers in those markets, and consequently impairs U.S. publishers' ability to compete within and profit from these foreign markets, in turn, potentially diminishing future investments in the creation of new textbooks. Since fewer books are sold, uniform prices may also be raised to cover development and production costs previously offset by foreign sales – operating costs that were previously spread over a larger global distribution market. To summarize, publishers will sell fewer books, U.S. consumers will likely pay more for these books, and foreign students and consumers will no longer be able to afford U.S. books.

Summary

Market segmentation in general and geographical market segmentation in particular provide companies and consumers with many advantages, including the access to otherwise unavailable goods and services at a fair price. Geoblocking is one way in which companies provide for market segmentation for goods and services distributed on the Internet. It is a widely used technique for this and a host of other worthwhile purposes. Proposals to restrict geoblocking would limit the economic gains from geographical market segmentation and would create potential threats to Internet freedom. These proposals should be seen for what they are – indirect ways to outlaw geographical market segmentation for digital goods without addressing the significant economic and social losses that such a policy would entail.

Restrictions on geoblocking in national law and trade agreements could undermine the objectives of advancing free markets, free trade, and other legitimate international public policy goals. Regional trade agreements such as the prospective Trans-Pacific Partnership should not introduce even rhetorical questions about companies' freedom to use geoblocking for pricing-to-market in different countries and for other socially beneficial purposes.

Endnotes

1. Kevin F. King, Personal Jurisdiction, Internet Commerce, and Privacy: The Pervasive Legal Consequences of Modern Geolocation Technologies (June 8, 2010). Albany Law Journal of Science and Technology, Vol. 21, 2011, available at <http://www.albanylawjournal.org/Documents/Articles/21.1.61-King.pdf> (King)
2. <http://whatismyipaddress.com/geolocation-accuracy>
3. W3C, Geolocation API Specification, May 2012, available at <http://dev.w3.org/geo/api/spec-source.html>
4. The use of geolocation technology combined with a policy of conditioning access based on location is sometimes called “geoblocking. See Australian House of Representative, Standing Committee on Infrastructure and Communications, At What Cost? IT Pricing and the Australia Tax, July 2013 (At What Cost?) p.14, available at http://www.aph.gov.au/parliamentary_business/committees/house_of_representatives_committees?url=ic/itpricing/report.htm
5. At What Cost, p. xiii
6. Riva Richmond, “We Know Where You Are: With New Software, Web Sites Can Tell What City a Visitor is Coming From; That Can Be Useful Information,” Wall Street Journal, September 29, 2008, p. R8, available at <http://online.wsj.com/news/articles/SB12227759888771725> (Richmond, Where you Are)
7. Apple, iTunes Store Terms and Conditions at <http://www.apple.com/legal/internet-services/itunes/us/terms.html>
8. Apple, iTunes: How to set up an Apple ID within iTunes, at <http://support.apple.com/kb/ht2731>
9. Digital Envoy, Inc. v. Google, Inc., 370 F. Supp. 2d 1025, 1027 (N.D. Cal. 2005), available at http://www.wsgr.com/attorneys/BIOS/PDFs/digitalenvoy_google2.pdf
10. Chis Smith, Hot Tactics for Geo-Targeting Ads on Google and Bing, Search Engine Land, October 1, 2013, available at <http://searchengineland.com/hot-tactics-for-geo-targeted-ads-on-google-bing-smx-east-173213>
11. Ian Paul, Google’s ‘My Location’ Tracks PC’s Location on Google Maps, PCWORLD (July 10, 2009, 9:43 AM), http://www.pcworld.com/article/168203/googles_my_location_tracks_your_pcs_location_on_google_maps.html.
12. Bob Tedeschi, E-Commerce Report; The Market Is Growing for Software that Finds Internet Users’ Locations, N.Y. TIMES, June 16, 2003, p. C7, available at <http://www.nytimes.com/2003/06/16/business/e-commerce-report-market-growing-for-software-that-finds-internet-users.html> . See also Richmond, Where You Are.
13. Kevin F. King, Personal Jurisdiction, Internet Commerce, and Privacy: The Pervasive Legal Consequences of Modern Geolocation Technologies (June 8, 2010). Albany Law Journal of Science and Technology, Vol. 21, 2011, available at <http://www.albanylawjournal.org/Documents/Articles/21.1.61-King.pdf> (King)
14. Dan Jerker B. Svantenson, Geo-Location Technologies and Other Means of Placing Borders on the ‘Borderless’ Internet, 23 J. Marshall J. Computer & Info. L. 101

- (2004) <http://repository.jmls.edu/cgi/viewcontent.cgi?article=1051&context=jitpl>
15. Riva Richmond, *Where You Are*, p. R8.
 16. State of New Jersey, Division of Gaming Enforcement, Internet Gaming Regulations, at <http://www.nj.gov/oag/ge/docs/Regulations/MergedRegulations110413.pdf>
 17. NJ.com, Online gambling in New Jersey FAQ, http://www.nj.com/onlinegamblingnj/index.ssf/2013/09/online_gambling_in_new_jersey.html
 18. The Economist, Online Gambling In Europe: A Stacked Deck, July 16, 2009, available at <http://www.economist.com/node/14041688>
 19. The Korea Herald, Midnight Ban Imposed on Online Games, April 10, 2010, available at <http://www.koreaherald.com/view.php?ud=20100412000752>
 20. Brian Ashcraft, The Country That Shut Down Xbox, Kotaku, January 9, 2012, available at <http://kotaku.com/5874251/the-country-that-shutdown-xbox-live-for-kids>
 21. Office of Foreign Assets Control, Sanctions Programs and Country Information, at <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>.
 22. Adobe, Adobe Partner Connection Reseller Program Agreement, at http://partnerdownload.adobe.com/p/Reseller_Program_Terms_and_Conditions_IE.pdf (“Reseller shall not distribute outside the Territory. In no event will the Territory include Iran, Syria, Sudan, Cuba and North Korea, or other countries identified as restricted by applicable law or regulation.
 23. CyberSource, Export Compliance, at http://www.cybersource.com/products_and_services/fraud_management/verification_and_compliance_services/export_compliance/
 24. Section 112: “Whoever, defames, insults or threatens the King, the Queen, the Heir-apparent or the Regent, shall be punished with imprisonment of three to fifteen years.” <http://www.thailandlawonline.com/laws-in-thailand/thailand-criminal-law-text-translation#chapter-1>
 25. Article 301- Turkish Penal Code <http://www.reuters.com/article/2012/10/02/net-us-turkey-youtube-idUSBRE8910T420121002> , http://www.slate.com/blogs/the_world_/2014/01/13/erdogan_internet_censorship_the_great_firewall_of_turkey.html
 26. Article R645-1: French Penal Code <http://arstechnica.com/tech-policy/2011/06/how-france-proved-that-the-internet-is-not-global/>
 27. <http://www.bpjm.bund.de/bpjm/Service/english.html>
 28. Communication and Information Technology Commission <http://www.citc.gov.sa/English/AboutUs/AreasOfwork/Pages/WebFiltering.aspx>
 29. Google Transparency Report- Requests to remove content, by country <http://www.google.com/transparencyreport/removals/government/countries/>
 30. World Health Organization, Tobacco Free Initiative (TFI), Enforce Bans on Tobacco Advertising, Promotion and Sponsorship, available at <http://www.who.int/tobacco/mpower/enforce/en/>

31. Google, Advertising Policies: Alcohol, at <https://support.google.com/adwordspolicy/answer/176005?hl=en>
32. Google, YouTube Terms of Service for Developers, at <https://developers.google.com/youtube/terms?hl=en>
33. <http://www.indiafoodbrief.com/from-the-editors-desk/126395-inclusion-of-children-in-tv-commercials-is-not-posing-a-good-picture>
34. See the country by country summary in Albert J. Marcella Jr. and Carol Stucki, Privacy Handbook, John Wiley & Sons, 2003, pp. 78-130.
35. European Commission, The Directive on Consumer Rights, available at http://ec.europa.eu/justice/consumer-marketing/rights-contracts/directive/index_en.htm
36. Europa, Press Release, “Consumers: 60% of cross border internet shopping orders are refused, says new EU study” October 22, 2009 p. 1 available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1564>
37. King, p. 70
38. Carl Shapiro and Hal Varian, Information Rules, Harvard Business School Press, 1999, available at <http://www.inforules.com/> (Information Rules)
39. Hal Varian, Differential Pricing and Efficiency, First Monday, Volume 1, Number 2, August 5, 1996 at <http://firstmonday.org/ojs/index.php/fm/article/view/473/394> (Varian, Differential Pricing)
40. Information Rules, p. 22
41. Government Accountability Office , GAO-05-806, College Textbooks: Enhanced Offerings Appear To Drive Recent Price Increases 21–25 (2005), available at <http://www.gao.gov/assets/250/247332.pdf>, p. 21 (GAO Report)
42. For example, Australian House of Representative, Standing Committee on Infrastructure and Communications, At What Cost? IT Pricing and the Australia Tax, July 2013 at p. vii: “...the price differences for IT products cannot be explained by the cost of doing business...” http://www.aph.gov.au/parliamentary_business/committees/house_of_representatives_committees?url=ic/itpricing/report.htm (At What Cost?)
43. Varian, Differential Pricing
44. Australian Competition Law, Price Discrimination, available at <http://www.australiancompetitionlaw.org/law/pricediscrimination.html>
45. At What Cost? p. 117
46. GAO Report, p. 22
47. Information Rules, p. 40
48. Guy A. Rub, Contracting Around Copyright: The Uneasy Case for Unbundling of Rights in Creative Works, 78 U. CHI. L. REV. 257 (2011), p. 44, available at <http://lawreview.uchicago.edu/sites/lawreview.uchicago.edu/files/uploads/78.1/78-1-Contracting%20Around%20Copyright-Rub.pdf> (Rub, Contracting)
49. GAO, Aviation Competition: Restricting Airline Ticketing Rules Unlikely to Help Consumers, GAO-01-831 (Washington, D.C.: Jul. 31, 2001), available at <http://www.gao.gov/products/gao-01-831>

50. U.S. International Trade Commission, Digital Trade in the U.S. and Global Economies, Part 1, July 2013, p. 1-1, available at <http://www.usitc.gov/publications/332/pub4415.pdf>
51. Testimony of David LeDuc on Behalf of the Software & Information Industry Association Before the International Trade Commission, March 7, 2013, p. 4, available at [here](#)
52. Keith E. Maskus, Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century, Peterson Institute for International Economics, 2012, p. 172.
53. Rub, Kietsaeng, p. 46
54. World Bank, GDP Per Capita, available at http://data.worldbank.org/indicator/NY.GDP.PCAP.CD/countries/1W?order=wbapi_data_value_2012%20wbapi_data_value%20wbapi_data_value-last&sort=desc&display=default
55. Government Accountability Office , GAO-05-806, College Textbooks: Enhanced Offerings Appear To Drive Recent Price Increases 21–25 (2005), available at <http://www.gao.gov/assets/250/247332.pdf>
56. GAO Report, p. 21
57. Daniel Castro, Price Discrimination for Copyrighted Works Post-Kirtsaeng, Innovation Files, March 22, available at <http://www.innovationfiles.org/price-discrimination-for-copyrighted-works-post-kirtsaeng/#sthash.lnif66fJ.dpuf>
58. 133 S. Ct. 1351 (2013), available at http://www.supremecourt.gov/opinions/12pdf/11-697_4g15.pdf . The Kirtsaeng case dealt with the importation of physical goods that were sold. Thus, it has no direct effect on digital works transmitted in the online marketplace or works that are licensed, rather than sold.
59. Kirtsaeng p. 416
60. See e.g., Lisa Campbell, Cengage adopts global pricing after Kirtsaeng, The Bookseller (Oct. 6, 2013) at <http://www.thebookseller.com/user/login?destination=node%2F210780> and Miggie Pickton, EBook Price Increases from Three Publishers, July 5, 2013, available at <http://researchsupporthub.northampton.ac.uk/2013/07/05/ebook-price-increases-from-three-publishers/>