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The Market

Industry Trends

Approximately 9.8 million firearms (both old and new) are sold in the U.S. each year, 4.6 million of which are handguns;¹ according to the Bureau of Alcohol, Tobacco, and Firearms (ATF), approximately 4.5 million new firearms, including 2 million new handguns are sold in the US.² Overall, the domestic, non-military firearm market is estimated at approximately \$244 million for revolvers and \$1.02 billion for pistols.³

Compared to other industries, the firearms industry is relatively small and stagnant. Unlike the automobile industry, firearms don't wear out or need replacement. Furthermore, there are no new police departments opening, so the overall firearms market is not growing significantly. According to 2008 reports by the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the U.S. firearm manufacturing industry has grown at a compound annual growth rate in units of 4.6% from 2003 through 2008. Also, the overall industry is quite small; if every gun manufacturer in the United States were combined into a single company, the company would still not have a place on the Fortune 500 (Kopel et al., 2001). While there are some larger manufacturers in the industry (e.g., Smith & Wesson, Colt Firearms, Remington Arms), sales are distributed widely throughout the industry, rather than concentrated with a few (Smith & Wesson reports to have only a 12% share of the domestic pistol market). This broad dispersion of profits allows new entrants to gain market share much more easily than in an oligopoly environment where only a few companies dominate the market.

Legal/Political Environment

Firearms manufacturing is a highly regulated industry, controlled by both state and federal laws. In addition to state licensing requirements, all firearms manufacturers must be licensed by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE, also abbreviated ATF), and EFG Firearms Manufacturing is no exception, requiring a Type 7 Federal Firearms License with SOT 2 tax status to manufacture and sell firearms regulated under the National Firearms Act of 1934 (regulating machine guns, short barreled rifles, short barreled shotguns, suppressors, and destructive devices) and the Gun Control Act of 1968 (regulating the manufacture, ownership, and transfer of firearms across state lines) as amended under the Firearm Owners Protection Act of 1986. The ATF has strict record-keeping requirements for manufacturers, including requiring maintaining a book of each firearm produced, received, and distributed (known as an 'ATF Bound Book'). These record-keeping requirements even extend to firearm components such as receivers and suppressors.

¹ P.J. Cook and J. Ludwig, Guns in America: Results of a Comprehensive National Survey on Firearms Ownership and Use, Summary Report, Washington, DC: Police Foundation, 1997.

² Bureau of Alcohol, Tobacco, and Firearms, Commerce in Firearms in the United States, Washington, DC: Department of the Treasury, February 2000, and Gordon Hawkins, Crime is not the Problem: Lethal Violence in America, New York: Oxford University Press, 1997.

³ Smith & Wesson Holding Corporation, 2010 Annual Report Form 10-K as filed with the SEC.

Available at: http://ir.smith-wesson.com/phoenix.zhtml?c=90977&p=irol-sec&control_selectgroup=Annual%20Filings

Oddly, other agencies normally associated with consumer product regulation are prohibited from regulating firearms.⁴ For example, the Consumer Product Safety Act contains the following provision: “The Consumer Product Safety Commission shall make no ruling or order that restricts the manufacture or sale of firearms, firearms ammunition, or components of firearms ammunition, including black powder or gun powder for firearms.”⁵

All manufacturers face strict liability standards in product liability lawsuits, and firearms manufacturers are no exception. Given the inherently dangerous nature of firearms, the industry is subject to more lawsuits than would be typical of general manufacturing. Various groups have sued gun manufacturers over the years, but most suits focus on a lack of safety features such as magazine disconnects built into the product,⁶ or even for not yet having invented personalization technology and incorporated it into their handguns.⁷ Given EFG Firearms Manufacturing’s focus on producing some of the safest firearms possible, it is unlikely that anti-gun groups would single out EFG Firearms Manufacturing; instead, they are likely to focus on competitors whose products lack the company’s biometric safety features.

In addition to federal laws protecting firearms manufacturers from liability arising from crimes committed with their products,⁸ some states also provide protection to law abiding firearms manufacturers from third parties. Indiana prohibits lawsuits against local manufacturers for misuse of firearms by third parties,⁹ and similar laws exist in both North Dakota¹⁰ and South Dakota.¹¹ In Louisiana, government bodies other than the state may not sue firearms manufacturers, dealers, or trade associates for damages that are the result of lawful activities. In Maine, municipalities may not sue a firearm or ammunition manufacturer for damages relating to the lawful design, manufacture, marketing, or sale of firearms or ammunition.¹² A municipality may, however, bring legal action for breach of contract or warranty. Mississippi prohibits lawsuits against manufacturers, distributors, or dealers for damages resulting from the lawful design, manufacture, distribution or sale of firearms by anyone other than the state. However, local governments may still bring suit for breach of contract or warranty or for defect in materials or workmanship.¹³ Montana has a number of restrictions on lawsuits against firearms manufacturers, dealers, or trade associations. Such lawsuits may be filed by the state, but not by local governments.

In states that favor strong gun-control policies, the idea of personalization technology is even more appealing. The State of New Jersey passed legislation in 2004 essentially requiring that all new firearms sold in the state must be “smart guns” within three years of the technology becoming commercially viable. The NRA has also opposed this particular bill.¹⁴

⁴ Teret, Stephen P.; Culross, Patti L. 2002. “Product-Oriented Approaches to Reducing Youth Gun Violence. The Future of Children. Journal Issue: “Children, Youth and Gun Violence,” Volume 12 Number 2 Summer/Fall 2002.

Available at: <http://futureofchildren.org/publications/journals/article/index.xml?journalid=42&articleid=169§ionid=1099>

⁵ Firearms Safety and Consumer Protection Act of 1976, U.S. Statutes at Large 90 (1976).

⁶ Meier, Barry. 1999. ‘Gun Producers’ Use of a Safety Device is Called Erratic,’ N.Y. TIMES, Mar. 19, 1999, at A12.

⁷ Johnson, Mark. 1999. ‘Locks Personalize Firearms: Mayors Emphasize Accident Prevention,’ Richmond Times-Dispatch, Mar. 16, 1999, at A1, LEXIS, News Library, Rchtdm File

⁸ Protection of Lawful Commerce in Arms Act, 2005. 15 U.S.C. §§ 7901-7903.

⁹ Indiana Code Title 34 Article 12 Chapter 3: ‘Legal Actions Involving Firearms and Ammunition.’

¹⁰ North Dakota Century Code § 32-03-54.

¹¹ South Dakota Codified Laws §§ 7-18A-36, 8-5-13, 9-19-20, 13-32-7, 22-1-2, 22-14-5 et.seq., 23-7-1 et.seq., 32-20-6.6, 32-20A-11.

¹² Maine Code Title 12, §§ 11102, 11208, 11209, 11212, 11214, 13201; Title 15, §§ 455; 455-A; Title 17-A, §§ 1051, 1052, 1057; 2001-2006 2011; 2012

¹³ Mississippi Code § 11-1-67: ‘Authority to Sue Traders in Firearms Reserved to State.’

¹⁴ NRA-ILA. 2002. ‘New Jersey Passes “Smart Gun” Bill,’ National Rifle Association Institute for Legislative Action. November 2002. Available at: <http://www.nraila.org/Legislation/Read.aspx?id=497>

Even pro-gun enthusiasts don't always agree on the value of safety features. Since being purchased by Saf-T-Hammer in 2001, Smith & Wesson has been installing internal locking mechanisms in all of its revolvers. In March, 2009, however, the company announced that it would begin phasing the internal lock out of its revolver lineup in response to pressure from consumers.¹⁵ Similarly, large-scale boycotts of Smith & Wesson resulted from the company's March 2000 agreement with the Clinton Administration to improve safety standards and limit sale and distribution of their products in order to avoid lawsuits.^{16,17}

Customer Segments

There are two primary customer segments Proposed Manufacturer will target:

1. Institutions
 - a. Law Enforcement
 - b. Corrections Officers
 - c. Private Security
 - d. and Military
2. Individuals.

While the Individuals market is potentially far larger than the Institutional market, the Institutional market has a more concrete, quantifiable need for such a product. Proposed Manufacturer is able to tell a much more compelling story for Institutional purchasers. As a result, the estimated potential target market share of Institutions is 10%, whereas the target market share for current Individual gun owners is estimated at less than 1%: more precisely, 0.25%. (Note: this does not include households who could become first-time gun owners, as discussed later under *Individuals*).

All of these potential market segments have been analyzed in regards to sales solely within the United States. However, Proposed Manufacturer will be registered with the U.S. Department of State as a potential exporter of small arms. Many of these same segments exist in other countries (e.g., law enforcement, corrections, private security, military, individuals), and their needs and concerns are very similar to their U.S. counterparts. For example, the fear of a police officer's firearm being stolen and used in a crime is just as great in Germany or China as it is in the U.S. If exports are considered, the total potential market for Proposed Manufacturer is significantly larger than what is stated in this business plan.

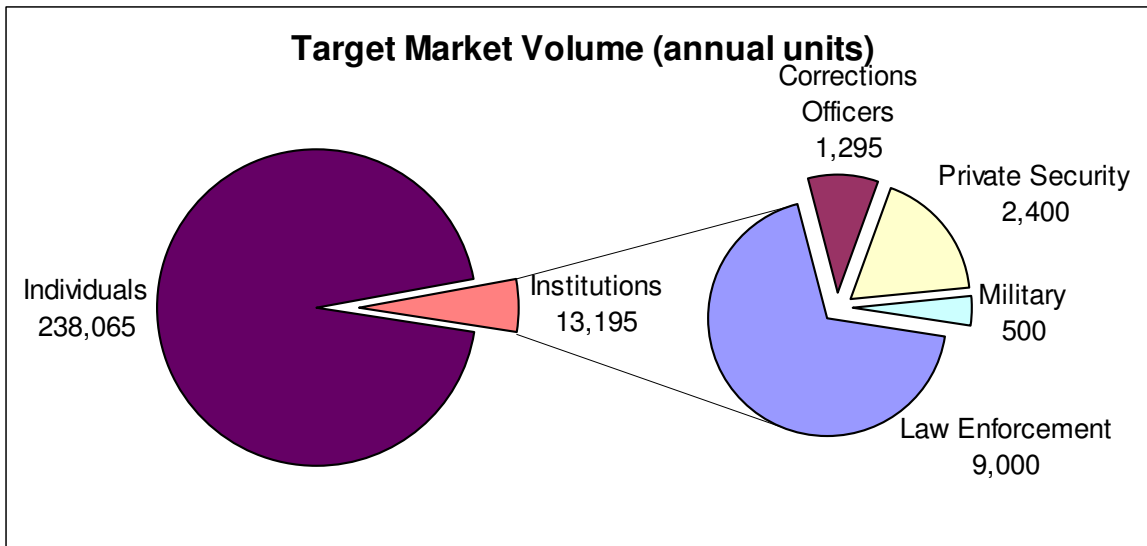
¹⁵ Ayoob, Massad, 2009. 'S&W Gives its Customers What They Want.' American Handgunner. Mar-Apr 2009.

¹⁶ March 17, 2000 CNN transcript of UD Secretary Andrew Cuomo announcing agreement.

Available at: <http://transcripts.cnn.com/TRANSCRIPTS/0003/17/bn.02.html>

¹⁷ Miller, Jerry, 2000. 'Smith & Wesson President Admits Consumer Anger Hurting Sales,' CNSNews.com, July 2008.

Available at: <http://www.cnsnews.com/news/article/25900>



Institutions

The key selling point of Proposed Manufacturer is a firearm that can be secured against unauthorized use, and this selling point is most desired by institutions and organizations attempting to minimize substantial legal, financial, or political liability. The public outcry of a police officer's weapon being used by a criminal and resulting in an innocent bystander's death is far greater than if the gun had merely been stolen from someone's home or purchased illegally at a gun show. With a large organization such as a police department or private security firm, the loss of life resulting from a misused firearm, while tragic, is often not viewed as negatively as the legal, financial, or even political fallout that may ensue after the event. As such, marketing efforts to institutional customers will focus on Proposed Manufacturer's ability to reduce these risks with safer firearms.

Law Enforcement

From 1994-2003, 616 police officers were killed in the line of duty (excluding 72 deaths on 9/11/2001), and 100 had their weapons stolen by the assailant(s) [self-reported incidents to FBI]. According to the FBI's Uniform Crime Reporting Program, in 1998, of the 58 officers who were fatally shot on duty, six were shot with their own guns. These stolen firearms are often used to commit crimes later on. A particularly tragic example occurred on August 25, 1981 when Minneapolis PD Officer Richard P. Miller Sr. was killed by a firearm previously stolen from another officer's vehicle.¹⁸ In response to this incident, officers publicly protested, resulting in legislative changes to the one-officer-per car policy that had been in effect at the time. Had this occurred today with the availability of Proposed Manufacturer's products, would the protests have focused on the availability of safer firearms instead? Even just a few isolated incidents such as this could create a significant incentive for police departments to upgrade existing guns, and possibly lead to legislative action mandating the purchase of such firearms. In 2009, the fatal shooting of a plainclothes police officer in New York prompted the NYPD to look into smart weapon technology that would allow officers' guns to recognize one another.¹⁹ While not

¹⁸ Obituary, Officer Richard P. Miller, Sr. 1981. 'Minneapolis Officers Killed in the Line of Duty.' MPD Police Federation. Available at: <http://mpdfederation.com/richard-miller.asp>

¹⁹ Associated Press. 2009. "NYPD Considers Smart-Gun Technology." Crains New York, June 5, 2009. Available at: <http://www.crainsnewyork.com/article/20090605/FREE/906059981>

specifically on-point with Proposed Manufacturer's product line, this suggests that law enforcement organizations are becoming more receptive to firearms that utilize technology, and are even specifically seeking out such solutions.

An additional concern of riot control officers is preventing people in a crowd from snatching officers' side arms, which may be stolen or even used against the police. In a very heavy crowd, the officer may not be able to see who is responsible for snatching a weapon, and may not even notice that it has happened. For this reason, riot police sometimes have holsters with positive locking mechanisms or other extra means of retention. However, this can be a trade-off that increases the amount of time needed to draw the sidearm in an emergency.²⁰

As of 2006, police in the United States have approximately 897,400 firearms²¹, and with 900,000 law enforcement officers, this correlates to approximately one firearm per officer. Approximately 79% of law enforcement officers are employed by local governments, 11% are employed by state police agencies,²² and the remaining 10% are employed by the federal government. Thus, marketing efforts must focus on local departments, rather than just large Federal agencies such as the DEA, DHS, FBI, or ATF.

The downside to the law enforcement segment, however, is that historically, officers have been slow to adopt new technology, as the Law Enforcement Alliance of America noted:

"U.S. police agencies were slow to give up their revolvers for semi-autos. If officers were justifiably concerned about reliability and complexity then, where does that leave smart guns? Instead of a simpler, more reliable mechanism (as we've seen with the trend for Glock's, Sigmas, USP's and Walther's P99), it appears that we're building complexity back into firearms."²³

Overall, this is the largest of the Institutional market segments. At 900,000 personnel on a 10-year replacement cycle, the potential market is approximately 90,000 units per year. At a projected 10% market share, this represents sales of 9,000 units per year.

Corrections Officers

In 2008, there were approximately 454,500 correctional officers and jailors, with another 43,500 personnel as first-line supervisors and managers. In addition, 20,200 workers were employed as bailiffs.²⁴ While the majority of these officers are trained in the use of firearms, only a small portion of corrections officers carry firearms (e.g., watchtowers, prisoner transport); personnel are prohibited from carrying guns in prison yards, hallways, dining halls, or any other area where an inmate might otherwise gain access to a weapon from a guard. In all, only 75,000 people of this group may have a firearm at any given moment.

Despite this group's small size, however, there is still significant potential. If a prison guard were armed with Proposed Manufacturer's firearm, not only would the safety of the guard be increased, but inmates would be unable to use the officer's weapon, in the event of an attack or riot. Overall, Proposed Manufacturer believes a potential market of 25% (or more) of 518,000

²⁰ Wikipedia.org 'Riot Control.' 2011. Available at http://en.wikipedia.org/wiki/Riot_control

²¹ Karp, Aaron. 2006. 'Trickle and Torrent: State stockpiles.' Small Arms Survey 2006: Unfinished Business, p. 61. Oxford: Oxford University Press. July 1, 2006.

²² Bureau of Labor Statistics, Occupational Outlook Handbook, 2010-2011 Edition.
Available at: <http://www.bls.gov/oco/ocos160.htm>

²³ Yoshino, Kimi. 2000. 'No Easy Answers: Gun Advocates Say Fear of Liability Keeps Parents From Teaching Survival Skills.' FRESNO BEE, Aug. 26, 2000, LEXIS, News Library, Fresno File.

²⁴ Bureau of Labor Statistics, Occupational Outlook Handbook, 2010-2011 Edition, Correctional Officers.
Available at: <http://www.bls.gov/oco/ocos156.htm>

exist, due to changes in prison practices once the company's technology has demonstrated its extremely high value in specific situations. Assuming the same 10-year replacement cycle of other Institutional segments, this translates into an annual market size of 12,900 units ($518,000 \times 25\% / 10$). At a projected 10% market share, this represents sales of 1,295 units per year.

Private Security

There are more than one million contract security officers, and an equal number or guards estimated to work directly for U.S. corporations;²⁵ however, as many as 90% of private security personnel are not armed.²⁶ Much like Law Enforcement, the legal, financial, and political repercussions of a firearm falling into the hands of an unauthorized user could be severe. With Proposed Manufacturer, the chances of misuse (and the associated liability) are greatly reduced. With the improved safety, it is likely that the percentage of officers armed will increase. Two million officers, 12% of which are armed, and assuming a similar 10-year replacement schedule like Law Enforcement, define a potential market of 24,000 units annually. At a projected 10% market share, this represents sales of 2,400 units per year.

Military

The defense forces of the United States are reported to have 3,054,553 firearms (Karp 2006), and 37,000 small arms were produced for the US armed forces in 2000 alone;²⁷ however, it is unlikely most of these firearms will be replaced with Proposed Manufacturer's products anytime soon. Biometrically secure firearms are likely to have a limited, but important, role within the military, much like laptop computers have a very small, but critical role on the modern battlefield. Possible uses for Proposed Manufacturer's products might include Military Police in civilian populations, or where soldiers are acting primarily in a peacekeeping or riot control role, rather than large-scale combat. As a soldier's role becomes more one of a police officer, so too might his or her weapons begin to look more like those of law enforcement. While this market segment has significant long-term potential, it will not be the primary focus of Proposed Manufacturer at this time, except in limited applications. Even Smith & Wesson, who has actively pursued this market with their M&P series of pistols for several years, has not yet secured any major contracts to supply firearms to any large domestic military agencies.²⁸ Therefore, the estimated market size has purposely been stated very low (500 units per year).

Individuals

There are an estimated 270 million guns possessed by civilians in the US,²⁹ and approximately 500,000 guns are stolen each year in the United States, many of which are used to commit violent crimes.³⁰ Given that Proposed Manufacturer's products, while safer than conventional firearms, are not a replacement for technologies such as gun safes and proper firearms storage procedures, the market for Proposed Manufacturer's products in the existing household market is negligible.

²⁵ Wikipedia.org 'Private Security.' 2011. Available at: http://en.wikipedia.org/wiki/Private_security

²⁶ Private-Sector Liaison Committee (PLSC) of the International Associate of Chiefs of Police (IACP). 'Private Security Officer Selection, Training, and Licensing Guidelines.' <http://www.theiacp.org/Portals/0/pdfs/Publications/privatesecurityofficer.pdf>

²⁷ Burrows, G. 2002. 'The No-Nonsense Guide to the Arms Trade.' New Internationalist™ Publications Ltd. Oxford OX4 1BW, UK. 2002.

²⁸ Smith & Wesson Holding Company 2010 Annual Report, page 17 full quote: "We have not, however, yet secured any major contracts to supply firearms to any large domestic military agencies. Although we believe that we now are able to offer a broad array of competitive products to the military, we cannot predict whether or when we will be able to secure any major military supply contracts. As a result, approximately 82.2% of our net firearm sales remains in the sporting goods distribution channel."

²⁹ Karp, Aaron. 2007. 'Completing the Count: Civilian firearms.' Small Arms Survey 2007: 'Guns and the City,' p. 67. Cambridge: Cambridge University Press. 27 August 2007.

³⁰ Cook, PJ; Molliconi, D; Cole, TB. 1995. 'Regulating Gun Markets.' J Criminal Law & Criminology 1995; 86:59-92.

However, a 1996 National Gun Policy Survey concluded that, “a sizeable number of **non-owners** [emphasis added] would be interested in buying a personalized gun.”³¹ Then, a March 1997 survey conducted by the National Opinion Research Center and the Johns Hopkins Center on Gun Policy and Research found that, of respondents who were “unlikely to buy a gun in the future,” 35 percent would “consider buying a handgun that would only fire for the owner of the gun.” A similar survey by Colt’s Manufacturing LLC (circa 2000) states, “thirty percent of those who don’t currently own a firearm would be in favor of gun ownership for personal safety or for sport if an electronic personalization technology existed.” Based on 2010 U.S. Census data, there are approximately 115 million households in the US, with 32.3% of households owning one or more firearms. While this is the lowest level of gun ownership in over forty years (1977 was a peak at 54%), this still represents a significant market potential of over 23 million households (115 million x 67.7% x 30%). Most survey groups acknowledge that the number of households self-reporting gun ownership may be understated, as people have a reluctance to report gun ownership to the government; therefore, actual numbers may be slightly higher.

A 1996 national poll on gun ownership and safety found that 80% of people who would buy a personalized gun would buy one even if the personalization device added \$100 to \$300 to the price.³² Adjusting for U.S. inflation from 1996 to 2011, this translates into a range of \$143 to \$430 in present dollars.³³

Once again, a ten-year replacement cycle is assumed for this segment, reducing the total annual market potential to approximately 2.3 million households. However, this group may be persuaded to upgrade their firearms more frequently as technological advances lead to improved (and thus more desirable) firearms, thus shortening the projected 10-year replacement cycle and increasing the potential market size. It is also possible that individuals within this segment may purchase more than one firearm (e.g., one for home, one for work, one for car, etc).

Competitive Landscape / Competitive Advantages

A variety of options exist for securing firearms today, including mechanical locks built into guns, trigger locks, cable locks, and gun safes. Over the years, various technologies have been proposed for creating a ‘smart gun,’ including RFID rings, wristbands, and watches worn by the user, magnetic rings (also worn by the user), manual combination locks, and while there have been several “almosts,” no clear technology has emerged as successful.

In 2008, TACOM-ARDEC³⁴ and the New Jersey Institute of Technology signed a five-year Memorandum to pool resources to research and develop “smart gun” technology.³⁵ NJIT has been working on this project for several years, and received federal funding for research in 2008.³⁶ The current design concept uses grip recognition software to identify the user, based on the assumption that each person has a unique way of gripping and applying pressure to the

³¹ Wayne, Leslie. 1999. “Smart” Guns Proving to Be No Quick Fix for Firearm Violence.’ N.Y. TIMES, June 15, 1999, at A24.

³² Smith, T.W. 1996 National gun policy survey of the National Opinion Research Center: Research findings. Chicago, IL: NORC, March 1997.

³³ Historical Inflation Data from 1914 to the Present, InflationData.com
Available at: http://www.inflationdata.com/inflation/inflation_rate/historicalinflation.aspx

³⁴ ARDEC: Armament Research, Development and Engineering Center, which falls under the command of TACOM: Tank Automotive and Armaments Command.

³⁵ Hess, Myra. 2008. ‘Picatinny NJIT Form Long-Term Partnership.’ The Voice. September 10, 2009.
Available at: <http://www.pica.army.mil/voice/voice2002/020118/picatinnynjit.htm>

³⁶ Hepp, Rick. 2008. ‘NJIT Gets ‘Smart Gun’ Technology Grant.’ Newark Live News, September 10, 2008.
Available at: http://www.nj.com/newark/index.ssf/2008/09/njit_gets_smart_gun_technology.html

firearm's handle. This solves the problem of individuals wanting to wear gloves when operating the weapon, as direct skin contact is not required. As of 2005, the group claimed to have a crude prototype grip that could correctly identify the user 90% of the time.³⁷ To date, however, no commercially viable, mass-produced product has resulted. While the New Jersey Institute of Technology continues to receive funding on this initiative, manufacturers such as Taurus have abandoned their partnership with NJIT in 2004.³⁸

Colt Firearms tried to develop a smart weapon in the late 1990's based on a RFID bracelet worn by the operator. Again, this solved the perceived problem of operating a weapon while wearing a glove. However, product demonstrations went so poorly that the project was scrapped, and Colt has not resumed any further research into this field (Kopel et al., 2001).

A more extreme approach was tried by Verichip (partnering with firearms manufacturer FN Manufacturing) using an RFID chip that was to be implanted in a police officer's hand.³⁹ No further information has been reported on this project since 2004, however, and it seems unrealistic to assume all police officers would readily agree to be "micro-chipped" just like a family pet.

More recently, Armatrix has produced a .22 caliber concept gun that relies on signals from a wristwatch (with built-in fingerprint reader) to authorize the user.⁴⁰ However, there are several significant issues with this particular system. Once an officer verifies his or her fingerprint on the wristwatch, the watch unlocks the gun for a pre-determined period, currently set for 8 hours, as opposed to an always-locked until shot status.

Some manufacturers have decided to stay out of the smart weapon arena altogether. In 1999, firearms manufacturer Beretta announced its position against such technology.⁴¹ Citing technological hurdles, perceived objections to adoption, public policy, and competitors' past failures, the company stated unequivocally that they would not pursue such technology. Their overall concern however, was much more basic: liability arising from misinformed consumers believing a smart gun was safer than a conventional firearm and leaving the weapon more accessible to children. An analogy of tamper-resistant bottles for medicine was provided, with data suggesting that the incidents of accidental poisonings has risen since the advent of the tamper-resistant pill bottles, as adults have come to rely too much on the new bottle designs and no longer follow safety practices such as storing medication out of the reach of small children. Other groups and individuals have raised this concern, too, out of fear that parents will not be as vigilant in keeping firearms away from children if they have the false belief that a smart gun is "childproof."⁴²

Proposed Manufacturer has no intention of suggesting its firearms are any safer around children than conventional guns; in fact, the company will continue to advocate for proper storage procedures such as gun safes, conventional padlock-style trigger locks, and safe firearm usage.

³⁷ Hirshon, Bob. 2005. American Association for the Advancement of Science (AAAS) Science NetLinks Science Update July 2005 podcast. Transcript available at: http://www.sciencenetlinks.com/sci_update.php?DocID=254

³⁸ Tartaro, Joseph P., 2004. 'Taurus Withdraws From "Smart Gun" Partnership in NJ,' Gun Week, March 10, 2004 issue. Discussion available at: <http://www.thehighroad.org/archive/index.php/t-71010.html>

³⁹ Associated Press. 2004. "No Chip in Arm, No Shot From Gun." Wired Magazine April 14, 2004. Available at: <http://www.wired.com/science/discoveries/news/2004/04/63066>

⁴⁰ Quick, Darren. 2010. "Armatrix SmartGun Safety System Uses Wristwatch to Authenticate Weapons." Gizmag.com, February 1, 2010. Available at: <http://www.gizmag.com/armatrix-wristwatch-safety-system-for-handguns/14044/>

⁴¹ Unknown. 1999. "Beretta Announces Position Concerning 'Smart Gun' Technology." Beretta Press Release, January 4, 1999. Available at: <http://rivendell.fortunecity.com/perilith/919/bio/smartgun.htm>

⁴² Sherman, Esq., Ralph D.. 2006. "Children, 'Smart Guns,' and Smart Adults." Gunsafe.org, 2006. Available at: <http://gunsafe.org/position%20statements/Smart%20guns.htm>

Proposed Manufacturer's system provides an additional layer of protection for the user, and it not intended to replace any current procedures for the safe handling and storage of firearms.

There is an additional, hidden concern amongst existing firearms manufacturers: if a manufacturer were to produce a "smart gun" and tout it as a safer than a conventional gun, would that not imply the company's other products are less safe? Even if the smart gun is advertised as merely having an additional layer of safety incorporated into it, much like a conventional trigger lock, the legal implication is that the company's other firearms are less safe, thus raising the possibility of a product liability suit on the grounds of design defect. The company could (and does) make safer firearms, but chose not to, therefore the company is liable for any injuries or damages resulting from misuse of the less safe firearms that otherwise could have been prevented with a simple biometric lock.

In the late 1990's, numerous companies and organizations were heralding the benefits of personalized firearms or "smart guns," claiming that the smart weapon would revolutionize the industry and create an entirely new market for firearms. Most of these groups believed that working prototypes were months away, and commercially viable products would be available within a few short years. Ten years later, however, most of these groups have either abandoned their research efforts due to technological dead-ends, consumer backlash, or lack of funding, or remain in a permanent 'almost ready' state, waiting for some new technological breakthrough or improvement in accuracy rates. Producing a weapon with a 90% accuracy rate of correctly identifying the user is simply unacceptable for this type of product.

