

Leveraging Old Intellectual Property to Accelerate Technology Entrepreneurship

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“We may be trained to think the new is about to overcome the old, but that’s just an optical illusion.”

Nassim Nicholas Taleb
Author and professor

Acquiring or licensing assets to older technologies, including surviving intellectual property rights, is an often-overlooked viable strategy for accelerating technology entrepreneurship. This strategy can help entrepreneurs short-cut the growth of a customer base, reduce development effort, and shorten the time to market with a minimum viable product. However, this strategy is not without risk; entrepreneurs need to be careful that the acquired intellectual property rights are not fraught with issues that could severely outweigh any perceived value. Proper investigation is required to ensure success because the current literature fails to provide tools that an entrepreneur can apply when considering the acquisition of intellectual property.

This article includes a case study of a technology company – Piranha Games – that indirectly acquired sole and exclusive access to a substantial historical customer base by acquiring and licensing older technology and surviving intellectual property assets. The founders then leveraged the existing product brand and its historical customers to acquire significant funding and went global with a minimum viable product in three years. The copyright and trademark assets provided value on day one to Piranha Games by making it difficult and risky for others to exploit the technology. Based on this case study, this article offers recommendations to entrepreneurs who may benefit from acquiring old intellectual property to accelerate the growth of their startups.

Introduction

Imagine if an entrepreneur had access to a substantial customer base on day one. Imagine if that access was sole and exclusive to the entrepreneur and that the customer base provided the necessary funding and knowledge to the entrepreneur at the very beginning, during a time of limited resources.

Entrepreneurs should be on the lookout for older technology assets that could provide significant present-day advantages during the start-up of a company. If there are surviving intellectual property rights associated with the technology, the assets can be particularly valuable. However, failing to adequately investigate these rights during an acquisition can quickly lead to disaster. Therefore, how can an entrepreneur leverage old

intellectual property to accelerate market entry of a product or technology?

This article is a case study of the acquisition and licensing of the MechWarrior (mwomercs.com) software technology and its associated intellectual property, both of which were acquired by Piranha Games (piranha.games.com). Piranha Games is a small independent developer of video games that was founded in 2000 in Vancouver, Canada. The case study is based upon publically available information obtained from MechWarrior blogs (tinyurl.com/mqmd5y7) and forums (tinyurl.com/lsvzo33), as well as news articles and information available on Wikipedia (wikipedia.org/wiki/MechWarrior_Online).

The following five contributions are made through this article. First, the article raises awareness of the benefits

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acquiring or licensing the assets to older technology to accelerate technology entrepreneurship. Second, it shows how to avoid potentially damaging or crippling issues that may exist with the existing intellectual property. Third, it highlights the value of leveraging the indirectly acquired historical customer base for funding. Fourth, it proposes an approach to creating a minimum viable product and acquiring tacit knowledge from the acquired historical customer base. Finally, it demonstrates how old technology may accelerate opportunities when combined with new business models that better suit the current market environment.

The following section describes the process of acquiring intellectual assets, including an overview of intellectual property rights and the due diligence required to avoid potentially damaging issues when they are acquired. Next, the article develops the MechWarrior case study, including a summary of its history and intellectual property, followed by lessons learned from the case. Finally, the article provides recommendations for entrepreneurs.

Acquiring Intellectual Assets

Acquiring an older technology and related intellectual assets can present many advantages to an entrepreneur; however, this acquisition can also present significant business and legal risks that must be avoided in order to extract the potential value of the older technology. Entrepreneurs need a basic understanding of intellectual property rights, how they relate to customers versus competitors, and how to identify potential legal risks during the acquisition.

Intellectual property

Intellectual property rights relate to copyright, trademarks, patents, and industrial designs, and they provide different forms of protection or assets for different periods of time (Smith and Parr, 2005; tinyurl.com/k9dkgqo). It is important for the technology entrepreneur to understand how these different rights relate to the competition and customer bases:

1. Copyright: protects expression in an original work by an author for a period of time defined by 70 years beyond the life of the author (Mattingly and Samardzija, 2009; tinyurl.com/mbjec7b). For software technology, this right applies to the assets, such as the computer program source code, the object code, the graphic screens creating the environment, and the graphic design. Customers relate to the visual graphics and images, resulting in strong brand recognition. Acquir-

ing an existing copyright from another company or individual owner provides the entrepreneur with a valuable option to be the sole new provider of this content to the existing customers.

2. Trademarks: provide the right to use a mark or design associated with a company's goods and services for extendable terms upon payment of a fee (Cosgrove et al., 2011; tinyurl.com/kkhhb55z). A trademark does not need to be registered (the rights still exist informally under common law), or it may be registered upon the formal filing and prosecution of the mark or design. Trademarks provide commercial value in the form of brand recognition and protection. Customers relate to the brand through the trademarks. Acquiring or licensing trademarks provides another valuable incentive to be the sole source of the associated brand. Early brand recognition by customers is very beneficial to entrepreneurs.

3. Patents: provide a right to exclude others from making, using, or selling an invention for 20 years beyond the filing date upon payment of maintenance fees. Patents provide value to an entrepreneur against infringement from competitors and customers, although a company is less likely to pursue cases of patent infringement by its customers. Industrial designs, also known as design patents, also provide a right to exclude others for a period of 14 years beyond the filing date upon payment of maintenance fees and provide value to the entrepreneur against a competitor (Smith and Parr, 2005; tinyurl.com/k9dkgqo).

Due diligence

Due diligence is an investigation to examine the intellectual property rights being considered for acquisition by a company; it may also investigate the potential for litigation based on intellectual property. The investigation tends to be conducted by intellectual property professionals or persons with special skills and education. The best approach is a combination of external and internal resources conducting the investigation. The external resources focus on the intellectual property rules and procedures and the internal resources focus on the technology and brand. Due diligence is a critical step in any business transaction concerning intellectual property rights (De Andio et al., 2004; *Intellectual Property & Technology Law Journal*, 16(8): 1-3).

A checklist of key activities undertaken during due diligence is provided in Table 1. These activities are typically carried out by the intellectual property professionals.

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Table 1. Due-diligence checklist for intellectual property assets

Key Activity	Trademarks	Copyrights	Patents
1. Determine whether proper marking of the rights in each jurisdiction has occurred.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Review and check status of all pending applications in all jurisdictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify and review unregistered, informal assets (i.e., common-law rights).	<input type="checkbox"/>	<input type="checkbox"/>	—
4. Check status of all formal registrations in all jurisdictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Check that renewal fees have been paid and identify due dates in all jurisdictions.	<input type="checkbox"/>	—	<input type="checkbox"/>
6. Check ownership rights, employee agreements, third-party agreements, and assignment documents for each intellectual property asset.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Identify and check for the presence of intellectual property clearance procedures and the results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Check for liens and security interests registered against the intellectual property assets in all jurisdictions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Identify and investigate past litigation concerning the technology and assets against the company and against competitors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The due-diligence process assesses the intellectual property rights associated with the commercial transaction to identify potential issues. As part of the process, existing rights are identified and the status of the existing property rights are determined (Valoir and Dai, 2008; *Intellectual Property & Technology Law Journal*, 20(4): 1-8). The title of the rights should be checked through employee agreements and security interests that may be registered against the property rights (Valoir and Dai, 2008); this is a common practice with venture capitalists when considering an acquisition of a company or when securing the assets of a company in relation to an investment.

The process of due diligence applies to each type of intellectual property right:

1. Trademark due diligence: reviews promotional materials to ensure proper use of trademarks and associated marking. A global search is conducted to identify and review trademark registrations and applications to ensure everything is in proper order. Assignment records are also reviewed to ensure proper ownership and to confirm that the rights may be transferred as part of the acquisition. Finally, a review should be conducted to ensure procedures are in place for clearing the trademark rights of others;

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this process ensures that the company will not inadvertently infringe on any competing trademarks.

2. Copyright due diligence: reviews copyrighted materials, such as computer programs, text, and graphics, to determine ownership. Ownership is an important aspect of copyright, therefore employee agreements, third-party agreements, as well as any vendor agreements must be reviewed to ensure complete ownership has been transferred to the company without any limitations. The investigation identifies any previous copyright risks and any concerns over a company's copyright-clearance practices, and it establishes the overall pedigree of the technology. This aspect of the due-diligence process is important because copyright risks may propagate forward into the future; it helps the acquiring company to understand the potential future risks based upon the past history of the copyrighted material.

3. Patent due diligence: reviews patent applications and granted patents to ensure the assets are in good order (Huebner, 2005; tinyurl.com/mzf59l6). The investigation should also search and consider applications and granted patents of competitors to understand any potential future risks, especially with the financial risks created by patent trolls (Bessen et al., 2011; tinyurl.com/kpm8czn). Patent trolls do not make or manufacture products or offer services – their business is the acquisition of patents and subsequent licensing through aggressive litigation.

Another aspect of due diligence investigates whether the company had a product-development clearance process to avoid intellectual property issues during development (Sheridan, 2011; *Intellectual Property & Technology Law Journal*, 23(1): 14-18). A product-development clearance is similar to due diligence but it is part of a recurring process during product-development cycles. Clearance attempts to ensure that the intellectual property rights of others are not infringed upon during product development.

Consider the case of Volkswagen, who reportedly paid several hundred million dollars to purchase the Rolls Royce and Bentley automobile companies. After closing the deal, management discovered that it did not have the trademark rights to the Rolls Royce brand, which had been previously sold to BMW (Valoir and Dai, 2008; *Intellectual Property & Technology Law Journal*, 20(4): 1-8). Volkswagen's representatives had missed a serious trademark issue during their investigation, which led to

significant costs in time and money through subsequent negotiations to acquire the trademark from BMW. The situation would have been much worse if BMW had chosen to keep the trademark; Volkswagen would have been prevented from realizing their plans for their costly new acquisition. As can be seen through this example, intellectual property rights can either provide a significant competitive advantage or become a significant and possibly crippling business and financial headache when the due diligence for intellectual property is inadequate.

In summary, the two main objectives of due diligence are to ensure that: i) the company can acquire or license all the intellectual property rights it needs, along with the technology assets and ii) the company does not have any historical or future potential issues with the intellectual property rights of third parties. In the next section, the importance of due diligence in acquiring old intellectual property for technology and business leverage purposes is examined through a case study that involved five elements of technology innovation management: intellectual property rights, customer involvement, business models, networks, and knowledge sharing.

Case Study: MechWarrior

MechWarrior is a strategy game that features large robotic war machines. It began in 1984 as a board game called Battledroids, which was developed by the FASA Corporation. The game was later renamed BattleMech and then MechWarrior. In 1989, FASA released the first video-game version of MechWarrior on CD-ROM for personal computers. In 2001, the MechWarrior trademark became the property of Microsoft Corporation, and soon after, a version of the game was released on the Xbox video-game console platform. Sometime thereafter, the product had little perceived commercial value due to availability on a single console platform in a highly competitive software gaming market.

In 2008, the founders of Piranha Games acquired and licensed the technology assets and intellectual property rights (i.e., the copyrights and a trademark license) from Microsoft. By acquiring this older software technology, Piranha Games hoped to save a great deal of early development work, especially with the graphical screen content, themes, storyboards, and associated animations and representations of characters. The MechWarrior brand also gave Piranha Games indirect access to the historical customer base that spanned almost 20 years from the product's first introduction in 1989.

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Although Piranha Games wholly acquired the technology assets, restrictions on the trademark license from Microsoft meant that the historical approach to CD-ROM distribution and retail sales was no longer viable, nor was distribution via console platforms. To overcome these limitations, Piranha Games developed a new business model based on a free-to-play online version of the game.

Piranha Games conducted an initial test of the market and potential customers by announcing the MechWarrior opportunity over the Internet. In 2012, Piranha Games announced “MechWarriors founders”, which was effectively a crowdfunding program designed to leverage the associated copyrights and trademarks by raising funds from the historical customer base. For a fee, members of the historical customer base had the opportunity to become founders, and through this program, Piranha Games reportedly raised over \$5 million USD. MechWarrior Online was initially released as a minimum viable product in the form of a closed beta version that was only available to these founders. This approach allowed Piranha Games to establish a collaboration network (Pisano and Verganti, 2008; tinyurl.com/67bcd3b) with the historical customer base, from which the company received valuable tacit knowledge (Kaupila et al., 2011; tinyurl.com/k19uyfx) with respect to the game. This knowledge included feedback about the closed beta version of the game as well as direction towards features, the evolution of the game, and historical insight into the game.

Lessons Learned from the MechWarrior Case

1. Old intellectual property accelerates technology entrepreneurship through technology assets and historical customers.

Acquiring these intellectual assets provided accelerated entrepreneurship in two ways. Firstly, the old technology could be used as a basis for a minimum viable product to shorten the development time and re-introduction of the software game. Secondly, it substantially shortened the time to build a customer base by attracting the historical customers to the founders program through the existing trademark recognition. However, if the acquired property rights were problematic, as in the case of Volkswagen, it would add significant expense to the company as well as create a serious unresolvable legal issue for the entrepreneur.

2. Proper due diligence reduces the risk of downstream intellectual property issues.

A trademark issue relating to the pedigree of the techno-

logy from FADA's previous product should have been found through the due-diligence process: the original board game was named BattleDroids, but the word "droid" is a registered trademark owned by LucasFilm Ltd. This trademark infringement forced FASA to change the game's name to BattleMechs. This intellectual property issue should have been identified by a due diligence study as a previous legal issue that was resolved, and it should have raised a general concern over FADA's intellectual property practices.

A further infringement on intellectual property rights relating to the pedigree of FADA's technology occurred in 1996, when certain graphics were added to the MechWarrior game, but they were apparently based upon designs from another company, Harmony Gold. This infringement came to light in 2011 when Harmony Gold raised the this legal issue with Mechwarrior's new owners, Piranha Games. The outcome of previous litigation in 1996 between Harmony Gold and FASA required FASA to change some of the material and withdraw from production certain graphical representations of the MechWarrior characters. This should have been revealed by a due diligence study during the acquisition by Piranha Games as a potential risk and ensured the path forward was clear and established appropriate safeguards to avoid the subsequent complaint between Harmony Gold and Piranha Games suggesting the issue in 2011 was completely avoidable.

3. Historical customer bases are powerful assets that may be leveraged.

Entrepreneurs exercising sole and exclusive access to the historical customer base through copyrights and trademarks may seek out opportunities with crowdfunding to raise funds. They may also create a minimum viable product and collaboration network and involve the historical customer base to obtain tacit knowledge before offering the product to new customers.

The indirect link to the historical customer base from the acquired intellectual property assets is compelling because it presents significant funding and knowledge opportunities to entrepreneurs.

4. New business models can be based upon old technology in the current market conditions.

A new business model provides the older technology with the advantages of new and future technological opportunities as the entrepreneur continues to leverage the historical customer base while adding in new customers. For Piranha Games, current market conditions open up the distribution of software and access to a

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global market through the Internet. The new "free-to-play" business model takes advantage of both the old technology and the current market conditions. The Internet provided Piranha Games with a way to find and access the historical customer base on a global scale; it also provided a simple, low-cost approach to global distribution of the technology.

Recommendations For Entrepreneurs

1. Consider acquiring (or licensing) the assets of an older technology to accelerate technology entrepreneurship.

Acquiring older technology can be beneficial to entrepreneurs by shortening the time to develop technology. Acquiring or licensing intellectual property assets also provides different value to entrepreneurs depending on the type of intellectual property (e.g., patents providing an exclusive monopoly for a period of time, trademarks providing brand recognition with the historical customers) (Smith and Parr, 2005; tinyurl.com/k9dkgqo); these assets can also provide an early competitive advantage. Understanding the difference in value and how they apply to competitors and customers is key when considering a strategic acquisition of older technology assets. Entrepreneurs seeking historical customers should focus on acquiring or licensing trademarks and copyrights. Entrepreneurs seeking exclusive rights to technology should focus on acquiring or licensing patents

2. Reduce the risk of acquiring past intellectual property issues through a rigorous due-diligence process.

Older technology and assets need to be assessed to ensure potential future issues are avoided; any loose ends need to be identified during a due-diligence investigation. A due-diligence investigation is key to any potential acquisition of older technology and assets, and it should be a global investigation (Valoir and Dai, 2008; *Intellectual Property & Technology Law Journal*, 20(4): 1-8). Use the checklist in Table 1 to avoid missing key activities.

3. Leverage the indirect acquisition of the historical customer base for potential funding.

Through trademarks and copyrights, entrepreneurs can indirectly acquiring access to historical customer bases. Key to this approach is the option for sole and exclusive use of copyrights and trademarks, which can be used as a form of crowdfunding.

4. Establish a collaboration network and leverage the historical customers for knowledge.

Create a minimum viable product based upon the older technology and provide initial restricted access to the historical customer base. Capture the wealth of tacit knowledge (Kauppila et al., 2011; tinyurl.com/kl9uyfx) from these customers and users to avoid past issues, and act upon this value before opening up the technology to the rest of the world.

5. Create new business models to accommodate old technology in the present market.

Business models may be innovated (Desyllas and Sako, 2012; tinyurl.com/kbmp6hr) to accommodate older technology in the present. This approach requires fresh thinking concerning the best business model to introduce the older technology into the current market, which is a key consideration before acquiring older technologies and assets.

Conclusion

Acquiring the physical and intellectual assets of older technologies is a significant strategy in accelerating the start up of a technology business with limited resources. Technology entrepreneurs and managers should seek out these opportunities and acquire older assets that were once successful to accelerate technology entrepreneurship. The keys to success with this approach include: the indirect acquisition of the historical customer base through the surviving intellectual property rights, the ability to ensure past intellectual property violations are not acquired along with the technology and intellectual property rights, overcoming past issues that historically contributed to failure, and innovating a new business model.

Further research should examine a broader range of surviving intellectual property rights, the risk and value of old intellectual property to technology entrepreneurs, the impact of old intellectual property on the choice of market, and how leveraging surviving intellectual property can be used with historical customers.

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Derek Smith is the founder and principal of Magneto Innovation Management, an intellectual property consulting firm that assists entrepreneurs and small businesses to navigate and grow their international patent portfolios. He has over 20 years of experience working as an intellectual property management consultant and patent agent for IBM Canada, Bell Canada and, most recently, Husky Injection Molding Systems where he was Director, Global Intellectual Property. Prior to entering the field of intellectual property, he was an advisory engineer at IBM Canada where he was involved in a variety of leading-edge software development projects. Derek is currently a graduate student in the Technology Innovation Management (TIM) program at Carleton University in Ottawa, Canada. He also holds a BEng degree in Systems and Computer Engineering from Carleton University and is a registered patent agent in both Canada and the United States.

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