

Cyberpunk 2077: An Intellectual Property Analysis of a Multifaceted Product

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General

i. Product Description and Product Segments

Cyberpunk 2077 is a video game produced by the Poland-based video game company CD Projekt Red (“CDPR”) that is slated for release on 19 November 2020.¹ Cyberpunk 2077 is an interactive entertainment product – a video game. As such, it is a complex work from an intellectual property perspective, not only embedding a wide range of often overlapping intellectual property rights (“IPRs”), but also incorporating some content which may fall beyond the scope of intellectual property in at least some jurisdictions. In this paper, we analyse the intellectual property assets associated with this game, explore their lifecycle and highlight challenges and opportunities in managing IPRs with properties of this nature.

Cyberpunk 2077 falls within specific genres of interactive entertainment. Specifically, it is a: (1) first-person perspective, (2) open world, (3) role-playing game, (4) that is set within the cyberpunk sub-genre of science fiction.² Cyberpunk 2077 represents a significant investment for CDPR, one which is made possible by the success of CDPR’s prior video game franchise. The Witcher, CDPR’s first project, experienced significant growth from the company’s release of the first video game in the franchise to their most recent release, the critically acclaimed *Witcher 3: Wild Hunt*.

As a product, a video game is a complex work of authorship implementing a wide set of IP rights. Specifically, copyright, design, trademark, and patent form video game multi-layered structure. Such contextual presence of different IP rights generates those gaps and overlaps especially when it comes to the classification and protection of such complex work. Different features within the game may attract the protection of multiple IP rights. Video games will generally receive whatever jurisdiction-specific protections are available for software, which may include having the software recognized as a literary work, while their content may receive separate protection as literary works, films, or other audiovisual works. Depending on the

¹ CD Projekt Red, ‘Cyberpunk 2077’ <cyberpunk.net> accessed 14 September 2020.

² A first-person perspective game is one in which the game is visually depicted as it would be seen through the eyes of the character controlled by the game player. An open-world game is a game in which the player (and character) is not restricted to a strict, pre-defined route through the game, but are free to wander throughout the game’s setting. A role-playing game (“RPG”) is a game in which the player is playing a single character. The cyberpunk sub-genre of science fiction features dystopian near-future settings, often featuring powerful corporations, human-machine interfaces, and artificial intelligence. Early works within this subgenre include William Gibson’s novel *Neuromancer* (Ace Books 1984) and Ridley Scot’s film *Bladerunner* (Warner Brothers 1982);.

jurisdiction, video games can be classified as collective, complex, or multimedia works.³ Therefore, while an agreed classification of video games seems hard to achieve, it may be preferable to see video games as a compound of IP assets embedded in discs, digital files to download or to stream.⁴

In general, these products are not for sale. Whoever decides to purchase a video game is merely the owner of the box or the disc (the physical format), and then only if they select a manner of content delivery that includes such an item. Many consumers, if not most, will not do so. Instead, they will acquire the game via digital delivery from one of several online distributors. Whoever wants to play a video game shall become party of a license agreement that sets the terms and conditions of video game use. Therefore, people purchase a license which give them the permission to use the software under certain conditions.

Product segmentation for major game releases⁵ such as *Cyberpunk 2077* is complex. The game will be marketed for use on multiple platforms, including PC and the gaming consoles produced by multiple companies. Within the PC market, it will be marketed through multiple online stores, including Steam, the game store run by Epic Games, and CDPR's own online storefront, GOG. In addition, the game will also be segmented geographically, or "localized," with versions in different languages for different regions.

ii. Industry Description and Industry Specifics Affecting IP Management

The Interactive Entertainment Industry is now the biggest pillar of the entertainment sector, surpassing both the movie and music industries combined.⁶ The global gaming market has been estimated at \$159.3Bn and is expected to grow and exceed \$200Bn by 2023.⁷ This is attributable, in no small part, to advances in digital technology and the industry's wide use of digital distribution. The Chief Executive of the UK Entertainment Retailers Association ("ERA") noted that the Interactive Entertainment Industry ("IEI") "...has been incredibly effective in taking advantage of the potential of digital technology to offer new and compelling forms of entertainment. Despite being the youngest of our three sectors, it is now by far the biggest."⁸

Video games can be played on a variety of different devices, including personal computers, video game consoles, smartphones and VR mobile devices. Such wide range of compatible hardware gives developers and publishers access to a broad and diverse consumer base. Demographics also play a key role as video games attract and now cater to an increasingly diverse audience. For example, women have been reported to account for 46% of all video game enthusiasts.⁹ These games are often marketed globally, creating a situation in which

³ Brazilian IP law considers video games as collective works; French IP law considers them a complex creation that cannot be categorized; German IP law considers them multimedia works.

⁴ With cloud gaming, the game software resides in datacentre ready to be streamed on several devices according to players' preferences.

⁵ Sometimes known as "AAA" or "Triple-A" games.

⁶ BBC, 'Gaming Worth more than Video and Music Combined' (*BBC*, 3 January 2019) <<https://www.bbc.com/news/technology-46746593>> accessed 10 September 2020.

⁷ Tom Wijman, 'The World's 2.7 Billion Gamers Will Spend \$159.3 Billion on Games in 2020; The Market Will Surpass \$200 Billion by 2023' (*Newzoo*, 8 May 2020) <<https://newzoo.com/insights/articles/newzoo-games-market-numbers-revenues-and-audience-2020-2023/>> accessed 10 September 2020.

⁸ Entertainment Retailers Association, 'Streaming drives entertainment sales 9.4% higher in 2018 to sixth consecutive year of growth but physical remains crucial to deliver megahits' (*ERA*, 3 January 2018) <<https://eraltd.org/news-events/press-releases/2019/streaming-drives-entertainment-sales-94-higher-in-2018-to-sixth-consecutive-year-of-growth/>> accessed 10 September 2020.

⁹ Sander Bosman, 'Women Account for 46% of All Game Enthusiasts: Watching Game Video Content and Esports Has Changed How Women and Men Alike Engage with Games' (*Newzoo*, 10 May 2019) <<https://bit.ly/3mJRfK8>> accessed 10 September 2020.

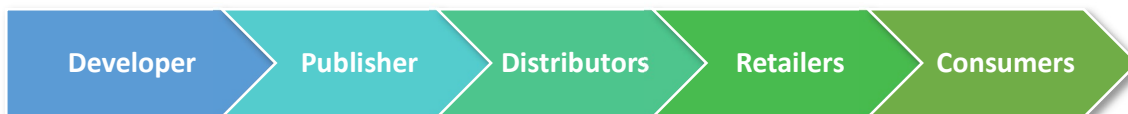
developers must consider the non-harmonized nature of IP law throughout the development and marketing process.

Games also combine both traditional software issues and multimedia entertainment works within a single product. This creates a series of IP management challenges which are discussed throughout the bulk of this paper.

iii. Business Strategy & Industry Value Chain

The IEI consists not only of players and game developers. It involves a wide set of parties that interact with each other along the value chain of video games development and promotion. As shown in (Figure 1), there are several participants contributing to video game creation and distribution. However, given the rapid changes video game industry is experimenting, a value chain shall reflect the evolution of the market and its different needs. For instance, mobile games value chain does not involve publishers and retailers¹⁰ while the online game value chain only involves the presence of developers and consumers.¹¹

Figure 1: Industry Value Chain



A business strategy is the set of decisions aiming to achieve profit-oriented objectives. Inevitably, video games business strategies must consider the complex IP nature of video games. In fact, the enforcement, protection, management, and commercialisation of IP assets strongly depends on the IP structure of the product or service. In addition, business and IP strategies shall consider the heterogeneous landscape of global Intellectual Property Laws. The following paragraphs seek to demonstrate the lack of IP harmonisation for video games and subsequent difficulties in arranging a proper business and IP strategies.

Because video games are so reliant on IPRs, and so commonly marketed on a global basis, any business strategy in this field must take into account the national and international aspects of this field of law, along with all associated legal uncertainties. IP law is statute-based, and IP laws are first and foremost territorial and apply within a specific jurisdiction. It means that, IP rights are reciprocally independent so that a design, a copyright work, and an invention may find protection in one country but not in another one.¹² However, national IP laws are also based on international conventions and treaties that seek to harmonize IP laws while providing a minimum level of protection in all jurisdictions. These international instruments aim to establish guidelines for homogeneous definition and protection of IP rights.

IP law's lack of harmonization and accented territoriality also influences intellectual property enforcement. In fact, IP assets have global character, and their use is rarely limited to national boundaries. Increasing digitalization and globalized economy are also challenging the interactions between national IP laws and private international laws. Current IP infringements usually involve several territories, which results in a complex set of jurisdictions, enforcement, and applicable laws to be applied.

For example, one need only consider the different approaches to copyright law in the US and EU. The EU has not implemented a Union-wide copyright framework. Based on the principle of territoriality, each member state has its own national copyright law while the EU has no

¹⁰ Mobile games market sees the dominant position of distributors that host games available to consumers

¹¹ Within the online games value chain developers and consumers directly interact with each other.

¹² WIPO, A casebook on the Enforcement of Intellectual Property Rights, (2018)

direct competence in the field. However, international instruments such as the Berne Convention 1886 (“BC”), the Trade-Related Aspects of Intellectual Property Rights Agreement 1994 (“TRIPS”), the World Intellectual Property Organization (“WIPO”) Copyright Treaty 1996 and eight Directives aim to set common guidelines and principles.¹³

The EU system is characterized by the international principle of idea/expression dichotomy that states copyright protection only extends to expression and not to idea, procedures, or methods. When stating that any fixation requirement for copyright protection is not required, EU law confirms that authorship is the main requirement for copyright protection and exploitation. The US system, meanwhile, outlines general requirements for copyright protection. Specifically, a work must be original, fixed in a tangible medium and more than a mere idea. While we find the same EU idea/expression dichotomy principle, the US also requires a fixation requirement. Doing so, US copyright laws highlight the importance of originality and fixation requirement for copyright protection.¹⁴ Another difference is given by the enforcement of copyright infringement. In fact, US legislation states that copyright infringement may be enforced only by pre-registration or registration of the copyright. Contrarily, EU law does not have registration requirement and copyright protection is gained as soon the work has been created.

The differences in copyright law represent only one area in which a lack of harmonisation can create issues for industry participants. Although some areas of intellectual property have been the subject of more international agreement than others, none are truly harmonised. In some cases, such as patent, the differences are of comparably limited significance to this industry. In others, such as the American design patent regime and the European registered design system, the differences can result in entirely different types of IPR covering the same properties. In all cases, these are among the issues that industry participants, whether major studios or SMEs, must be aware of.

Video games are played by millions of people that reside in different jurisdictions with their own IP laws and enforcement. This means that IP infringement involving a video game may trigger several jurisdictions at the same time—questions related to applicable legal regimes and enforcement do not have obvious answers. Developers and publishers, however, have partially overridden the issue by imposing a governing law and arbitration clause in their End User License Agreements.

In jurisdictions such as the US, even though video games are not mentioned in the Copyright Act, they may comply with the classification requirement provided they are original, fixed in a medium and can be perceived and reproduced.¹⁵ They can also be protected under the audiovisual category of works. It is also important to note that video games are software programs and, in many cases, entail extensive lines of code. Since computer code is a combination of numbers, symbols and words, and video games entail computer code, it follows that video games are also eligible for protection under the literary category.¹⁶ Several other core video game elements, however, are difficult (if not impossible) to protect via a single IP right (e.g. gameplay or game concept).

¹³ WIPO, Summaries of Conventions, treaties and Agreements administered by WIPO, (2013)

¹⁴ Paul Goldstein and P. Bernt Hugenholtz, *International Copyright Principles, Law, and Practices*, (2013)

¹⁵ *Williams Electronics, Inc. v. Artic International, Inc.*, 685 F.2d 870 (3rd Cir.1982).

¹⁶ Section 101 of the statute notes that literary works can be expressed in “...words, numbers or other verbal or numerical symbols or indicia, regardless of the nature of the material objects such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.”

Table 1: IP Matrix

Copyright <ul style="list-style-type: none">• Code• Story• Characters• Graphics• Concept and in-game Art• Music and Sounds• User Interfaces• Motion Capture• Voice Acting
Trade Mark <ul style="list-style-type: none">• Company Name• Company Logo• Game Title• Distinguishable "Catch phrase" associated with the game
Trade Secrets <ul style="list-style-type: none">• Pricing Information• Development Tools• Developers' Know-How• Deal Terms
Patents <ul style="list-style-type: none">• Inventive Gameplay or Game Design Elements• Hardware Technical Innovations• Software Technical Innovations
Registered Designs <ul style="list-style-type: none">• Box Design• 3D Models and Environments• User Interfaces
Gaps <ul style="list-style-type: none">• Fictional Marks• Streamers• Youtubers• Unauthorized Merchandisers

This “Intellectual Property Matrix” (table 1) outlines that video games are made by a combination of previous intangible assets. It also showcases the multiplicity of legal routes and avenues publishers and developer must navigate through to protect their IPs. In fact, given the constant commercial trend that sees video game as the protagonists of current and future entertainment scene, developers and publishers are increasingly motivated to protect their creations from competitors and “pirates” while harnessing video game IPs for maximum value. Video game Intellectual Property assets and their subsequent commercialization must deal with the complexity of IP laws between national and international level while considering the special nature of the video game medium.

In Details

iv. IP Components of the Product and IP Strategy of the Company

In a video game, the IPRs are concentrated in two separate yet equally important components: the software, or engine, which runs the game; and the multimedia audio-visual work, or content, that provides the narrative being told through the game. An engine includes all the modules and tools required for rendering 3D models and environments, simulating physics and lighting, generating music and sound as well as programming and managing artificial intelligence. The content encompasses all the individual ingredients and audiovisual components that go into a video game. This includes the art, graphics, 3D models and environments, user interfaces, music, ambient sound, voice acting, characters, settings, script, and all the other elements of the story.¹⁷

The game is essentially the content “fed” into the engine. The game and the content are interdependent, and their relationship could be likened to that between the automobile engine and body:

“Like the automobile body and interior, the “game” is the part that the user interacts with and is the part that differentiates one game from any other games. Just as automobile engine/chassis are regularly used with different bodies to create different car models, so are game engines used to create different games.”¹⁸

The strategy for deriving value from these components varies, with some companies electing to license or otherwise acquire the right to use engines, content, or both from other companies, focusing primarily on achieving value through the game itself. Other companies bring more of the work in-house, permitting them to reduce costs by avoiding license fees on the one hand and creating additional material that can be licensed out on the other. Cyberpunk 2077 employs a blend of approaches. The development of the engine for Cyberpunk made heavy use of IPRs already in the CDPR portfolio, while the basis for the content was acquired from a third party.

The Engine

Engines are independently protectable works. A video game developer can either develop their own engine or licence an engine from another developer.¹⁹ This complex software is expensive and time-consuming to develop, and many video game studios prefer to license existing engines as opposed to developing their own. Engines available for licensing are usually very versatile and can be tailored to fit the needs of a game. This is especially true for smaller

¹⁷ From an IP perspective, it should be noted that many of these elements will represent works in their own right.

¹⁸ Kevin R Conway, ‘Game Mods, Engines, and Architecture’ in Erik Champion (ed), *Game Mods: Design, Theory and Criticism* (ETC Press 2013) 91.

¹⁹ For example, Epic Games makes its engine, Unreal Engine, widely available for third party licensing. See <https://www.unrealengine.com/> accessed 15 Sept 2020.

independent studios (“indie”) that do not have the budget nor the capacity for such undertaking. However, studios that begin by licensing an engine may, with growth, decide to invest the time needed to develop their own engine.

Where a studio has developed its own engine, that existing engine serves as an IP input into the product – a component which existed in some form prior to this game. This is true for *Cyberpunk 2077*, as CDPR developed its own engine during the development of their successful *Witcher* video game franchise. CDPR’s first instalment in the franchise used the Aurora Engine, which they licensed from Canadian developer BioWare. While developing the second entry to the franchise, CDPR created their own in-house technology. With more experience and greater access to resources and personnel, CDPR developed REDengine, allowing them to create linear, story-driven third-person RPGs.

The third iteration of the REDengine, specifically developed for their extremely successful game *The Witcher 3: Wild Hunt*,²⁰ represents the direct input for *Cyberpunk 2077*. The developer wanted to move past the linear and highly structured and curated nature of the previous *Witcher* video games and allow players to explore immersive open world environments and experience the video game’s story as they pleased. They also sought to create a more cinematic experience with higher fidelity graphics REDengine 3 introduced “...improvements to facial as well as other computer animation...volumetric effects enabling advanced rendering of clouds, mist, fog, smoke and other such particle effects...advanced ultra-high resolution textures and mapping, as well as dynamic physics and advanced dialogue mimic system.”²¹ The result was an engine that could “...create and combine a vast game world with player choice-driven stories”.²² The latest iteration of the REDengine allowed for increased creative freedom, enhanced visuals and a complex storytelling structure. The technical achievements and effectiveness of CDPR’s engine is evidenced by *The Witcher 3*’s huge success and popularity, with sales exceeding 50 million copies this year.²³

During the early stages of *Cyberpunk*’s development, CDPR was reportedly using a version of REDengine 3.²⁴ However, as REDengine was developed for a third-person action video game, adjustments had to be made to accommodate CDPR’s new creative direction. After receiving a \$7 million USD grant through the Polish GameINN²⁵ program, CDPR focused on upgrading the capabilities of its in-house tools.²⁶ This has led to many thorough upgrades to their in-house engine which led to the fourth and latest iteration of CDPR’s proprietary engine, the REDengine 4. The new version of CDPR’s engine is developed specifically for *Cyberpunk* and makes it easier for the studio to create the game with a first-person perspective. REDengine

²⁰ MCV Staff, “The Wild Road to the *Witcher 3*” (*MCVUK*, 10 June 2015) <<https://www.mcvuk.com/development-news/the-wild-road-to-the-witcher-3/>> accessed 9 September 2020.

²¹ Fandom: The Official *Witcher* Wiki, “REDengine” (*Fandom*) <<https://witcher.fandom.com/wiki/REDengine>> accessed 9 September 2020.

²² David Hinke, “CD Projekt Red introduces REDengine 3, latest iteration of in-house tech” (*Engadget*, February 2013) <<https://engt.co/3m78THtXT>> accessed 9 September 2020.

²³ Fraser Brown, ‘The *Witcher* series hits 50 million sales’ (*PC Gamer*, 29 May 2020) <<https://www.pcgamer.com/the-witcher-series-hits-50-million-sales/>> accessed 9 September 2020.

²⁴ Hinke (n 5).

²⁵ GameINN see <https://gameinn.pl>

²⁶ James Batchelor, ‘CD Projekt Red, Techland receive grants from Polish government’s \$27.4m research fund’ (*GamesIndustry.biz*, 19 December 2016) <<https://www.gamesindustry.biz/articles/2016-12-19-cd-projekt-red-techland-receive-grants-from-polish-governments-usd27-4m-research-fund>> accessed 9 September 2020; Luckie, ‘*Cyberpunk 2077* may feature seamless multiplayer and a huge living city’ (*GamePressure*, 27 September 2016) <<https://www.gamepressure.com/newsroom/cyberpunk-2077-may-feature-seamless-multiplayer-and-a-huge-living-zb344>> accessed 9 September 2020.

4 also introduces various graphical upgrades that allow for the development of “next-gen” assets, graphics and effects. In fact, every aspect of REDengine has reportedly been upgraded.²⁷

CDPR, by heavily investing in developing, maintaining, and upgrading its in-house engine, has developed a powerful software creation suite that is customizable and upgradable according to their needs. This allows for increased creative freedom and flexibility in developing their projects. Most importantly, CDPR does not have to license or pay royalties to third parties for using their engines. CDPR’s use and development of REDengine in *Cyberpunk 2077* represents the use of a strategy by which they made the maximum use of IPRs already in their portfolio, and developed a new engine which both provides a critical component for this product, but will also be available for use in future games – either new CDPR creations, or, should the company so choose, created by third parties using the engine under license from CDPR.

The Video Game Content

Where CDPR used their own existing IP portfolio as the basis for the development of the engine used in *Cyberpunk 2077*, the initial source for the game’s content was not developed in-house.²⁸ Instead, the basis for the game’s content was acquired from a third party, R. Talsorian Games (“Talsorian”).²⁹ Talsorian is a publisher of what are known as pen-and-paper, or traditional, RPGs, a genre first made famous by *Dungeons & Dragons* in the late 1970s and early 1980s. Specifically, CDPR acquired rights to Talsorian’s *Cyberpunk 2020* RPG franchise.³⁰

The corpus of IPRs that makes up the *Cyberpunk 2020* franchise is complex. It includes a number of literary works, including the original *Cyberpunk* RPG, the *Cyberpunk 2020* game, *Cyberpunk 3.0*, and a significant number of supplements that provide additional detail regarding the game’s universe.³¹ The primary IPR constituting the story inputs for *Cyberpunk 2077* would therefore seem to be the copyright in these literary works. In reality, the situation is more complex.

In addition to the copyrights, there are also trademarks, both registered and unregistered, as well as the goodwill associated with the tabletop game. Beyond that, there are issues surrounding copyright in individual elements of the works, including characters and settings, and a set of what might best be termed ‘fictional trademarks’ associated with the game universe. The issues with RPGs are more pronounced because these works differ from more traditional forms of intellectual property such as novels or films.³² Rather than being structured around a traditional narrative, RPGs provide a mechanism allowing players to create characters, a rules

²⁷ Nathan Grayson, ‘The People Making *Cyberpunk 2077* Would Like To Correct A Misconception About Game Development’ (*Kotaku*, 5 October 2016) <<https://kotaku.com/the-people-behind-cyberpunk-2077-would-like-to-correct-1775789408>> accessed 9 September 2020.

²⁸ As noted above, beginning with an existing work is consistent with the policy that CD Projekt Red has employed regarding other successful interactive entertainment properties they have developed, including their popular *Witcher* series, which originated in stories written by Andrzej Sapkowski.

²⁹ Although the content was acquired from a third party,

³⁰ The game has spanned several editions thus far, with an additional edition planned for release near the release of the *Cyberpunk 2077* game. See, eg, Mike Pondsmith et al, *Cyberpunk* (R Talsorian Games 1988); Mike Pondsmith et al, *Cyberpunk 2020* (R Talsorian Games 1992; Mike Pondsmith et al, *Cyberpunk v3.0* (R Talsorian Games 2005).

³¹ See, eg, Anthony Seville et al, *Firestorm: Stormfront* (R Talsorian Games 1997); Nick Gillott et al, *Rough Guide to the UK: Riding the Edge to 2020’s Britain* (R Talsorian Games 1994); Mike Pondsmith et al, *Night City: A City Sourcebook for Cyberpunk* (R Talsorian Games 1991). As *Cyberpunk 2077* is set in Night City, that sourcebook is particularly likely to contain material that has made the transition to the video game.

³² However, similar protection issues are present with more conventional franchises, including those involving comic books, television programming, and/or films. See, eg, *DC Comics v. Towle*, -802 F.3d 1012 (9th Cir. 2015) (Copyright lawsuit involving infringement of the “Batmobile” vehicle from the Batman franchise).

system that governs whether players succeed at various tasks, and a fictional universe in which the game takes place.³³ Players are, particularly in the context of tabletop RPGs, then free to design their own characters and stories within the constraints of the game’s overarching framework.

The IP components that a tabletop RPG provides to the video game are not the main characters and plots; rather, they are what might be considered in broad terms as the ‘setting’ for the game. Locations, secondary characters, and broad ‘historical’ arcs that capture the history of the setting can all be intellectual property components associated with these works, as can fictional inventions, vehicles, weapons, corporations, and other such features of richly detailed settings. Collectively, these can be viewed as a set of ‘fictional facts.’³⁴ The intellectual property protections that may apply to such features are complex and jurisdictionally-variable. Although a detailed treatment of these features is not possible in the space available here, a brief treatment of several key areas is warranted, as these features are relevant to both the development of the game, and as will be discussed subsequently, to potential third party uses both licensed and unlicensed.

The protection of fictional characters is a contentious area of copyright law. The extent of protection and mechanism through which it is offered vary extensively from state to state, with some jurisdictions treating characters as copyright-protected works, while others extend protection, if at all, only through trademark or unfair competition law.³⁵ In the case of the type of characters – many of them secondary – that are found in the context of pen-and-paper games, protection can be particularly challenging. Thus, a major character from the setting such as ‘Johnny Silverhand,’ who is described in substantial detail across several of the RPG books, is more likely to attract independent copyright protection when used in a video game than, for example, undistinguished members of “the Voodoo Boys,” a (fictional) gang.³⁶

The protection of elements of works other than characters, such as fictional locations, is more challenging. For example, a fictional nightclub, “Afterlife” is described briefly, in a text-only description, in a *Cyberpunk 2020* supplement.³⁷ What rights might be implicated by the video game *Cyberpunk 2077*’s use of this location? The extent to which a visual depiction of a location is capable of infringing copyright in text describing the location, falls within a grey area of copyright law.

³³ Although there are many differences between traditional RPGs and video game RPGs from a player perspective, including the amount of flexibility involved in crafting the game’s story, this same set of basic features is found in both types of RPG – making pen-and-paper RPGs particularly well-suited to adaptation to the video game format.

³⁴ For more on fictional facts, see generally Matt Kellogg, ‘The Problem of Fictional Facts: Idea, Expression, and Copyright’s Balance between Author Incentive and Public Interest’ (2010) 58 J Copyright Soc’y USA 549.

³⁵ A partial treatment of this area may be found in Trevor Cook ed, *Sterling on World Copyright Law* (4th Edn, Sweet & Maxwell 2015) para. 6.45-6.48.

³⁶ See, eg, *Nichols v Universal Pictures Corp*, 45 F2d 119, 121 (2nd Cir 1930) (“If Twelfth Night were copyrighted, it is quite possible that a second comer might so closely imitate Sir Toby Belch or Malvolio as to infringe, but it would not be enough that for one of his characters he cast a riotous knight who kept wassail to the discomfort of the household, or a vain and foppish steward who became amorous of his mistress. These would be no more than Shakespeare’s “ideas” in the play... It follows that the less developed the characters, the less they can be copyrighted; that is the penalty an author must bear for marking them too indistinctly.”) The general principle that “less developed” characters receive less protection, although American in origin, is in rough accord with the current treatment elsewhere.

³⁷ Mike Pondsmith et al, *Night City: A City Sourcebook for Cyberpunk* (R Talsorian Games 1991) 116-117. The full description of Afterlife presented there consists of three paragraphs of text.

The status of fictional settings less well-established than the already unclear status of fictional characters, although an argument by analogy is possible here.³⁸ Additional questions arise regarding whether a textual description of a setting can be infringed by artwork of that setting.³⁹ Similar questions will arise with other game features, including invented vehicles, weapons, and other such elements. Moreover, and as was the case with characters, these issues do not merely fall within a grey area of copyright law within one jurisdiction; they fall within a grey area of copyright law in multiple jurisdictions.⁴⁰

Questions surrounding the protection of fictional facts become even more prominent where the thing being protected is clearly trademark-like in nature. For example, ‘Arasaka’ is a fictional corporation that features prominently within the *Cyberpunk 2020/2077* fictional universe. This imaginary company’s logo is featured in a several RPG supplements. That logo is also used in the video game. The simple nature of the logo makes it uncertain whether copyright protection would be available for it as a graphic work in all jurisdictions. At the same time, the lack of a real-world company using that logo as a source of goods makes protection as a mark quite uncertain. In many jurisdictions, the mark is ineligible for protection because it is not being used as an indication for a source of real goods, in much the same way that the fictional “Duff Beer” made famous in the animated series *The Simpsons* is not a real product. Nevertheless, this inconvenient fact has not always prevented real trademark protections from being extended to fictional products.⁴¹

Taken together, these fictional facts, whether copyright protected elements, fictional trademarks, or other, less-certain features, constitute the fictional universe in which the game is set. In addition, a certain amount of “history” for this universe is also provided, along with a series of broad plot arcs which can be used as a more detailed foundation for the “stories” created by players. In practical terms, these elements are found within the RPG’s rulebook, and a series of subsequent supplements. Thus far, despite the richly detailed nature of many fictional universes, particularly those used within the interactive entertainment industry, fictional universes have not been treated as a form of intellectual property in and of themselves. Nevertheless, the possibility of protection in a manner analogous to the protections extended to fictional characters should not be overlooked.⁴²

The IP components of the *Cyberpunk 2020* franchise have been taken by CDPR and modified to create much of the content for *Cyberpunk 2077*. Some characters have been used from the 2020 franchise and settings have been updated and modified, and new characters and stories have been introduced. The result is a derivative work that has added additional depth to the existing franchise they acquired, increasing its value and licensing potential.

³⁸ See, eg, *DC Comics v Towle*, 802 F3d 1012 (9th Cir 2015) (treating fictional vehicle as a character for copyright purposes).

³⁹ The situation if “Afterlife” is viewed as a trademark is even more complex, as is shown by the example in the next paragraph.

⁴⁰ As a major, or “AAA” video game release, *Cyberpunk 2077* will be released globally. This potentially exposes CD Projekt Red to the IP laws of every country in which the game is released.

⁴¹ There have been attempts in multiple countries, with mixed success, to market “Duff Beer” without license from Twentieth Century Fox (the copyright owner for *The Simpsons* franchise). Compare, eg, *Twentieth Century Fox Film Corp & anor v The South Australian Brewing Co Ltd & anor* [1996] FCA 480 (19 June 1996) (Australian case enjoining a “Duff Beer” on various grounds) with Helmut Sonn, “Austria: The Simpsons fail with their Duff (beer)” *ManagingIP.com* <https://www.managingip.com/article/b1kbpdnx9zfcj/austria-the-simpsons-fail-with-their-duff-beer> (Discussing Austrian case in which Twentieth Century Fox failed to block a German company from marketing a real world “Duff Beer.”)

⁴² For a more extensive treatment of this question, see Michael Dunford, “*Paramount Pictures v Axanar Productions: Identifying the Infringed Work When an Unauthorized Production is Set in an Existing Fictional Universe*” (2018) 1 *Interactive Entertainment L Rev* 73

Additional IP components have also been created as part of the content of the game. The setting has been fleshed out through the creation of the extensive graphics for the game; where the tabletop RPG relied upon sketches, drawings, and the imagination of readers to evoke the image of the setting, the video game is an extremely detailed graphical work, at the cutting edge of current technology.⁴³ New protectable works have also been created in the form of music. Like most video games produced at its level, *Cyberpunk 2077* can be expected to ship with a full soundtrack. It is possible that, as is sometimes the case, the soundtrack will include music licensed from elsewhere. However, original music is also often created. In the case of *Cyberpunk 2077*, a rock band was commissioned to be a band that features in the game, and to create several songs for the game. Although the game is still pre-release at this time, one of the tracks, *Chippin' In*, has been streamed in excess of 3 million times on Spotify alone as of the time of writing.

Further content-based IP components have also been produced as a result of the “localization” process, in which different geographic variants of the game are created. This process generally involves the exercise of translation rights to the game, either through in-house production or by contracting out the process to other companies. For productions on the scale of *Cyberpunk 2077*, this can require extensive efforts. For example, the Mandarin Chinese version of the game has reportedly involved “more than 150 voice actors, 100,000 lines, 4 recording studios + 10,000 person hours.”⁴⁴

The IP components of *Cyberpunk 2077*, then, constitute a mix of acquired and developed works. As was the case with the engine, the existing works have been extensively modified, resulting in the creation of additional works. Taken together, these components both produce value directly, within the game itself, and provide the foundation for potential downstream uses in the form of later versions of the game, and, as will be discussed subsequently, through the development of franchised works in other entertainment media.

Commercialisation

CDPR has emphasised that *Cyberpunk* will have two distinct modes that are treated as two separate projects: the story-driven single player version and the multiplayer/online mode. According to CDPR, this also means that the commercialisation and monetisation of the two projects will differ from one another. The official *Cyberpunk* Twitter account recently stated that: “*Cyberpunk 2077* is a single game with zero microtransactions. One single purchase...*Cyberpunk* multiplayer/online, which is a separate project, will have some microtransactions.”⁴⁵

Treating the single player and multiplayer modes of *Cyberpunk* as distinct from one another will allow CDPR to offer long-term support, expansions, and updates for both. Judging by the way in which previous *Witcher* games were supported and expanded upon after their initial release, especially *The Witcher 3: Wild Hunt*, *Cyberpunk*'s single player will most likely receive the same treatment.⁴⁶ CDPR seems to have confirmed that *Cyberpunk*'s single player

⁴³ See, eg, Zachary Boddy, ‘*Cyberpunk 2077* Shows Off RTX Ray Tracing With New NVIDIA 30-Series GPU’ (Windows Central 1 Sept 2020) <<https://www.windowscentral.com/cyberpunk-2077-shows-rtx-ray-tracing-new-nvidia-30-series-gpu>> accessed 14 Sept 2020.

⁴⁴ Daniel Ahmad, @ZhugeEX, Twitter <<https://twitter.com/ZhugeEX/status/1303069349440303112>>

⁴⁵ <https://twitter.com/CyberpunkGame/status/1303053206600253442>

⁴⁶ *The Witcher 3: Wild Hunt* received 16 pieces of free downloadable content in the form of in-game items and character customisation options following its release. The game also received two major expansions that could be purchased in addition to the base game. These expansions added new missions, areas, stories, characters and overall added more value to the original game. See IGN, ‘DLC and Expansions Packs’ (*IGN*, 24 July 2018) <https://www.ign.com/wikis/the-witcher-3-wild-hunt/DLC_and_Expansion_Packs> accessed 11 September 2020.

mode will receive updates in the form of free downloadable content (“DLC”) as well as paid expansions.⁴⁷ While it remains to be seen how microtransactions will be implemented for the multiplayer version of the game, they will nevertheless ensure a steady stream of content and updates as well as long term support for players.⁴⁸

v. IP Aspects Related to Third Parties – Strategic & Risk Management Challenges

Content Acquisition

As noted earlier, it is clear, based on the observed developments in both the game and its franchising, that CDPR has obtained broad rights to the Cyberpunk 2020 franchise originally developed by Mike Pondsmith and Talsorian Games.⁴⁹ In acquiring these rights CDPR is taking an opportunity to create an entirely new product – a high-end (or triple-A) video game release, set in a relatively undeveloped world that lends itself well to both future game development and to wider franchising.

Although this could be accomplished through licensing, outright acquisition of the intellectual property has two major advantages. First, it provides clarity. As noted above, the range of IP components involved in a multi-work franchise such as Cyberpunk 2020 is complex. Acquisition of the entire franchise shortcuts the need to carefully define the scope of a license and reduces the potential for conflict later on.⁵⁰ Second, and potentially more importantly from the perspective of IPR use, acquisition of the content positions CDPR to license future works in other media based on the success of the video game.

Franchising

Video games, like other works of popular culture, can serve as the basis for complex multimedia franchises. Successful franchises, such as Nintendo’s Pokemon, Blizzard’s Warcraft, or CDPR’s Witcher, can bring in levels of income through licensing and merchandising agreements that vastly exceed the earnings of the initial products. CDPR acquired the existing Cyberpunk 2020 franchise from R. Talsorian Games with a view to maximise the potential for further franchise development. Although it is, as of now, quite early in the lifecycle of the initial product, let alone the updated franchise, we are already seeing CDPR begin to leverage the IP in this manner.

Two such licensing agreements have, in fact, already been announced. A comic book series titled Trauma Team, produced by Dark Horse comics, has been announced and two issues have

⁴⁷ Heather Wald, ‘Cyberpunk 2077 free DLC confirmed by CD Projekt Red’ (*Gamesradar*, 24 August 2020) <<https://www.gamesradar.com/cyberpunk-2077-free-dlc/>> accessed 11 September 2020; Jordan Oloman, ‘Cyberpunk 2077 Will Have Free DLC Alongside Paid Expansions’ (*IGN*, 24 August 2020) <<https://www.ign.com/articles/cyberpunk-2077-free-dlc>> accessed 11 September 2020.

⁴⁸ Previous CDPR video games did not have a multiplayer version, apart from the standalone *Gwent: The Witcher Card Game*, and this is the first time they will be incorporating microtransactions.

⁴⁹ CDPR’s logo appears on the front of the first issue of a licensed comic book, and while Mike Pondsmith is cited as the creator of the original game, CDPR is listed as the copyright holder. See Cullen Bunn & Miguel Valderrama, *Cyberpunk 2077: Trauma Team* (2020) Vol 1, Issue 1. CDPR has also acquired at least one trademark previously owned by Talsorian. “Cyberpunk” US Trademark Registration No 4062690, suggesting that CDPR has elected to acquire, rather than license, rights from Talsorian. At the same time, it should also be noted that Talsorian has released a tabletop RPG version of *The Witcher*, suggesting that the arrangement between the companies goes beyond *Cyberpunk*. Cody Pondsmith and Lisa Pondsmith, *The Witcher* (R Talsorian Games 2018). CDPR is listed as a ‘partner’ in marketing materials for this game, and their logo appears on the cover.

⁵⁰ CDPR has encountered some issues with this in the past. See generally, eg, Michael Salajczyk, ‘The Witcher Saga: The Author’s Quest for Additional Royalties from Video Game Developer’ 18 Oct 2018, <<https://mediawrites.law/the-witcher-saga-the-authors-quest-for-additional-royalties-from-video-game-developer/>>

been released as of the time of this presentation.⁵¹ An original Netflix animated series titled *Cyberpunk 2077: Edgerunners*, to be produced by Japanese anime studio Studio Trigger, has also been announced, and is scheduled for release in 2022.⁵² In addition, although not yet announced, it is likely that a range of other spinoffs, both in terms of works of entertainment and tangible merchandise, will follow. In addition, Talsorian continues to produce tabletop games set in the *Cyberpunk* universe, so there is clearly an ongoing arrangement between the two.⁵³ It would not be surprising if this arrangement involved a deal through which CDPR acquired most rights, including marketing and franchising, while leaving Talsorian with the ability to produce tabletop games.⁵⁴

Further licensing arrangements are to be anticipated. Such arrangements may involve additional works of entertainment, including novelizations and other forms of dramatization, as well as a range of merchandise beyond what is already available directly from CDPR.⁵⁵ In this context, it should be noted that the highly textured nature of the fictional universe that Talsorian and CDPR have created creates additional potential here. In the case of other video game franchises, such as *Tomb Raider*, franchised works have been tied primarily to the main characters and storyline.⁵⁶ In the case of both announced *Cyberpunk 2077* spin-offs, this is not the case. The stories are set within the same universe as the game but are not adaptations of the game's storyline. Rather, they are stories featuring new characters and plots. It should be noted that the development of these new characters and stories represents additional IP components which are associated with this product. Ownership of these components needs to be carefully considered when the franchise arrangements are negotiated.

This ability to leverage areas of the content that are distant from the main storyline of the game has the potential to increase franchising revenue through the creation of a wider range of content than might otherwise be expected. At the same time, however, it should be noted that this creates additional risk-management challenges, particularly given some of the legal grey areas discussed above, such as protection for fictional trademarks.⁵⁷ For example, the logo for the fictional company Arasaka, mentioned in the discussion of story inputs above, is used as an art asset within the game itself. However, it is also used as a merchandising asset, appearing on several items of official merchandise. However, the same logo is also available on unofficial merchandise available from a wide range of retailers, who have at least some legal cover as a result of the lack of certainty as to whether the logo is protected either via copyright or as a mark.

Streamers, YouTubers, and Unauthorized Merchandisers

Although space restrictions prevent a detailed discussion, there are several additional peripheral industries that have sprung up around interactive entertainment and other works of

⁵¹ Dark Horse Comics, "Cyberpunk 2077: Trauma Team #1" < <https://www.darkhorse.com/Comics/3005-392/Cyberpunk-2077-Trauma-Team-1> >

⁵² See Fraser Brown, "Cyberpunk 2077 is Getting a Spin-Off Anime from Studio Trigger" (PC Gamer, 25 June 2020) <<https://www.pcgamer.com/cyberpunk-2077-is-getting-a-spin-off-anime-from-studio-trigger/>>

⁵³ Such a relationship was likely defined, at least in part, through the arrangement by which CDPR acquired rights.

⁵⁴ The extent to which Mike Pondsmith retains moral rights in *Cyberpunk 2020*, which are not transferrable in all jurisdictions, is an open question, particularly given the nature of the works, and is beyond the scope of this analysis.

⁵⁵ See <https://us.gear.cdprojektred.com/game/cyberpunk-2077.html>

⁵⁶ See, eg, *Tomb Raider* (Warner Brothers 2018).

⁵⁷ The complexities that can be involved in merely attempting to define the infringed work when taking legal action against an unauthorized spinoff can be surprising, as was seen in a recent case involving a *Star Trek* fan film. See Dunford, n. 48, at 77-87.

popular culture. These involve heavy third-party use of IP connected to the product, often without income to the product developer or owner, and outside the control of the owner.

One of these auxiliary industries is known as “streaming.” Several Internet platforms permit users to broadcast “streams” showing their gameplay. The best known of these platforms is Twitch, but YouTube and Facebook Gaming also attract audiences for this form of content. Top streamers have millions of followers and derive substantial income from their channels.⁵⁸ YouTube video makers occupy a similar niche, making videos that review the game or explore aspects of the game’s world.⁵⁹ To date, the copyright status of these niche industries is unclear, and, given the likelihood of pushback from customers and other public relations issues should a rightsholder be too aggressive in taking action in this area, is likely to remain unclear.

As previously noted, unauthorised merchandise is also commonly available for games such as this. Although specific examples will not be cited here, the authors can attest that numerous products inspired by or related to *Cyberpunk 2077* can be found on a range of venues. Such merchandise is sometimes simply a blatant infringement of copyright or trademark, but in other cases it takes advantage of the grey areas discussed above. It is also both prevalent enough and takes place through such a large number of small enterprises that policing such products can represent a substantial challenge for IP owners – one that can be likened to a game of whack-a-mole, with new players popping up faster than they can be knocked back.

vi. Residual IP Dimensions Resulting from the Product

As the reader will have surmised, there are significant residual IP dimensions associated with this product. In addition to the IPRs created in conjunction with the *Cyberpunk 2077* game, and those that are created and used in the development of franchised works, both of which have been discussed at length above, an additional range of IPRs are also created in conjunction with the marketing of the that product. Some of these rights, such as the registered trademark for the game’s logo, are the type of IPRs that one expects to find associated with virtually any modern product.⁶⁰ Other forms of IPR that have been used in conjunction with the game’s marketing, such as the copyright associated with a sculpture sold as part of the “Collector’s Edition” limited release box,⁶¹ are of a sort that one might only associate with high-buzz product releases. In both cases, however, the use of these marketing IPRs is conventional: they are part of an effort to enhance the overall value of the underlying IPRs in the product itself.

As such, these works serve both a marketing purpose and to bring in secondary income streams. At present, the range of official and licensed merchandise is modest; given the trajectory of other games such as the *Warcraft* or *Pokemon* franchises, it is possible that merchandising may become a substantial source of income in its own right. However, such merchandise will also always retain a certain degree of marketing value.

Marketing use is also made, to an extent, of the production of the game and the production of the associated IPRs themselves. For example, as of the time of this writing, a five-minute YouTube video on the official *Cyberpunk 2077* YouTube channel that documents the process

⁵⁸ See, eg, Calum Patterson, ‘Top 20 Most Followed Twitch Streamers – Updated August 2020’ (Dexterto 18 Aug 2020) <<https://www.dexterto.com/entertainment/top-20-most-followed-twitch-streamers-750744>> accessed 14 Sep 2020.

⁵⁹ See, eg, Madqueen Show, *The World of Cyberpunk 2077 Explained* (YouTube 24 July 2020) <<https://www.youtube.com/watch?v=oFEDzL90ga0>> accessed 14 Sep 2020.

⁶⁰ The *Cyberpunk 2077* logo, European Trademark #017912301; United States Trademark #5847729, is a registered trademark of CD Projekt SA, for goods and services in IC 009, 014, 016, 018, 025, 028, & 041.

⁶¹ *Cyberpunk 2077*, “Preorder *Cyberpunk 2077*” <<https://www.cyberpunk.net/gb/en/pre-order>> accessed 8 September 2020.

of the making of some of the music for the game has garnered nearly half a million views.⁶² In this light, it is worth mentioning that, as is often the case with high production value works of entertainment, an active social media presence has become de rigueur.⁶³ The social media channels may make use of content created for the game, but some of the content posted to these accounts will likely be original material.

Conclusions

The IEI is the biggest entertainment market yet also the youngest. Video games are now a fundamental part of our collective culture and can significantly impact the way in which we consume content. IPRs are very important for the IEI and it can be argued that without it could not have reached the status it has. *Cyberpunk 2077* is a product that is part of a larger intellectual property and related rights ecosystem. In developing this product, CDPR made use of IPRs that they had previously developed to serve as the foundation for the game's architecture and structure. They applied this to an existing, but not well-known, franchise which they acquired. Both the engine and the content were then extensively developed as part of the process of creating the game. It can be anticipated that they will be further developed over the next several years, both as part of the creation of additional works on the part of CDPR and through the process of the development of franchised works and merchandise.

The lifecycle of the IPRs involved in the product is complex, combining software and multimedia entertainment in a globally distributed work. These works involve the creation of detailed and textured fictional universes that lend themselves to a wider range of franchised works than might normally be expected. These efforts to commercialise this product are complicated both by the lack of global harmony within the IP legal domain and the legal grey areas associated with a number of the IPR components.

On the whole, *Cyberpunk 2077*, like other Triple-A games, is a highly complex product that relies heavily on IPRs. The IPRs associated with this product are the central, most valuable assets that are associated with the product; indeed, it would barely be an exaggeration to state that the IPR portfolio itself is the product that has been produced. This is true not only for *Cyberpunk 2077*, but for other works in within the video games industry.

Despite the complexities, lack of global harmonization, and manifold other legal issues, the IP issues of the video games industry remain under-researched and understudied. More work in this field is warranted, not only to clarify the issues surrounding major releases such as *Cyberpunk 2077*, but also to provide clarity and guidance to the many SMEs attempting to make their way in this complex industry.

⁶² *Cyberpunk 2077*, “*Cyberpunk 2077 – Refused: Becoming SAMURAI*” <https://www.youtube.com/watch?v=1VZalG5WZH0>

⁶³ The official Instagram for the product can be found at <https://www.instagram.com/CyberpunkGame/>; the official Twitter at <https://twitter.com/CyberpunkGame>; and the official Facebook Page at <https://www.facebook.com/CyberpunkGame>