

**Guide to the Intellectual Property Aspects
of Mobile Applications and Social Media**

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Executive summary

Intellectual property (IP) plays a critical role on social media and in the mobile application (app) life cycle, ensuring small and medium-sized enterprises (SMEs) can protect their innovation, brand and competitive advantage in a digital economy driven by the ubiquity of mobile technology.

The shift from web to mobile apps and SMPs has changed the landscape of Internet access, with apps and SMPs offering a variety of benefits such as increased user engagement and personalized experiences. As mobile apps and SMPs continue to power sectors ranging from e-commerce to entertainment, recognizing and managing IP rights is of paramount importance to SMEs.

Copyright is a cornerstone of IP in app development and the preparation of posts on SMPs, covering not just the software (the code) but also the media used in the app or posts such as images, sounds and text. It enables app developers and those creating content for SMP posts to authorize or restrict the use of their creations, providing a legal framework to control the copying, distribution and adaptation of their work. The Berne Convention outlines protections for literary and artistic works, its broad membership indicative of a global consensus on copyright standards.

Trademarks, which include trademarks for goods, and service marks for services, perform the essential function of distinguishing one company's offerings from those of others. They facilitate brand recognition and consumer loyalty, an asset in the crowded app marketplace. Trademark registration provides enhanced legal support, with international registration streamlined through the Madrid System administered by the World Intellectual Property Organization (WIPO).

Trade secrets provide protection for confidential business information critical to SMEs, including customer data and proprietary know-how. Trade secrets are less costly than patents, and do not require formal registration, relying instead on reasonable measures to maintain confidentiality.

In the context of online marketplaces (or stores), apps act as clearinghouses that enable SMEs to access wider markets. This can also be achieved via SMPs, especially with app integration. Global platforms often require strategic partnerships, and an awareness of IP implications is required for SMEs to thrive.

To make effective use of IP, SMEs should consider the following guidelines:

- Develop a clear understanding of the different forms of IP and their application within the app development or social media content preparation process.
- Conduct thorough trademark and domain name searches to ensure global brand protection and avoid infringement.
- Secure all necessary rights and permissions when using third-party content and understand the implications of open source software (OSS) licenses.
- Protect trade secrets with robust security and privacy measures, while complying with data protection laws.
- Manage partnerships strategically, using contracts to define rights and obligations, including assignment and licensing of IP rights.
- Proactive IP management is not just a legal necessity but a strategic tool that enables SMEs to maximize the business potential of their mobile apps and social media posts, opening avenues for innovation and growth in an increasingly connected world.

About the author

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Overview of applicability of different forms of IP in app development, commercialization, distribution and use

From the World Wide Web to apps

When the World Wide Web emerged in the 1990s, the use of HTML code allowed individuals and companies to create websites for many reasons, including selling products and services. All these people – providers and Internet users alike – used the same application, a web browser, to communicate. This made perfect sense in a world where most access to the Internet was through a computer.

Over the past two decades, however, access has increasingly shifted to mobile (or smart) phones and tablets. Publishers and others using the web to reach their audiences realized they could develop their own small software applications (or apps). This gave them more control over how they communicated with users and had several other benefits, including increased user engagement, the ability to push notifications, offline access and better personalization. With 5.5 billion smartphone users worldwide and mobile app revenue estimated at more than 380 billion United States dollars, the importance of apps is clear, and is likely to continue to increase at a rapid pace.¹

The many roles of mobile apps in 2024

Mobile apps have become not only an indispensable part of the global economy, powering a wide range of transactions and driving economic growth across industries, but also an integral part of our daily lives, transforming the way we interact with the world around us. Their economic impact is felt in sectors ranging from e-commerce and entertainment to health care and transport. Mobile apps have revolutionized the way we conduct transactions, enabling a whole array of activities, including:

- E-commerce: consumers can easily purchase goods and services, from clothing and electronics to groceries and travel, directly from their mobile devices.
- Digital payments: apps such as mobile wallets, peer-to-peer payment platforms and online banking allow users to transfer funds, pay bills and manage their finances on the go.
- Ride-sharing and delivery: on-demand apps for transport, food delivery and other services have changed the way we access and consume these services.
- Streaming and entertainment: mobile apps have become the primary platform for consuming digital content, from music and video streaming to games and social media.

Mobile apps have broken down geographic barriers, allowing businesses to reach customers globally, and individuals to access goods, services and information from anywhere in the world. This connectivity has fostered new opportunities for entrepreneurship, innovation and collaboration, driving economic

development and job creation. The impact of mobile apps on the global marketplace will continue to grow and shape the way we live, work and interact for years to come.

There is a diverse range of mobile apps being developed to address local needs and challenges in various countries around the world. For example, in Kenya, M-PESA is a popular mobile money transfer and microfinancing service; Kumu is a well-known live-streaming social media app that allows Filipinos to connect, entertain and interact with each other through live video content; and in Trinidad and Tobago, SurePay is a mobile payment app developed by a local fintech startup, enabling digital payments, bill payments and peer-to-peer transfers.

The importance of social media for app developers

For app developers, the integration with social media platforms opens a world of opportunities. Social media apps provide a vast, engaged user base that can serve as a powerful channel for app discovery, user acquisition and ongoing engagement. By integrating with social media, apps can leverage the inherent virality and network effects of these platforms. When users share, interact with or recommend an app through their social networks, it creates a ripple effect that can significantly enhance the app's visibility and discoverability. Such organic exposure can lead to a surge in new users and increased brand awareness.

Social media integration within apps encourages users to actively engage with the app's content and features. In-app sharing, commenting and social logins foster a sense of community and collaboration, keeping users invested in the app experience. This heightened engagement can translate into increased user retention and loyalty.

The role of apps on social media for business

For businesses aiming to leverage social media as a strategic tool, app integration can unlock a wealth of benefits. By integrating their apps with social media platforms, businesses can extend their brand's reach and engage with their target audience in a more meaningful and dynamic way. Whether it is promoting products, sharing content or facilitating customer interactions, this can amplify the impact of a business's social media efforts.

Apps that are integrated with social media can provide customers with a more personalized and engaging experience. Features such as in-app sharing, user-generated content and social authentication can help businesses encourage stronger connections with their customers, ultimately leading to increased loyalty and customer lifetime value.

The data and analytics generated through the integration of apps and social media can also offer valuable insights into customer behavior, preferences and interactions. These insights can inform marketing strategies, product development and overall business decision-making, helping companies stay agile and

responsive to customer needs. Finally, the seamless integration of apps and social media can contribute to improved operational efficiency for businesses. By automating certain social media tasks such as content scheduling, customer service and campaign management, businesses can free up resources and focus on more strategic initiatives.

The role of clearinghouses

Not every SME needs to develop its own app. Many SMBs use apps that act as online clearinghouses (or stores). These apps play a critical role in enabling SMEs to access a global customer base. Such super apps provide a centralized platform where businesses of all sizes can list and sell their products and services. By leveraging the extensive user base and distribution channels of these mega-platforms, SMEs can dramatically expand their reach beyond local or regional markets.

The types of products and services offered by SMEs on these clearinghouse apps span a broad spectrum. On e-commerce platforms such as Amazon and Alibaba, SMEs typically sell physical goods ranging from handcrafted, artisanal items to mass-produced consumer electronics and household goods. Service-based SMEs also use these clearinghouses to offer professional services, software applications, digital content and more. The ability to quickly list offerings, manage inventory, process payments and fulfill orders, all within the ecosystem of a dominant app, has lowered the barriers to entry for SMEs in the global marketplace.

In addition to providing access to customers, clearinghouse apps also offer SMBs valuable data-driven insights, logistics support and financial services, enabling them to grow their businesses more efficiently. For many SMEs, partnering with a leading marketplace app has become a strategic imperative to compete and thrive in today's digital-first economy.

The role of intellectual property in apps and social media

IP is an umbrella term for rights that protect the products of human intellect, including copyright and related rights (protecting rights in literary, artistic and scientific works, performances of performing artists, phonograms and broadcasts); patents (protecting inventions in all fields of human endeavor); industrial designs; trademarks (including service marks and trade names); trade secrets; and protection against unfair competition. The development, marketing, distribution and use of apps on smartphones and other devices can directly implicate several of these rights. In this guide, we discuss copyright and related rights and trademarks, and briefly note the potential role of trade secrets.

Copyright applies to the software itself (the code of the actual application), images, photographs, videos, music and certain other sounds, text and more that the app developer uses or creates. Trademarks are used in apps to identify the company offering a product or service in an app, whether in its own app or through a clearinghouse.

It is possible, though unlikely, that the development of an app, or its integration into social media platforms, will result in a patentable invention or protectable industrial design. App developers and social media users, on the other hand, often use material that is protected by copyright or trademark, and this remains relevant even if the app or social media use is noncommercial in nature.

Copyrights, trademarks and trade secrets will be discussed in that order.

Copyright and apps

Copyright applies to apps and social media in several ways, including:

- reusing (in the app or on social media feed) text, images, videos/reels, sounds, music or broadcasts previously created by someone else without modification;
- creating new content for the app or social media posts by reusing such material but modifying it;
- creating new content that does not copy previous content; and
- making any of these three types of content available online (directly in the app or on social media, or by linking to the original source).

To understand the ins and outs of copyright law as it applies in this context, the following will be reviewed:

- what copyright protects (subject matter);
- rights of a copyright owner and the exceptions to those rights;
- duration of copyright protection;
- formalities for obtaining copyright protection; and
- infringement issues.

The discussion is detailed but a summary of the main points is included at the end of each section.

2.1 Subject matter of copyright protection

Article 2 of the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) – the most important international copyright treaty to which 181 countries were a party as of June 2024 – protects the rights of authors of literary and artistic works. This means copyright protects many types of creations, including texts (poetry and novels to blog posts), music, paintings, photographs, films (home videos to Bollywood, Nollywood and Hollywood productions) and certain technology-based works such as computer programs and databases.²

In several countries, copyright is referred to as authors' rights.³ Online, these types of works

are exploited as users post photographs, videos, music and texts of various kinds. Further, apps and social media platforms consist of software.

Copyright protects the expression of ideas in the form of literary and artistic works but not the ideas themselves; for example, a recipe for chocolate chip cookies is likely to be an expression, in the form of text, perhaps accompanied by pictures, and as such, it is protected by copyright. However, the idea (the recipe, which is the ingredients needed, and the steps followed to prepare and bake the cookies) is not.

In summary, the Berne Convention protects authors' rights in literary and artistic works. This expansive definition covers diverse creations such as texts, music, visuals, films and software. While copyright shields the expression of ideas, it does not protect the underlying concepts themselves. As of June 2024, the Berne Convention had 181 member countries, highlighting its global significance in governing copyright.

2.2 The bundle of copyright rights

Copyright is best understood as a bundle of rights composed of economic and moral rights. Economic rights can be licensed or transferred, either *inter vivos* (that is, during the author's lifetime and typically by written contract) or after the author's death (by will or intestate succession).

Without an exception or limitation allowing use without a license (see section 2), copyright owners can authorize or prohibit several uses of a protected literary and artistic work, as follows.

Let us begin with the economic rights included in the bundle of rights. It is important to be aware that each right need not be owned or exploited by the same person or within the same territory. This means that each right can be owned by a different person and that each right can be further subdivided, including by language or country. For example, a Canadian author of a French-language novel may authorize (by assigning the right or granting a license) Publisher A to sell the novel in French in Canada and subsequently authorize Publisher B to do the same in Africa and the European Union.⁴ The same author may separately authorize Publisher C to translate the book into Spanish and grant a separate authorization to a film producer in India to make a movie based on the book. In such cases, the translation and film will then also be protected by a new set of copyright rights.

To better understand what economic rights allow a copyright owner to authorize (and prevent if unauthorized), each right in the bundle is examined, bearing in mind that each right can be divided by territory, language (if applicable) and other things.

Reproduction of the work

The right of reproduction is essentially the right to make copies in various forms of all or substantial portions of a protected work; for example, a book publisher makes copies to produce a book. Online, this would entail making a copy of a file containing the work.

Public performance of the work

Performance of a work includes playing a musical piece, performing a play, projecting a film in a cinema, reciting a poem or reading a book. Only public performances require authorization, without a limitation or exception in the law (discussed below). A performance is considered public if it takes place where the public is or can be present, or at a place that is not open to the public but where a substantial number of people outside the normal circle of a family and close acquaintances are present. As the WIPO publication, *Understanding Copyright and Related Rights*, says:

“The right of public performance entitles the author or other copyright owner to authorize live performances of a work, such as a play in a theatre or an orchestra performance of a symphony in a concert hall. Public performance also includes performance by means of a recording. Thus, a musical work is considered publicly performed when a sound recording of that work, or phonogram, is played over amplification equipment, for example in a discotheque, airplane or shopping mall.”⁵

Broadcasting and other forms of communication to the public of the work

The right of broadcasting “covers the transmission of sounds or of images and sounds by wireless means, whether by radio, television or satellite, typically intended for reception by the public”. A work is communicated to the public when “a signal is distributed by wire or wireless means for reception only by persons who possess the equipment necessary to decode the signal. Cable transmission is an example of communication to the public. A file containing a video uploaded to YouTube and then viewed by YouTube users is communicated to a group of users who collectively constitute a public, as is a reel available on a social media platform. Prior to being communicated to that public, a copy (reproduction) was made on the server(s) from which it is accessed by users.

Translation of the work

This is the right to authorize or prohibit the translation of a protected work such as a book or screenplay into other languages. This would apply, for example, to texts protected by copyright and made available online, including via an app or on social media.

Adaptation of the work

This is the right to authorize or prohibit certain format changes such as transforming a novel into a screenplay.⁶

As discussed, each of these rights in the bundle of rights can be owned and licensed to a different person, and this is true in each country or territory. With music, it can get more complicated as there may be separate rights in the composition of a song, its performance and the recording of that performance. This means that the author, performer and sound recording producer may each own a different 'piece' of the music. Consequently, three levels of authorization may be required before the music is made available online. This is explained in the next section.

Apart from economic rights, copyright rights (under the Berne Convention) include another category of rights termed moral rights. These rights include the right "to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to [the author's] honor or reputation".⁷ They are independent of economic rights and are maintained even after the transfer of the author's economic rights. Moral rights typically cannot be licensed but can be transferred after the author's death (by will or succession). In some jurisdictions, authors can waive moral rights.

Moral rights: example

Author A writes an article and finds a newspaper that agrees to publish it subject to the author's economic rights to the manuscript. When the article is published, the author sees that their name is not indicated. Without a valid waiver of moral rights, a court is likely to find that the author's moral rights have been violated even if the author's economic rights were transferred to the publisher.

Key takeaways

- Copyright grants authors a bundle of rights, economic and moral. Economic rights can be licensed or transferred during the author's lifetime or after death. These allow authorizing/prohibiting uses such as reproduction, public performance, broadcasting, translation and adaptation.
- Each economic right can be subdivided by such factors as territory or language and owned/licensed separately. For example, an author may grant different publishers rights to sell their work in specific regions or languages, while licensing film adaptation rights to another party.

- The reproduction right covers copying works, including digital copies uploaded online. The public performance right covers live and recorded performances. The broadcasting/communication right covers transmission to the public via wire or wireless.
- Translation and adaptation rights allow authorizing/prohibiting conversion to other languages or formats, such as novel to screenplay.
- In complex cases such as music, there can be multiple rights (composition, performance, recording) owned by different parties, each requiring separate authorization.
- Alongside economic rights, copyright includes moral rights. These enable authors to claim authorship and prevent distortion/derogatory use, independent of economic rights. Moral rights typically cannot be licensed but can be transferred after death.
- The ability to divide, license and transfer this bundle of rights is a key copyright feature, enabling flexible global exploitation of creative works.

2.3 Music and film

A musical work, such as a song (lyrics and music) or score for an orchestra, is of little value except to those who can read sheet music unless it is performed (live or recorded) so users can listen to the music. Similarly, few people read movie screenplays. Most users access the movie once it has been produced and made available to the public in cinemas, on television, DVDs, online or through other means. To that extent, copyright law recognizes that music and audiovisual works are different.

Audiovisual works do not have to be long. Short documentaries and videos, such as reels uploaded to social media platforms, can be considered audiovisual works for copyright purposes if they meet the minimum standard of originality (discussed in the next section).

With music, the law recognizes the distinct role of performers (singers and musicians) and producers of sound recordings, both of whom have rights known as related rights. These rights are recognized internationally. They are protected under the 1961 Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention) and the WIPO Performances and Phonograms Treaty (WPPT).

The WPPT grants performers economic rights to their performances fixed in recordings of the music (known as phonograms) but not in authorized audiovisual fixations, such as motion pictures. These rights include three that are likely to be most relevant in an SMP context, namely, the right of reproduction, right of distribution and right of making available, as follows:⁸

1. The right of reproduction is the right to authorize direct or indirect reproduction of the phonogram in any manner or form (explained in the section on the bundle of authors' economic copyright rights).
2. The right of distribution is the right to authorize the making available to the public of the original and copies of the phonogram through sale or other transfer of ownership.
3. The right of making available is the right to authorize the making available to the public, by wire or wireless means, of any performance fixed in a phonogram, in such a way that members of the public may access the fixed performance from a place and at a time individually chosen by the app or other Internet-based sources.

In the case of a live performance, the WPPT grants performers: (1) the right of broadcasting (but not rebroadcasting); (2) the right of communication to the public (except where the performance is a broadcast performance); and (3) the right of fixation. Fixation is a technical term defined by WIPO as capturing "in some material form (including storage in an electronic (computer) memory) in a sufficiently stable form, in a way that on this basis the work or object of related rights may be perceived, reproduced or communicated to the public".⁹ An example would be capturing or recording a live performance at a concert on a smartphone. The term bootlegging has been used in this context.

The WPPT also grants performers moral rights like those of authors discussed in the previous section. These include the right to claim to be identified as the performer and the right to object to any distortion, mutilation or other modification that would be prejudicial to the performer's reputation.

The WPPT grants producers of sound recordings (phonograms) several economic rights that broadly parallel those of performers. Concerning apps and social media, the rights of reproduction, distribution and making available are potentially relevant.

Echoing a similar right in the Rome Convention, the WPPT provides that performers and producers of phonograms have the right to a "single equitable remuneration" for the direct or indirect use of phonograms, published for commercial purposes, broadcasting or communication to the public. This complex wording essentially means that when a sound recording containing a performance of music is broadcast (for example, by a radio station), states party to the WPPT should provide for a payment of the equitable remuneration to performers (determined by a governmental authority, such as a copyright tribunal or specialized board). This is a right to get paid and not a right to authorize (or prohibit) the broadcast and means that a broadcaster can use the recording without asking for permission, but the broadcaster must pay the remuneration.

The next issue is the amount to be paid. The payment (remuneration) is often made via a collective management organization (CMO) and the law in many countries provides that its amount should be determined by a government entity such as a special tribunal, court of law or government agency.¹⁰

Any WPPT contracting party may restrict or even deny this right to equitable remuneration.¹¹

How the bundle of economic copyright rights in music applies to apps and social media: example

A songwriter writes an original song and performs it with a friend. The performance is recorded in a studio. The songwriter has the full bundle of economic rights to the song but shares the performance rights with the friend with whom they performed. The studio producer who made the recording is likely to have a separate right in the recording. Making the recording available on an SMP or via an app may involve rights to the song, performance and recording.

Since each right can be transferred or licensed separately, the author could still authorize other uses separately, even after authorizing the making available of the song on an SMP. For instance, the author may authorize someone to translate the lyrics and thus create a new version of the song, assuming the songwriter did not transfer the right to someone else, such as a music publisher.

With films and other audiovisual works, the Beijing Treaty on Audiovisual Performances, adopted in 2012,¹² grants performers (musicians, as well as actors, dancers and “other persons who act, sing, deliver, declaim, play in, interpret, or otherwise perform literary or artistic works or expressions of folklore”) economic rights that resemble those mentioned above. These include the rights of reproduction (their performance in a motion picture, for example), distribution and making works available.

As to unfixed (live) performances, the Beijing Treaty grants audiovisual performers three kinds of economic rights that also resemble those already discussed, namely, the right of broadcasting (except in the case of rebroadcasting), the right of communication to the public (except where the performance is a broadcast performance) and the right of fixation. It also grants audiovisual performers moral rights, like those described for music performers.

Finally, the Beijing Treaty provides that contracting parties may provide, in their national law, that once a performer has consented to the audiovisual fixation of a performance, the exclusive rights mentioned above are transferred to the producer of the audiovisual fixation. This means, for example, that once an actor has signed a contract with a film producer, national law may provide that the rights of the performer are transferred to the producer (unless a contract between the performer and producer states otherwise).¹³

Key takeaways

- Copyright law recognizes that music and audiovisual works differ in how they are accessed by the public. Music requires performance, while movies are accessed through production and distribution.
- Audiovisual works include short videos and reels, provided they meet the minimum standard of originality (discussed in the next section).
- Copyright law grants related rights to music performers and producers, distinct from the author's copyright, including rights of reproduction, distribution and making works available.
- For live music performances, performers have rights of broadcasting, communication to the public and fixation (recording). Performers also have moral rights to claim authorship and prevent distortion.
- Sound recording producers have similar economic rights to performers under the WPPT treaty, including reproduction, distribution and making available.
- The WPPT also provides performers and producers a right to equitable remuneration when their recordings are broadcast, overseen by CMOs.
- For audiovisual works, the Beijing Treaty grants performers (actors and musicians, among others) similar economic and moral rights as in music.
- The Beijing Treaty allows national laws to transfer a performer's rights to the audiovisual producer once the performer consents to the fixation, unless otherwise specified by contract.
- This complex web of overlapping rights aims to fairly compensate all contributors to the creation and distribution of musical and audiovisual works.

2.4 Conditions for obtaining copyright protection.

Obtaining copyright is usually not complicated. Rights emerge from the simple fact that an original work was created by a human author. This means that originality is the main condition to satisfy in order to obtain copyright protection. What is an 'original' work? In this context, original typically means two things. First, that the work was created by the author (not copied), and second, that the author made creative choices in creating the work. Creative does not necessarily involve making artistic choices. It means making choices that are not dictated by or essentially due to external factors or constraints. Such factors and constraints include the function the work is intended to perform, if any, the tools used to produce the work, or the practices or conventions standard to the work in question.

Most literary and artistic works easily satisfy the criteria of originality. The more difficult cases involve very small creations (for example, a single sound, or a few words or notes) or collections and compilations (for example, a list of words). These are typically unprotected as not sufficiently original.

In the case of collections, the choices considered creative (and generating the originality necessary to be protected by copyright) as mentioned in the Berne Convention, are selection or arrangement.¹⁴ For example, a list of the 100 best Latin American novels of the twentieth century made by one person is likely to differ from a list made by another person. This suggests there is room for creative choices. The titles included on the list were neither “dictated by nor essentially due to external constraints” but resulted from personal choices made by each author.

In the context of apps and social media, there are two interesting questions on originality. First, if someone creates a work that is essentially a copy of a preexisting work without authorization (which could mean a license from the owner of the rights in the preexisting work or an exception in the law, such as parody), then the ‘new’ work would probably be found to be a reproduction of the preexisting work. If it is infringing, the new work would probably be denied protection, and even if it is not infringing, the author would have to have made creative choices in creating the new work. Second, what if the ‘choices’ are made not by a person but by a computer, such as a generative artificial intelligence (AI) application? National laws generally assume that only human authorship can create the originality necessary to obtain copyright protection, or otherwise deny protection to works created by a computer, unless the computer is considered merely a tool used by a person.¹⁵ Indeed, the Berne Convention clearly has a physical author (human being) in mind as it refers to the life of the author, for example. However, many countries party to the Convention allow legal persons, such as corporations, to be considered authors, for instance, of collective works (such as an encyclopedia). Another approach might be to ask whether it makes sense to give rights to the result of work not performed by human beings, and whether providing an incentive, in the form of exclusive rights, to create such works (including the moral right) fulfills a copyright mission.

In certain jurisdictions – for example, the United States of America – a second condition must be met to obtain copyright protection, namely, that the work be fixed in a tangible medium of expression of more than transitory duration. It is a requirement expressly allowed by the Berne Convention.¹⁶ Fixation is defined above in relation to the WPPT as capturing “in some material form (including storage in an electronic (computer) memory) in a sufficiently stable form, in a way that on this basis the work or object of related rights may be perceived, reproduced or communicated to the public”. In jurisdictions where this requirement applies, copyright protection would not be extended, for instance, to an improvised creation of which no recording is made.

Copyright generally does not require formalities such as registration. In the 181 members (as of June 2024) party to the Berne Convention, the “enjoyment and the exercise” of copyright rights protected under the Convention “shall not be subject to any formality”.¹⁷ In some jurisdictions, the United States of America in particular, a system to register copyright is in place, as well as legislative incentives to encourage its use.

These include the availability of attorney's fees and statutory damages, which under US law are limited to the infringement of registered works.¹⁸

Key takeaways

Copyright generally arises automatically when an original work is created. Originality means the work was not copied and the author made creative choices in its creation, not just following external constraints.

In the United States of America, it is recommended that registration of a copyrightable work at the United States Copyright Office be considered.

Small works or compilations can still meet the originality requirement if the author's selection or arrangement shows creativity; for example, a personal list of top novels shows originality.

In the context of apps, if an app is simply copying a preexisting work without authorization, it will likely not get copyright protection, even if not technically infringing.

Many countries only recognize human authorship, though some allow for legal entities such as corporations. Content generated autonomously by generative AI could, therefore, be unprotected.

Some jurisdictions, such as the United States of America, also require the work be fixed in a tangible medium to obtain copyright. This means improvised, unrecorded work would not be protected.

Overall, copyright protection usually arises automatically without any formal registration, though some countries provide incentives to register, such as access to statutory damages. The key is that the work shows originality through the author's creative choices.

2.5 Limitations and exceptions: the three-step test

Limitations and exceptions are forms of use of a protected work that do not require a license from the copyright owner, though in some cases it may require paying a fee (or remuneration).

Limitations and exceptions are tools used "to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention".¹⁹

International instruments such as the Berne Convention, and the WIPO Copyright Treaty (WCT) and WPPT contain several limitations and exceptions. For example, Article 10 of the Berne Convention provides that it "shall be permissible to make quotations from a work which has already been lawfully made available to the public, provided that their making is compatible with fair practice, and their extent does not exceed that justified by the purpose, including quotations from newspaper

articles and periodicals in the form of press summaries.” This is often referred to as the right of quotation.

By and large, however, international law tends to leave it to each country to provide its own set of limitations and exceptions. Rather than permitting (or mandating) specific limitations and exceptions, the major treaties provide a ‘test’. The limitations and exceptions adopted by each country or jurisdiction can then be tested to see if they pass. This is known as the three-step test, which has now become “the centerpiece of international copyright treaties”.²⁰

In its original form, the three-step test was contained only in Article 9(2) of the Berne Convention, as follows:

“It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.”

Similar language is now used, sometimes with changes, in several other international instruments; for example, the test also applies to limitations and exceptions to rights in the WCT, WPPT and Beijing Treaty.²¹

The three-step test is also found in major trade agreements, including the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).²²

How does the test apply? Limitations and exceptions in each party to these treaties must meet the conditions of the test to ensure compliance with their international obligations.

In summary, the first step (special case) means that an exception or limitation must be reasonably narrow in scope. The second step (normal exploitation) means the limitation or exception should not prevent the copyright holder from exploiting the work in a normal way. The third step allows an exception or limitation to cause some prejudice to the legitimate (legal and financial) interests of the author but only if it is reasonable, which is often taken to mean that a public interest purpose can justify the prejudice. Whether the three steps of the test are independent (that is, whether they should be interpreted as a single test), and exactly how the test should be interpreted is a matter of debate among experts.²³ In most cases, the test will not be applied directly by a national court or legislator and is best seen as a guide to legislators.

Many countries provide a list of specific exceptions, such as private use, and use in education and research, and parody. Others provide open-ended exceptions that are applied on a case-by-case basis by courts, such as fair use in the United States of America.

Key takeaways

- Limitations and exceptions in copyright law allow certain uses of protected works without requiring a license from the owner. These balance author rights with public interests, such as education and information access.
- International treaties such as the Berne Convention provide some specific exceptions, including the right to quote from published works, but generally leave the exact formulation of exceptions to each country.
- These national exceptions must pass the three-step test to comply with international law. Exceptions should be narrow in scope, and not conflict with normal exploitation or unreasonably prejudice against the author.
- How the three steps are interpreted is debated, but the test guides legislators in crafting exceptions that serve the public interest while respecting creators' rights.
- Many countries provide specific exceptions, others have more open-ended fair-use exceptions applied case by case.

2.6 Term of protection

According to the Berne Convention, copyright protection should last “the life of the author and fifty years after his death”.²⁴ In many jurisdictions, duration has been increased to the life of the author and 70 years after their death. In some cases, such as when a work is anonymous (identity and exact lifespan of the author are not known), special rules apply. The Convention provides that as long the identity is in doubt, copyright protection expires 50 years “after the work has been lawfully made available to the public”. With works authored by multiple people, the term is calculated based on the life of the last surviving author.

Key takeaway

Copyright lasts for a minimum term of the author’s life plus 50 years but in practice, most countries have increased this to life plus 70 years.

2.7 Specific copyright issues concerning mobile apps and social media.

The previous sections focused on the subject matter of copyright protection; that is, the rights, limitations and exceptions that apply to copyrighted material, and the term of protection. This section examines the specific role of copyright in apps. It does so by distinguishing between categories of digital content found in apps: content created by the app developer or to upload to a social media platform; content copied from a third party and used for the same purpose; and content created for the same purpose not entirely copied but based on existing copyrighted content. The use of generative AI is also considered.

Content created by the app developer for a social media post.

This type of digital content does not involve copying or adapting existing material. It includes software, but also photographs, images, text, music and video. The author is the original owner of this content, which is likely to be protected by copyright, as previously explained. The author is free to copy, upload, perform and distribute that content in any way, including by allowing free and unlimited use, imposing conditions on free use such as those found in Creative Commons licenses, licensing it (commercially or otherwise), or by transferring it in whole or in part to someone else. Some apps and social media platforms provide rules that apply to such content in their terms of service, which we discuss below. Such terms may grant a license to the platform as well as to all its users.

Content copied by the app developer or used for a social media post.

It is easy to find and reuse digital content online to create an app or upload to an SMP but the fact that content is available online does not mean it can be used freely. The use of content to create an app is unlikely to be covered by an exception under national law. For social media posts, analysis must be made on a case-by-case basis, but commercial use reduces the likelihood that an exception will apply. Without an exception in national law, images, photographs, videos, music, software (code) and other types of copyrighted content can only be used if they are licensed. The terms of that license may be available online; for example, in the terms of use associated with the content or on the platform where it is made available. In some cases, a license may be available through a CMO. This is often the case with music, for example.

Content based on preexisting content.

This category of digital content is more difficult to deal with from a legal perspective because it may trigger application of the right of reproduction, and in some cases the right to adapt or translate preexisting material. This is sometimes referred to as the right to make derivative works. It applies to material that contains substantial portions of preexisting works. Uploading a picture, movie (audiovisual work) or other copyrighted work created by someone else, or recording the performance of a song, could constitute copyright infringement. If only a short excerpt of a preexisting work is used, it could be considered a fair use quotation under Article 10 of the Berne Convention (see above). However, given international rules leave it to each country or jurisdiction to create its own limitations and exceptions, the situation will largely depend on national laws.

Key takeaways

App and social media content can be divided into three types when considering the application of copyright to mobile apps and SMPs:

1. Content created by the app developer or for a social media post without copying protected expression contained in preexisting content is likely to be protected by copyright, and the

person who developed the app or content is likely to full rights over to use, share, or license it as they choose.

2. Content copied from other sources can be used only if a license from the copyright holder has been obtained or an exception in national law applies, which is unlikely for most commercial uses.
3. Content created by the app developer or for a social media post based on preexisting works but not entirely copying protected expression in preexisting content may implicate reproduction or adaptation rights, depending on national laws.

The legal treatment of these different types of content can vary significantly from one country to another based on applicable copyright exceptions and limitations.

2.8 Content specifically created by third party at app developer's request, or for social media posts, from open source software, or made by generative AI.

When content such as code, logo, images or music is created by a third party specifically at the request of the app developer, or for use in a post on social media, there are three main copyright issues.

Any SME that hires a third party to develop an app or content for an SMP will find itself in the same situation. This is an important point to consider. Even the SMW paid the third party, the person who developed the app or content will own the rights to the code and content (images, text) they created, provided it does not infringe the rights of someone else, unless there is a written assignment (transfer) agreement.

Example

An app developer paid by Company A to develop an app can probably legally reuse the material created for A to create a similar app for Company B – even if Company A paid for it – unless there is a written contract between the app developer and Company A that either transfers the rights to the SME or otherwise restricts what the app developer can do with the app.

This is often misunderstood. A third party owns the copyright to the content it created unless the rights are transferred. These rights do not transfer to or from an app developer, even if money was exchanged for the content. For example, if an app developer, or someone preparing a post on social media, commissions an image from an artist for the app and pays for the image, the artist still owns the copyright to the image,

unless a written transfer agreement is signed. When purchasing content created by a third party, it is necessary to provide either clear terms for a license to use the content, including any future uses the app developer may have in mind, or a transfer of rights in the content.

Second, as noted, the third-party author who created the content retains their moral rights. In certain jurisdictions, these rights can be waived in a written agreement.

Third, the third party may have reused content that belongs to someone else, often without the app developer's knowledge. The app developer may be liable for the use of that content. This situation should be addressed in a contract between the app developer and the third party creating content at the app developer's request.

App developers may use open-source software (OSS), computer software whose source code is publicly available and can be used, modified and redistributed by anyone. This code is copyrighted and provided under a license that requires any modifications to be subject to the original license terms to preserve the open and collaborative nature of the software. Software developers using OSS should keep this in mind. Examples often mentioned in this context include:²⁵

- React Native: framework developed by Facebook for building cross-platform mobile apps using JavaScript and React.
- Flutter: mobile app developed by Google that uses the Dart programming language to build high-performance, visually attractive apps for iOS and Android.
- Android Open Source Project (AOSP): open source version of the Android operating system that provides the core platform for many Android-based smartphones and tablets.
- Ionic: UI (user interface) toolkit for building high-performance, high-quality mobile and desktop apps using web technologies such as HTML, CSS and JavaScript.
- Apache Cordova: mobile development framework that allows developers to build cross-platform apps using HTML, CSS and JavaScript, which are then packaged for various mobile platforms.
- Xamarin: .NET-based platform for building modern, native cross-platform mobile apps that can share code across iOS, Android and Windows.
- Node.js: cross-platform JavaScript runtime environment that enables the development of server-side and network applications.

These tools and frameworks provide developers with customizable options for building a wide variety of mobile apps across different platforms and devices.

Finally, content created by generative AI without human originality may not have copyright protection.

Key takeaways

When an app developer or person preparing a post on social media commissions third-party content, such as code, images or music, there are several key copyright considerations:

- The third party retains the copyright, even if the developer paid for it, unless there is a written transfer agreement.
- Similarly, when an SME hires an app developer or person to prepare its social media posts, that person will own the copyright rights to the content created (such as an app) unless those rights were assigned (transferred) to the client in a written instrument, even if the client paid for the app or content.
- A third party that created content consisting of one or more copyrighted works retains moral rights over the content, which may be waivable in some jurisdictions.
- The third party may have unknowingly reused copyrighted content, leaving the company that hired them liable.
- Many app developers use OSS frameworks and tools, which have their own licensing terms to preserve the collaborative nature of the software. Some popular OSS examples include React Native, Flutter, AOSP and Xamarin.
- Content generated by large language models (LLMs), a type of AI program, may not qualify for copyright protection.

2.9 Takedown, similar notices and technological measures

In practice, copyright owners in several jurisdictions use systems sometimes called notice-and-takedown systems. Such systems were introduced after the WCT and WPPT were adopted.

Under these treaties, in certain jurisdictions such as the United States of America, social media platforms are not liable for copyright infringement when an infringing work is posted by a user of their platform, provided that the material is taken down after the platform receives notice from the copyright owner. The lack of liability associated with the takedown system is often referred to as a safe harbor provision. For example, if a YouTube user uploads a video or music file without authorization, YouTube will not be liable for copyright infringement, but it must remove the video after receiving a notice in the proper format from the copyright owner or owner's agent. Since implementing the system, Google has received more than 8.5 billion notices.²⁶

The WCT can also be implemented in other ways. In Canada, for example, a system known as notice-and-notice was implemented in 2012, whereby the copyright owner notifies the platform, which in turn notifies its user of the copyright claim. It is then up to the user to decide whether to remove the material. If it is not removed, the copyright owner may go to court.

Some copyright owners have also turned to technological measures to identify and prevent unauthorized access to their literary and artistic works hosted online, including in apps and on social media. This includes Content ID used on YouTube. As YouTube says:

“Copyright owners can use a system called Content ID to easily identify and manage their content on YouTube. Videos uploaded to YouTube are scanned against a database of files that have been submitted to us by content owners. Copyright owners get to decide what happens when content in a video on YouTube matches a work they own. When this happens, the video gets a Content ID claim.”²⁷

Reliance on technical measures such as Content ID and systems like Audible Magic and other forms of automatic content recognition (ACR) may have reduced the need or desire of some copyright owners to pursue matters in court. The use of automated tools seems unavoidable if one is to enforce copyright, and take down content uploaded without authorization through apps, given the extreme volume of material uploaded daily. For example, a potential risk of automated systems is that content that would otherwise be legal (such as a parody) may be taken down.

Key takeaways

- Many copyright holders use notice-and-takedown systems, where platforms such as YouTube are not liable for user-uploaded infringement if they remove content after receiving a notice from the copyright owner. This safe harbor provision is instituted in jurisdictions such as the United States of America.
- Copyright holders rely on automated content recognition tools such as YouTube’s Content ID to identify and manage unauthorized use of their works on platforms.

2.10 Copyright infringement and remedies

Copyright infringement exposes the infringer to various types of remedy if found liable by a court. The remedies available to a copyright owner fall into three main categories. The first two categories are available in civil courts, where two or more private parties are involved in a lawsuit. The third category is a matter for criminal courts, where the plaintiff or prosecutor is usually a public entity such as the state.²⁸

Preliminary or interim measures are court orders issued in civil proceedings prior to the final determination of the rights of the parties. They typically take the form of a court order, such as a temporary restraining

order, to preserve evidence or to require a party to cease allegedly infringing conduct. Preliminary injunctions are often subject to a balancing test to protect the rights of both parties. For example, in some jurisdictions, the court will issue an order requiring the defendant to cease the allegedly infringing conduct only if the plaintiff demonstrates that it has a strong case and that allowing the defendant to continue the conduct will cause harm that cannot be adequately compensated later. In urgent cases, an order may be issued even before the defendant has been notified of the existence of a lawsuit.

There are three main types of final remedies in civil cases and they are awarded after the rights of the parties to the case have been determined. The exact rules governing final remedies vary from country to country, and jurisdiction to jurisdiction. The court can order the payment of damages, most often to compensate the plaintiff (compensatory damages). In some jurisdictions, the law provides for the payment of damages without necessarily proving actual economic loss (statutory damages) or to punish the defendant and deter future violations (punitive damages). The second type of final remedy available is an order, such as an injunction, which is like the type of injunction described above, but on a permanent basis or for a longer period. The third type of remedy is payment of the prevailing party's attorney fees and court costs. Criminal sanctions are "intended to punish those who carry out infringements of particular gravity, such as willful acts of piracy committed on a commercial scale, and so to deter further infringement".²⁹ These sanctions usually take the form of a fine or prison sentence but may also include the seizure and destruction of infringing goods and the tools used to produce them.

Key takeaways

Copyright infringement can lead to different legal remedies if a court finds the infringer liable. These include:

- provisional/temporary measures such as injunctions to preserve evidence or stop alleged infringing conduct, often subject to a balancing test;
- final civil remedies such as damages (compensatory, statutory or punitive), permanent injunctions and attorney's fees; and
- criminal sanctions including fines, prison sentences and seizure/destruction of infringing goods, meant to punish and deter serious, commercial-scale piracy.

The specific rules for such remedies can vary across countries and legal jurisdictions.

2.11 Jurisdiction

To hear a case against a defendant who allegedly infringed a copyright, a court must have jurisdiction over the defendant and the subject matter (that is, whether the court can hear a case involving alleged copyright infringement). Both types of jurisdictions are determined by national laws. Courts apply their own rules of civil procedure and remedies.³⁰

There are cases where courts in more than one jurisdiction may have jurisdiction to hear a dispute because more than one country may decide they have jurisdiction over the case; for example, there may be several parties in different countries, or the effects of an alleged infringement may be felt in more than one territory. In such cases, conflicts may arise. This is called private international law, or simply conflicts of laws. There are few clear international rules governing such conflicts.

Although such situations are not common, a court must also decide which copyright law to apply, for example, when the infringement covers several jurisdictions. What if digital content is created in Country A, emailed to someone in Country B, who then uploads it to a social media platform, and it is accessed and downloaded in Country C? In copyright cases, the Berne Convention requires that the law of the country for which protection is sought is applied.³¹ This is usually the law of the jurisdiction in which protection is claimed.

In cases involving a digital transmission of a literary or artistic work, countries may choose to apply either the law of the country of transmission (upload) or the country of reception (download), or both.³²

Sometimes an application's terms of service provide for arbitration rather than litigation. Arbitration is a process in which, by agreement of the parties, a dispute is submitted to one or more arbitrators who make a binding decision on the dispute. By choosing arbitration, the parties opt for a private dispute resolution process instead of going to court. Arbitration is consensual (it is conducted only if both parties agree) and neutral (the parties select the arbitrators to ensure such neutrality). It is generally confidential, and there is usually no appeal, the arbitrator's decision being final.³³

Key takeaways

- For a copyright infringement case, the court must have jurisdiction over both the defendant and the subject matter, which is determined by national laws.
- Multiple jurisdictions may be competent to hear a dispute, leading to conflicts of laws, for which there are few international rules.
- The court must decide which copyright law to apply, often the law of the country where protection is claimed, which can be complex for digital works.

- As an alternative to court proceedings, some apps provide for private arbitration, which is consensual, neutral and confidential.
- Overall, determining the appropriate jurisdiction and applicable law can be challenging, especially in digital copyright disputes.

Trademarks

This part of the guide examines applying trademark law to mobile apps and social media, beginning with what a trademark is, how it is protected, the rights that come with trademark protection, and the use of trademarks in apps.

3.1 Different types of marks

In determining what a trademark is, a distinction must first be made between trademarks and service marks. When a mark is used in connection with the sale of a product or good (for example, a smartphone), it is usually a trademark. When used in connection with a service (for example, telecommunications, banking or access to a social media platform), it is better to use the term service mark. Both types of marks can be “words, letters, numerals, pictures, shapes and colors, or any combination thereof”.³⁴ Any sign or combination of signs can constitute a mark. The purpose of marks is to distinguish the goods or services of one company from those of another; for example, a computer, tablet or phone made by Apple is easily identifiable from the famous logo. A mark may do more than distinguish products; a consumer familiar with a mark expects consistent quality when using the service or buying the product.

Trademarks and service marks: example

The global company Apple Inc. uses several trade and service marks, including words such as iPhone®, iTunes® and Apple®, and the well-known logo of a bitten apple.

A trademark performs a critical communication function. The provider of a new service or product will likely do better with a good choice of mark. It will be easier for users of the service and consumers of the product to remember and mention it, for example, in a post on a social media platform. This consumer appeal

function is typically best served by using an arbitrary or made-up word like YouTube® even if it suggests the nature of the product or service, or a fanciful mark using an existing word to refer to a product of an entirely different kind, such as Apple® for computers and phones.

Sometimes a mark is used not to distinguish the product or service, but rather, a particular feature of the product or service; for example, fair trade may be used in connection with coffee or music to certify that a third party has found the product or service to comply with the standards set by the certification authority. Such marks are known as certification marks.

3.2 Conditions for obtaining trademark or service mark protection.

Certification mark: example

Fair Trade Music International^a can certify that a music release is compliant with the Fair Trade Music certification criteria, which includes: (1) disclosure of revenues; (2) proper payment/split of royalties; (3) efficient royalty distribution; (4) accurate royalty accounting; (5) audits; and (6) disclosure of conflicts of interest. Certified services are authorized to use this certification mark:



Photo/ functional caption: © Name of copyright holder

^a Fair Trade Music International. "Fair Trade Music certification process reviewed at CIAM Congress in Siena." *fairtrademusicinternational.org*. Oct. 15, 2015. <<http://www.fairtrademusicinternational.org/fair-trade-music-certification/#criteria>>.

There are two main ways to obtain trademark (or service mark) protection. The first is to apply for registration, usually with the trademark (or IP) office where the registrant is located, though registration with a foreign trademark office is also possible and often recommended for SMEs operating in multiple countries. In countries with a common law-based legal system,³⁵ use of a mark in commerce (the person uses the mark in regular commercial transactions) can also be a source of rights and is, in fact, required to obtain registration, though not to apply for it. Registration provides notice of the existence of the mark and may give the owner of the registration stronger rights and remedies.

At the time of registration, the appropriate governmental agency will usually verify that the mark does not conflict with an earlier registered mark. If such a conflict is found, the registration process will not be completed, at least until the conflict with the earlier mark is determined, which may ultimately be decided by a court. Certain marks may also be refused registration if they are considered obscene or otherwise offensive to the traditions or legal system of a country.

Trademark and service mark registrations are usually renewable indefinitely, at least if the mark is used in commerce. A trademark that is no longer in use may be removed from the register after a certain number of years (usually at least three) at the request of a third party.

Registration may be sought in one's own country or in a country party to the Paris Convention for the Protection of Industrial Property, provided that the applicant is also from one of the 180 countries party to the Convention (as of June 2024), or by using a domestic (one's own country) application as the basis for a foreign application or registration, a system also provided for under the Convention. However, an efficient way to obtain protection in multiple jurisdictions is to use the Madrid System administered by WIPO.

To file an application under the Madrid System, the applicant typically has already registered or filed an application in their local IP office. The applicant then uses that local application or registration to file an international application through the same IP office, which will certify it and forward it to WIPO. WIPO will conduct a formal examination of the application, which, if approved, will be recorded in the International Register and published in the *WIPO Gazette of International Marks*. WIPO then sends a certificate of international registration and notifies the IP offices in all territories where the applicant wishes to protect the mark. The IP offices of all such territories then decide, within 12 or 18 months, whether to accept the mark in accordance with their laws. WIPO records these decisions and notifies the applicant.

3.3 Rights of a mark owner

The owner of a trademark or service mark can prevent others from using that mark in commerce, or a confusingly similar mark, in a way that is likely to confuse the relevant public. It is not a right to prevent use of the mark in a noncommercial context; for example, one can refer to the joy associated with the recent purchase of an iPhone or Galaxy smartphone without infringing the trademarks owned by Apple or Samsung.

The trademark owner will have access to remedies like those discussed in chapter 2 for copyright (see section 2.10). Enforcement of the right will be subject to similar jurisdictional requirements (see section 2.11).

The owner of a well-known mark may enjoy rights of broader scope; for example, it may protect against the use of the mark in commerce in connection with products or services that are very different (dissimilar) from those offered by the trademark owner.

Certain uses of a mark are often permitted, including criticism or parody. It is difficult to criticize a product or service on a social media platform without referring to the product/service by name (trademark). Similarly, a parody is effective to the extent that it evokes the original in the mind of the viewer, reader or listener. The exact rules and scope of these limitations on the trademark owner's rights vary between jurisdictions.

Another type of use often permitted is comparative advertising. Again, the scope of what is allowed varies greatly from jurisdiction to jurisdiction.³⁶

3.4 Trademarks, service marks in apps and on social media

Apps use trademarks and services in many ways. Names such as Apple®, YouTube® and Facebook® are famous around the world. The ® symbol means those words are registered trademarks. App developers must be careful to choose a trademark for their product or service that does not conflict with a prior registered trademark. Given mobile apps can often be used in many countries, one way to check availability is to use the WIPO Global Trademark Database. Checking the availability of domain names for a website that accompanies the app is also recommended (see section on domain names).

Here are some tips for choosing the best trademark for a new app or for use on social media to identify a business.

The most protectable marks are arbitrary, fanciful or suggestive, rather than merely descriptive of the features or purpose of the app or business. Distinctive marks are less likely to be refused or challenged.

An arbitrary mark is an existing word, phrase, symbol or design that has no logical relationship to the product or service it represents. In other words, the mark has no inherent connection to the underlying goods or services. This lack of a direct semantic link is what defines an arbitrary mark and gives it heightened trademark protection under the law. Examples of fanciful marks include Apple® for computers and smart phones, Dove® for soap and personal care products, Amazon® for an e-commerce website, and Shell® for gasoline and energy products.

A fanciful mark is a word, phrase, symbol or design that is invented or created solely for use as a trademark and has no prior meaning other than to identify the mark. It is an entirely new creation. Fanciful marks are among the strongest and most distinctive category of marks. Because the mark has no prior meaning, it is

Word and logo marks: example

While COTA-COLA would be an infringement of COCA-COLA® for soft drinks, a different word could infringe the famous white and red stylized letters of Coca-Cola if spelled in a similar way.



Photo/functional caption: © Name of copyright holder.

inherently unique and closely associated with what it represents. Examples include Xerox® for photocopiers, Exxon® for oil and gas products, and Kodak® for photographic equipment.

Word marks such as those mentioned above can be stylized, and the stylized version can be protected and registered separately. In such a case, it is the visual aspect of the mark, rather than how it sounds, that could lead to infringement proceedings.

For apps, when choosing a name, consider how it will appear and be searchable in app stores. Avoid names that are difficult to spell or remember.

Finally, choose a trademark that can be broadly applied to your app and any future products or services you may offer under that brand.

3.5 Trademarks and domain names

One feature of apps and many SMPs is that users no longer need to use a web browser to order a company's product or access its service. However, even companies with mega apps, such as Amazon®, operate a website that may have different functionality. This requires a domain name. If the company that developed the app has chosen a trademark and then discovers that it cannot use it as part of its domain name because it has been validly registered by someone else, problems can arise. Fortunately, with the variety of top-level domains available (see below), a company will likely find a way to register a good domain name.

Domain names are a common way to locate and identify websites; for example, the domain name wipo.int is used to locate the WIPO website at <http://www.wipo.int>. When a user types a domain name into a browser, the domain name is translated by the domain name system into an Internet Protocol (IP) address, which is the address of a particular server on the Internet that the user should then be able to connect to.

There are several types of domain names. A generic top-level domain (gTLD) is the top-level domain of an Internet address, such as .com, .net and .org. Many new gTLDs have been created, including: .aero for the entire aviation community; .biz for business purposes; .coop for cooperatives; .info, which is unrestricted; .jobs for human resources; .museum for museums; .name for personal names; .pro for professionals; and .travel.

A country code top-level domain (ccTLD) is associated with a specific country, such as .mx for Mexico. "These ccTLDs are administered independently by nationally designated registration authorities. There are currently 308 ccTLDs listed on the Internet Assigned Numbers Authority (IANA) database. WIPO, which has a ccTLD program, has launched a database portal to facilitate online searches for information related to country code top-level domains.

The word/words to the left of the gTLD or ccTLD are called the second-level domain name.

A URL is often more than the combination of a second-level and top-level domain name, or in other words, more than a name followed by a gTLD or ccTLD. For example, WIPO uses wipo.int but users can go deeper into the site if they have a more specific URL. A person wishing to access the Madrid System to file an international trademark application, for instance, might go directly to <http://www.wipo.int/madrid/en/>. In such a case, there are additional levels (or layers) added to the basic wipo.int URL.

Key takeaways

- Trademarks are used for products, while service marks are used for services. Both can include words, letters, symbols, shapes and colors to distinguish one company's offerings from another's.
- Marks help consumers identify and remember a product or service and expect consistent quality. Arbitrary, fanciful or suggestive marks are most effective. Avoid descriptive terms. Consider searchability and future brand growth.
- There are two main ways, namely, registration with a trademark office, or common law rights through use in commerce. Registration provides stronger legal rights.
- Trademark offices generally verify a mark does not conflict with prior registrations. Certain marks may be rejected as obscene or offensive.
- Owners can prevent others from using a confusingly similar mark in commerce. Well-known marks get broader protection.
- Criticism, parody and comparative advertising may be allowed, within limits that vary by jurisdiction.
- App developers and businesses in general must carefully choose a mark that does not conflict with prior registrations, especially globally. The WIPO Global Brand Database can help check availability.
- App developers and business in general should also check the availability of one or more domain names to use for a website associated with their product or service.

In summary, selecting and protecting a strong, distinctive trademark is crucial for a successful mobile app and/or social media business. Thorough research and following legal best practices are key.

Trade secrets and confidential information

4.1 What is a trade secret?

A trade secret is information that is not generally known and that provides its owner with a competitive advantage. Trade secret (or confidential information) protection is useful for non-patentable information such as customer lists, but also know-how, which is necessary to implement, improve and adapt patented technologies. Compared with patents, trade secrets are much less expensive to obtain, maintain and enforce. They are protected by a combination of physical measures to maintain secrecy and contractual or other legal restrictions on disclosure of the information by those who acquire it from the owner.

4.2 International trade secrets rules

One of the few international rules protecting trade secrets is Article 39.2 of the TRIPS Agreement, which provides that:

“Natural and legal persons shall have the possibility of preventing information lawfully under their control from being disclosed to, acquired by, or used by others without their consent in a manner contrary to honest commercial practices, so long as such information:

“(a) is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known or readily accessible to persons within the circles that normally deal with the kind of information in question; or

“(b) has commercial value because it is secret; and

“(c) the person lawfully in control of the information has taken reasonable steps under the circumstances to keep it secret.”

Members of the World Trade Organization (164 as of June 2024) must comply with the TRIPS Agreement.

The text of Article 39.2 provides considerable flexibility in determining how this protection should be implemented. The key requirements are fairly well accepted internationally: to be protectable, the information should be secret, valuable because of its secrecy, and subject to reasonable measures to keep it secret.

4.3 Trade secrets, confidential information, in apps and on social media

App developers may work with many third parties; for example, during development, they may share confidential information with those who help them develop the app. This is also possible, though less likely, when preparing a social media post. It would be prudent to consider requiring in advance that the third party maintain the confidentiality of the information, given this is a key requirement for maintaining protection.

Use of the app will often generate data about the users, including customer lists. A good way to ensure protection (and comply with the reasonable steps requirement) may be to limit access to confidential information on a need-to-know basis, and to have clear policies on disclosure, particularly for departing employees, including termination of access in such cases. Employers must recognize that their data “may be widely distributed across multiple platforms on an increasing number of mobile devices, and the recovery of the employer’s confidential information contained in this electronic data is becoming increasingly important.

As a result, businesses may want to:

- establish policies regarding privacy settings on their application accounts to limit who can access data; and

- explain that disclosure or misuse of the company’s confidential information could result in a breach of employment contract, and also violate the terms of confidentiality agreements between the company and third parties.

In addition, as noted above, maintaining trade secret protection may require that the owner of the information be able to show that they “took reasonable steps under the circumstances to keep it secret. This may include using state-of-the-art data security measures to transmit and store the data, and limiting access to the data to those who have a duty to keep it confidential. App developers and users of social media for business should also comply with applicable privacy and data protection laws.

Key takeaways

Trade secrets are confidential business information that provide a competitive advantage. They can protect non-patentable know-how and are cheaper to obtain than patents.

- The TRIPS Agreement sets international standards, such as information must be secret, commercially valuable due to secrecy, and subject to reasonable steps to maintain secrecy.
- App developers and business in general should require employees, consultants and all third-party contractors to maintain confidentiality of shared information – a key TRIPS requirement – and ideally limit access to confidential information on a need-to-know basis.
- User data generated through the app or social media, like customer lists, can be trade secrets that require protection.
- Demonstrating reasonable steps to preserve secrecy is crucial, and can include technical, contractual and policy measures.
- App developers and businesses using social media should ensure compliance with applicable privacy and personal data protection regulations when handling user data.

In summary, carefully managing confidential information, whether shared during development or generated through the app or the SMP, is essential for small and medium businesses to protect their trade secrets.

Licensing

When a right to use IP is granted by the owner of the right or its agent (the licensor) to a user (the licensee), the transaction is called a license. Licensing is often the most important use of IP. A typical example is the licensing of copyrighted material, such as the right to use images on a website or in an app or social media post.

5.1 Licensing decoded.

Licensing is an authorization (license) given by or on behalf of the owner of copyright or other IP right (licensor) to a person or legal entity (licensee) to perform a certain act that would otherwise infringe the IP right in question. Ownership of the right is not transferred to the licensee.³⁷

The two basic categories of licenses are exclusive and nonexclusive licenses.

Exclusive license: example

The author of a book manuscript wants to publish a digital version (e-book). The author finds an e-book service online and uploads the manuscript after signing an exclusive license with the e-book service provider that grants the e-book provider an exclusive right to make an e-book. Under that license, the author can no longer make e-books of the manuscript available (only the licensed e-book service provider can do so) and the author cannot authorize another e-book provider to make copies available.

Under an exclusive license, the licensor can no longer use the right that has been licensed nor can they license another person to use that right. A variation on this type of license, known as a sole license, allows the copyright owner to continue to use the work but not to authorize a third party other than the sole licensee to use it (for the licensed use).

The second and much more common category of license is the nonexclusive license. It allows the licensee to use the work under the terms contained in the licensing agreement, but the copyright holder can license other third parties. A typical non-exclusive license is the end user license agreement (EULA) that Internet users must often agree to before using a service or downloading digital content, particularly software.

License terms are often contained in the terms of use of an app or SMP. Examples are discussed in the following section.

There are two forms of licensing: individual and collective. Most licenses are granted by individuals (natural or legal persons). There is, however, another form of licensing, collective licensing (licensing by a CMO), that is relevant in the social media context. These are licenses that provide access to a repertory (or pool) of rights.

A license applies only to the user that is licensed. An app developer or person preparing a social media post may want to ensure that third-party content used to build the app or used in the post is available not just everywhere the app or post will be made available across all platforms the SME may wish to use. For example, when licensing an image or short reel for use on the app or in the post, it may be useful to have the right to use it on a web page, thus maintaining the company's visual signature.

5.3 Collective licensing

Licensing a work individually is sometimes impossible, or at least impractical; for example, a songwriter cannot possibly license every SMP, broadcaster or application that wants to make the song available online in every country, at least not in the current technological environment. In such cases, one way to enforce copyright is to authorize an organization representing a category or large group of right holders to license certain uses on behalf of the group, monitor those uses, collect the corresponding remuneration and distribute it to the right holders. CMOs perform this function.

CMOs grant users the right to use either specific works or an entire repertoire of works; for example, an online music service may be licensed to use all the musical works contained in the CMO's database. CMOs have expertise in copyright and licensing matters and may also be able to provide advice to authors and other rights holders.

The price paid by a licensee who obtains a license from a CMO may be set by voluntary agreement between the CMO and the user. In some cases, the right holder who authorized the CMO to license, or on their behalf, may set the price. If the parties cannot agree, a court, specialized body or tribunal may set the price (sometimes referred to as a rate or tariff), if provided for by national law.

App developers and those preparing social media posts should consult the lists of CMOs available **online and** visit the website of the CMO operating in their jurisdiction for information on licensing options. Several CMOs and non-governmental organizations representing creators of various types of material may offer free information, and in some cases organize webinars or other events.

Several CMOs offer licensing services in this area, and commercial agencies also offer licensed content.

Key takeaways

- Licensing is a keyway IP rights are used, where the IP owner (licensor) authorizes someone else (licensee) to use the IP under certain terms.
- There are two main types of licenses: exclusive, where the licensor cannot use or license the IP to others, and nonexclusive, where the licensor can license to multiple parties.
- CMOs can help license IP, such as music, on behalf of many rights holders, making it more practical than individual licensing.
- App developers and SMEs using social media posts should research CMOs in their jurisdiction to explore licensing options for third-party content used in their apps.

- Commercial agencies also offer licensed content that can be used in apps or posts.
- Overall, licensing is a critical way for app developers to legally use IP owned by others.

Summary and recommendations

The following are key takeaways and recommendations for companies developing mobile apps, and for SMEs hiring app development companies and using social media for business or third parties to prepare posts for that purpose:

1. Mobile apps and SMPs have become an integral part of the global economy, generating billions in revenue and changing the way that businesses and consumers interact.
2. Apps and SMPs enable a wide range of transactions, from e-commerce and digital payments to ridesharing and entertainment, and allow companies to reach a global customer base.
3. IP rights, such as copyrights, trademarks and trade secrets, are critical to the mobile app and SMP ecosystems.
4. Copyright can protect the software code, creative content and other original expression within an app and in SMP posts and trademarks the brand identity of the business using the app or SMP.
5. Choosing a distinctive, legally available trademark is critical to avoid conflicts and effectively promote the brand.
6. When commissioning third-party content for an app or SMP post, developers should ensure they have the necessary rights and permissions, as the third party retains the copyright unless it is transferred by written agreement.
7. App developers should be aware of OSS licensing terms and ensure compliance when using OSS frameworks and tools.
8. Trade secrets, such as customer information and technical know-how, are valuable assets that app developers and businesses active on social media should protect through appropriate security measures.
9. When developing an app or using SMPs for business purposes in multiple countries, conducting trademark and domain name availability searches is recommended to ensure global protection and branding.
10. SMEs hiring third parties to develop an app or social media posts should consider a written agreement that provides them the rights they need to operate and grow, such as a clear transfer of the relevant IP rights in the app or posts to them.

Endnotes

¹ Gustec, Silvija. “13 benefits of mobile apps for business you need to know in 2023.” *decode.agency*. DECODE, Feb. 11, 2021. <<https://decode.agency/article/benefits-mobile-apps-business/>>.

² With databases, copyright protection applies to the selection and arrangement of the database contents. Some jurisdictions, including the European Union, have additional protection of databases by a special (*sui generis*) right.

³ *Understanding Copyright and Related Rights*. World Intellectual Property Organization, 2016: p. 4.

⁴ Depending on the type of exhaustion in each country/territory, this may or may not be fully enforceable. For example, a country that allows for “international exhaustion” of copyright would allow importation of copies legally produced in another country, leading to so-called parallel importation or gray market goods.

⁵ *Understanding Copyright and Related Rights*. World Intellectual Property Organization, 2016.

⁶ *Id.*, p. 10.

Please note, WIPO does not use abbreviation *id* (google suggests it signifies work in second note is by the same author as the work in first note/immediately preceding citation. But that does not seem to tally with the way *id* is used throughout endnotes section. WIPO uses *ibid.* for the same reference immediately before (*Ibid.*, p. 44), and *op cit.* for work previously cited (Loveacre, *op. cit.*, p. 44). Author to amend.

⁷ Berne Convention, art. 6bis(1).

⁸ World Intellectual Property Organization. “Summary of the WIPO Performances and Phonograms Treaty (WPPT) (1996).” *wipo.int*. Sep. 2017. Is this published or accessed date (in which case needs to be Web. Sep. 2017) <http://www.wipo.int/treaties/en/ip/wppt/summary_wppt.html>.

⁹ *Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related Rights Terms*. World Intellectual Property Organization, 2003: p. 290.

¹⁰ Hooijer, Robert, and J. Joel Baloyi. *Collective Management Organizations – Tool Kit. Neighboring Rights*. World Intellectual Property Organization, 2016: p. 11.

¹¹ *Id.* To deny the right, the WPPT contracting party must make a formal reservation to the treaty and notify WIPO. In the case and to the extent of a reservation by a Contracting Party, the other Contracting Parties are permitted to deny, vis-à-vis the reserving Contracting Party, national treatment (reciprocity). This form of reciprocity differs from the normal rule in international IP known as national treatment, a principle of law according to which a country should treat nationals of other countries party to the same treaty no less favorably than it treats its own nationals.

¹² This treaty was not yet in force as of October 2018. But it is now 2024??? Can this not be updated?

¹³ World Intellectual Property Organization. “Summary of the Beijing Treaty on Audiovisual Performances (2012).” *wipo.int*. <http://www.wipo.int/treaties/en/ip/beijing/summary_beijing.html>.

¹⁴ Berne Convention, art. 2(5).

¹⁵ Guadamuz, Andres. “Artificial intelligence and copyright.” *WIPO Magazine*, October (2017).

¹⁶ *Id.*, art 2(2).

¹⁷ Berne Convention, art. 5(2).

¹⁸ United States. United States Code. Title 17, sect. 412.

¹⁹ World Intellectual Property Organization. “WIPO Copyright Treaty.” Preamble. *wipo.int*. Dec. 20, 1996. <<https://www.wipo.int/wipolex/en/text/295166#preamble>>.

²⁰ Ricketson, Sam. *WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment*. Standing Committee on Copyright and Related Rights, Apr. 5, 2003: p. 65.

²¹ See WCT, art. 10; WPPT, art. 16; and Beijing Treaty, art. 13.

²² World Trade Organization. Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C. WTO, Apr, 15, 1994, art. 13.

²³ Geiger, Christophe, *et al.* “The Three-Step-Test Revisited: How to use the Test’s Flexibility in National Copyright Law.” *American University International Law Review* vol. 29, issue 3 (2014): pp. 581–626. Japanese version. *Intellectual Property Law and Policy Journal* vol. 49 (2017).

²⁴ Berne Convention, art. 7(1).

²⁵ This guide expresses no opinion as to whether these apps qualify as open source.

²⁶ Google. "Content delistings due to copyright." *transparencyreport.google.com*. Requires published or accessed date to correct WIPO style. <<https://transparencyreport.google.com/copyright/overview?hl=en>>.

²⁷ YouTube. "How content ID works." *support.google.com*. Google, Dec. 29, 2017 Is this the published or accessed date (in which case needs to be Web. Dec. 29, 2017)? <<https://support.google.com/youtube/answer/2797370?hl=en>>.

²⁸ *Understanding Copyright and Related Rights*. World Intellectual Property Organization, 2016: p. 24–25.

²⁹ *Id.*

³⁰ Frankel, Susy, and Daniel J. Gervais. *Advanced Introduction to International Intellectual Property*. Edward Elgar, 2016: p. 116.

³¹ Berne Convention, arts. 5(2), 6bis(2) and (3), 7(8), 10bis(1), 14bis(2)(a) and (b), 14ter(2) and 18(2). It is also mentioned in the Rome Convention, art. 7(2), and the Beijing Treaty on Audiovisual Performances, art. 5(3).

³² It has been suggested that the law of emission would apply unless that law is inadequate, in which case the law of the country/countries of reception would be used. See Ficsor, Mihály. *The Law of Copyright and the Internet*. Oxford: Oxford University Press, 2010: pp. 172–179.

³³ More information is available on the WIPO website, <http://www.wipo.int/amc/en/arbitration/what-is-arb.html>.

³⁴ *Understanding Industrial Property*. World Intellectual Property Organization, 2016: p. 17.

³⁵ More information on such countries is available on Wikipedia, https://en.wikipedia.org/wiki/List_of_national_legal_systems#Common_law.

³⁶ See Mills, Belinda. "Comparative advertising: should it be allowed?" *EIPR* vol. 17, No. 9 (1995) I can't find this anywhere, only a bibliography reference in an Indian law journal. Can author please provide relevant link or delete; and Palazzi, Pablo A. "Comparative Advertising in Argentine Law." *Fordham Intellectual Property, Media & Entertainment Law Journal* vol. 22 (2012): p. 659.

³⁷ *Guide to the Copyright and Related Rights Treaties Administered by WIPO and Glossary of Copyright and Related Rights Terms*. World Intellectual Property Organization, 2003: p. 294.