



**ISCTBL 2021**  
INTERNATIONAL SCIENTIFIC CONFERENCE

Универзитет „Гоце Делчев“ –  
Штип

**Goce Delchev University  
Shtip**

Факултет за туризам и бизнис  
логистика

**Faculty of Tourism and  
Business Logistics**

**Четврта Меѓународна Научна Конференција  
Fourth International Scientific Conference**

**ПРЕДИЗВИЦИТЕ ВО ТУРИЗМОТ И БИЗНИС  
ЛОГИСТИКАТА ВО 21 ВЕК  
CHALLENGES OF TOURISM AND BUSINESS  
LOGISTICS IN THE 21ST CENTURY**

**ЗБОРНИК НА ТРУДОВИ  
CONFERENCE PROCEEDINGS**



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**Социо-економски импликации на КОВИД-19: намалување на**  
**разликите и справување со дистрибутивните влијанија во различни**  
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**Прва сесија: Бизнис логистика и бизнис администрација**

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**Panel session**

**Socio-economic implications of COVID-19: reducing disparities and addressing distributional impacts in different sectors**

Session chair: Tatjana Boshkov, Assoc.professor and Dean at Faculty of tourism and business logistics, „Goce Delcev University – Stip, N. Macedonia

Panelists

1. Gligor Bishev, University professor and Management Board Chairman, Sparkasse Bank, N. Macedonia
2. Zarko Radjenovic, PhD, Research Associate, Innovation Center, University of Nis, Serbia
3. Natasha Miteva, PhD, Vice-Dean for Education, Faculty of Tourism and Business Logistics, Goce Delcev University – Stip, N. Macedonia

**Moderators**

**First session: Business logistics and business administration**

Tatjana Boshkov, PhD, Dean at Faculty of Tourism and Business Logistics, Goce Delcev University – Stip, N. Macedonia

**Second session: Tourism, hospitality and gastronomy**

Natasha Miteva, PhD, Vice-Dean for Education, Faculty of Tourism and Business Logistics, Goce Delcev University – Stip, N. Macedonia





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**ФАКУЛТЕТ ЗА ТУРИЗАМ И БИЗНИС ЛОГИСТИКА**  
**FACULTY OF TOURISM AND BUSINESS LOGISTICS**

**ЧЕТВРТА МЕЃУНАРОДНА**  
**НАУЧНА КОНФЕРЕНЦИЈА**

**FOURTH INTERNATIONAL**  
**SCIENTIFIC CONFERENCE**

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## ECONOMIC PERSPECTIVES ON INTELLECTUAL PROPERTY MANAGEMENT

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### Abstract

This paper is aimed at revealing the need for intellectual property (IP) management. In this regard, the role of IP in the economic development of enterprises is presented. The economic advantages of the protection of intellectual property sites and the possibilities for obtaining economic benefits from the acquisition of intellectual property are indicated.

***Key words:*** *intellectual property, management, economic advantages*

### Introduction

The world is changing at a rapid pace and this is also having an impact on business development. In recent decades, knowledge has become a major resource, intensifying the innovation activity of companies. The results of the use of knowledge are not only a competitive advantage for companies, but also a driving force for the development of society and the economy. In order to make the most of the new knowledge, companies must ensure its protection and adequate management of intellectual property rights.

This paper is aimed at revealing the need for intellectual property management. In this regard, the role of IP in the economic development of enterprises is presented. The economic advantages of the protection of intellectual property sites and the possibilities for obtaining economic benefits from the acquisition of intellectual property are indicated.

### Intellectual property

Intellectual property is a key resource gaining strength in the transformation process towards a knowledge-based economy. This new type of economy implies a completely different approach to achieving economic growth based on developing, acquiring, using and transferring knowledge. The specific nature of intellectual knowledge, as well as the results of human creativity, contribute to the existence of different types of intellectual property. *“Intellectual property (IP) refers to creations of the mind – everything from works of art to inventions, computer programs to trademarks and other commercial signs”* (WIPO, 2011, p.1).

The main categories contained in intellectual property are:

- industrial property (Table 1) – the protection of these sites is carried out through the Paris Convention for the Protection of Industrial Property.
- copyright and related rights (Table 2) – protection is obtained in accordance with the Berne Convention for the Protection of Literature and Artistic Works.

Table 1: *Specifics of the intellectual property rights (IPR)*

Object	Features
<b>Patent/ Invention</b>	„patents characterize the innovative potential of a country and its capacity to use own and foreign knowledge and transform them into potential economic benefits“ (Georgieva and Nikolova-Minkova, 2019, p. 3).
<b>Utility models</b>	Exclusive rights that allow the holder to oppose the use of the protected invention by others without their permission for a limited period of time. Препоръчва се в случаите, в които полезният живот на изобретението е по-кратък от получаваната чрез патент закрила.
<b>Industrial Designs</b>	The rights protect the visual design of the objects of intellectual property. They cover the three-dimensional characteristics of the product as a shape or surface, as well as two-dimensional characteristics such as color, patterns, lines, etc.
<b>Trademarks, Trade names and Service marks</b>	By registering the trademark, its owner receives the right: to use the trademark, to dispose of the trademark, to prohibit the use of the trademark by third parties in its activities without the consent of the owner.
<b>Geographical indications</b>	The rights protect the right holder against the use of a registered geographical indication (indications of origin, designation of origin, geographical indications, traditional and specific designations) by designating a good/ service misleading the consumer as to their origin.
<b>Undisclosed Information/ Trade secrets</b>	Trade secret rights are related to the unauthorized knowledge and use of specific information, secrets, facts, decisions and data that underlie the business activities of the rightful claimants and for which they have taken appropriate measures to maintain in secret.

Source: adapted by: Panayotova, Sv., Nikolova-Minkova, V. (2020, p.93)

Table 2: *Objects of copyright protection*

Objects	Composition
<b>Original works</b>	Literary; stage; musical; audiovisual; artwork; photographic; architectural projects, maps, etc.; cadastral and state topographic maps; graphic design of printed publications.
<b>Secondary works</b>	Processing; translations; adaptation; arrangements; dramatization.
<b>Collected works</b>	Periodicals; collections; databases; anthologies; bibliography.
<b>Part of works</b>	Parts that are relevant to and that reveal the specific content of the work.

Source: Panayotova, Sv., Nikolova-Minkova, V. (2020, p.94)

The last years of the development of the knowledge-based economy and the impetus that research in the field of human activity receives are a prerequisite for the separation of the so-called category "new intellectual property objects" (Borisov, Borisova, 2015, p.38). They are administered by WIPO through the Paris Convention and the Berne Convention or through new international agreements. These include: New varieties of plants; New animal breeding; Databases; Topology of integrated circuits; Computer programs; Domain names; Multimedia products; Traditional knowledge; Typographical signs.

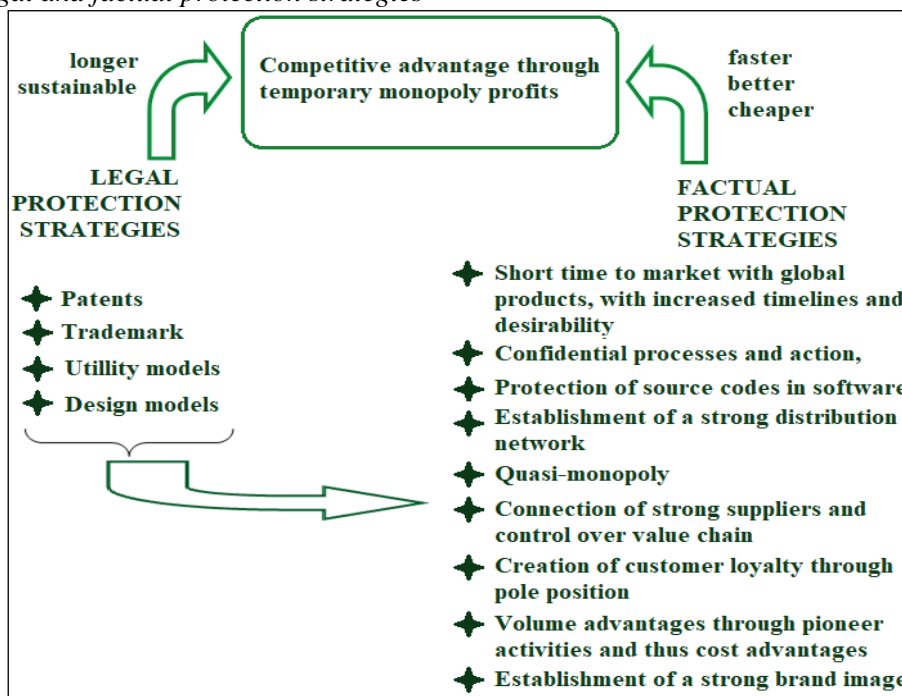
It should be taken into account that, due to the specificity of intellectual property, protection on them can be carried out differently (Figure 1).

The authors Gassman & Bader (2017) point to the possibilities of ensuring the protection of innovative knowledge and their results – through legal protection or through factual protection (providing conditions for their protection as a secret). Bader stated that „*Traditional, factual protection strategies for the reduction of imitation risks are ever increasingly being supported by legal protection strategies to ensure freedom of action and block competitors. Intellectual property (IP) has therefore become a suitable instrument for influencing sustainability and returns-on-investments*“ (Bader, 2006, p.10).

The accumulation of intellectual property rights of the above categories, regardless of the protection strategy chosen by the company, creates an "intellectual reserve" whose effective management

contributes to the development not only of the individual company or economic sector, but also of the countries as a whole.

Figure 1: *Legal and factual protection strategies*

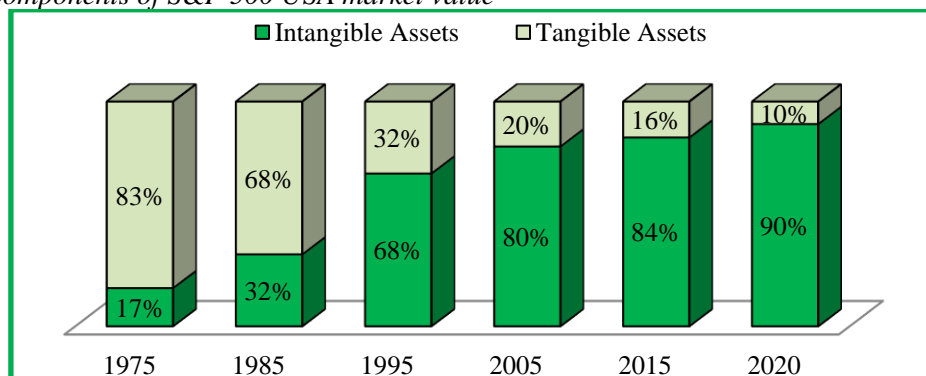


Source: Gassman, O., Bader, M. A. (2017), p.5

### Intellectual property management

The economic processes taking place in society require a drastic change in management structures. Today, when most of the value of companies is formed by intangible assets (Figure 2), effective intellectual property management is the most important step in the innovative development process. According to WIPO "All businesses, especially those which are already successful, nowadays have to rely on the effective use of one or more types of intellectual property (IP) to gain and maintain a substantial competitive edge in the marketplace. Business leaders and managers, therefore, require a much better understanding of the tools of the IP system to protect and exploit the IP assets they own, or wish to use, for their business models and competitive strategies in domestic and international markets." (WIPO, 2011, p.1).

Figure 2: *Components of S&P 500 USA market value*



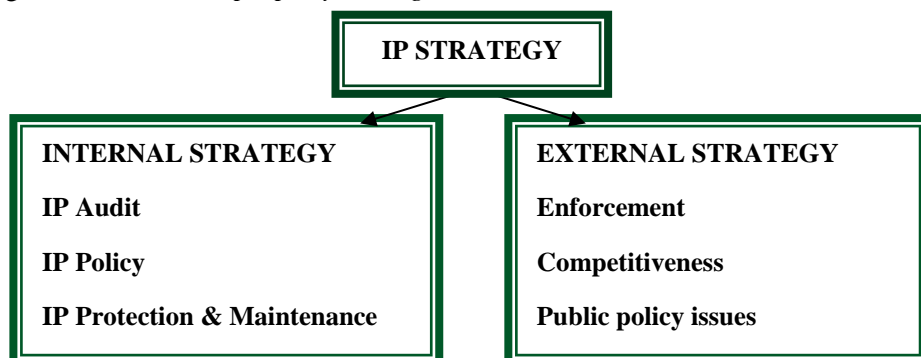
Resource: Ocean Tomo, Intangible Asset Market Value Study 2020, <https://www.oceantomo.com/INTANGIBLE-ASSET-MARKET-VALUE-STUDY>

There is a variety of literary sources justifying the need to align intellectual property management strategies with companies' corporate strategies (Lynn, Morone and Paulson, 1996; Faix, 1998; Brockhoff, 1999; Hargadon and Sutton, 2000; Ernst, 2002; Smith & Hansen, 2002). Gassman & Bader stated that „*An intellectual property strategy generally aims to improve the economic outcomes of investments made in innovations and should therefore address various key decisions, for example make or buy decisions, organizational association or isolation, innovation or adaptation of new technology, the protection or exploitation of knowledge; public or private research funding, safeguarding or sharing of intellectual property and pioneering advantages or disadvantages*“ (Gassman & Bader, 2006, p.219).

In scientific literature, the priority of research is the rights to inventions and the relationship between patents and innovations (Griliches, 1981; Malecki, 2014). A number of researchers confirm the positive correlation between the success of companies and the strength of their patent portfolio (Arundel, 2001; Ernst & Omland, 2003). In recent years, research revealing trademark activity as a reliable innovation indicator (Klinger, 2003) has also increased; Mendonça, Pereira & Godinho, 2004; Flikkema, De Man, Wolters, 2010), especially for innovation in knowledge-intensive business services – KIBS (Miles, Andersen, Boden & Howells, 2000; Schmoch, 2003; Amara, Landry & Traoré, 2008).

Regardless of the strategy chosen (Figure 3), the main objective of intellectual property is to protect earlier innovative investments, thereby counteracting third-party copying. This largely justifies the need to use both external and internal IP strategies.

Figure 3: *Intellectual property strategies*



Source: from the author

**External strategies** include enforcing intellectual property rights (IPR), selling them to other companies, or licensing them. One of the first questions seeking a solution by *enforcement* of IPR is what approach to take with regard to these rights – to prosecute offenders or to conclude out-of-court agreements and to grant licensing agreements in the case of an infringement. Achieving a *competitive advantage* as a strategy is associated with competitor intelligence and accessible patent information to increase the competitiveness of own intellectual property. In terms of *public policy*, managers need to be aware of how they can create a barrier to competitors entering the market or which actions can negatively impact their companies' ability to benefit from IP.

**Internal strategies** address issues related to companies' resources. *IP audits* identify the intellectual property created within the company, which must be assessed and managed as an asset. The audit shall also support the review of third party intellectual property management to prevent abuse. As a result of the final assessment of the audit carried out, managers are able to implement effective IP management practices.

Kowalski (2007, p. 488) states that the minimum requirements for *IP policy* relate to:

- coverage of intellectual property policy;



- ownership of intellectual property;
- disclosure of intellectual property;
- marketing, commercialization and licensing of patents;
- distribution of income;
- rights and obligations of an inventor and the institution;
- other pertinent issues.

The *IP Protection & Maintenance Strategy* is aimed at developing effective rules for determining the rights necessary for the protection of intellectual property. This examines the implications of the strategies implemented and the maintenance of IP to minimize risks.

The strategies mentioned so far and their elements demonstrate the importance of intellectual property rights as a critical tool for promoting innovation for businesses. It should also be stressed that intellectual property is also a factor in economic development.

### **Intellectual property – a factor for economic development**

Intellectual property protection serves not only as a tool to stimulate innovation, but also leads to the development of new markets, supports the dissemination of technology and is generally seen as a powerful tool for economic development and wealth creation.

Evidence of this is the information presented above (Figure 2). In less than fifty years, the value of intangible assets has increased nearly 5-fold and by 2020 accounts for 90% of the value of the largest U.S. companies (Ocean Tomo, 2020). This demonstrates the role of intellectual property as a driving force of economic development, which can be seen in the following perspectives:

- Macroeconomic – presents IP's relationship with the knowledge-based economy at national level.
- Microeconomic – analyzes the state of the IP in relation to the knowledge-based economy from the point of view of the company.

Research looking for a link between intellectual property and economic performance at national level is controversial. A higher level of protection of IP has both positive and negative effects on the economy and its development (Andersen & Konzelmann, 2008; Odagiri, Goto, Sunami, Nelson, 2010).

In developing countries, the direct effect of IP on the economy depends on a number of factors, including R&D carried out in the country, the nature and efficiency of its institutions, per capita wealth, stage of development, etc. (Maskus, 2000; Odagiri et al. 2010; Chu, Cozzi, Galli, 2014).

The scientists also found that IP could have a positive impact on economic development in two directions: by promoting foreign export rights for high-tech goods in the local economy and by providing incentives for innovation in the country (Maskus, 2000, p.481, pp. 485-86; Ivus, Park, Saggi, 2015).

The micro-economic perspective of analyzing the advantages of using IP relates to the economic benefits of owning intellectual rights. According to Gurry „*that companies and countries which continue to invest in new products and innovation during times of economic recession will be those that will be best positioned to take advantage of the recovery, when it arrives*“ (Gurry, 2009, p.3).

The main economic advantages that companies can derive from the possession of intellectual property rights are presented in Table 3.

Table 3: *Economic advantages of owning intellectual property rights*

Model	Created competitive advantages
Practicing exclusivity or	Companies create intellectual property and restrict third-party access to it. This gives themselves an advantage in the market and an opportunity to block competitors.

Licensing and cross-licensing	The licensing of IP is suitable for extracting additional economic benefits from the possession of rights in cases where their owner is incapable of satisfying market demand on his own and when seeking strategic partnerships through cross-licences.
Litigation	The economic advantage gained through the protection of IPR is closely linked to the scope of those rights. There are known cases (patent trolling) in which, even if the patent holder does not apply his rights to the invention, he can obtain economic benefits by prosecuting infringers.
Deterring	Companies' defensive strategy aims to acquire more IPR in order to conquer a particular territory and to influence competitors. These actions must be carefully considered, as it is to some extent related to the creation of trusts pursued under the Unfair Competition Act.

Source: from the author

The macro- and micro-economic prospects of intellectual property ownership described above reveal its growing role as an activator of the economic performance of companies.

### Conclusion

In view of the objective set for this report: to reveal the need to manage intellectual property, within the framework of the development is clarified the specifics of the IP categories, indicated are the possibilities for the protection of IP and the economic benefits of intellectual property ownership.

Possible IP management strategies are presented, focusing on the need to jointly implement these strategies for the acquisition of competitive advantage.

The economic benefits of the possession of intellectual property rights are also addressed, and emphasis is placed on patents.

In summary, it is to be taken into account that in the rapidly changing environment, especially in the context of a continuing public and economic crisis, the result of Covid-19, the intangible assets held in the form of intellectual property are a guarantee for the successful recovery of companies, which requires their competent and effective management.

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