Abstract

Photography of the digital age has lost the properties of a physically tangible product and has become intellectual property. Simultaneously with this process, the process of transition of photography into a mass-produced good has taken place. Market demands towards photography as a product of mass consumption often reduce the aesthetic and artistic standards that have been set by its development period in the process of photography coming to life as a medium. Despite the negative effects that accompany the transition of photography in its process of transformation into a mass-produced good, even such photographic “products” are able to encourage to a particular activity and ultimately generate revenue for numerous industries standing in the background of the “photography-product”.

Production and distribution of stock photographs\(^1\) is one of the derivates of the

\(^1\) Stock photography derives from the word „stock” and implies the sale/rent of an already existing photograph, which was not taken according to the customer’s order. On the other hand, the use of stock
digital age in which business in the domain of production of photographs is expanded to their distribution to users of websites and/or digital communication channels. In doing so, websites are at the same time used as distribution channels for photography as a creative product. Such symbiosis of photography – means of communication and network space – communication space – allows business association of these communication subjects and their new perspectives in the digital age. The Internet is becoming a bridge for photography, which allows it to cross into a new dimension, thus expanding its production and sales capacities. After the first 100 years of photography as a medium, its new forms of existence are just being unfolded. It is important to point out that stock photography has an important role in cultural and creative industry, which is currently in the phase of being formally defined in the Republic of Croatia.

Keywords: stock photography, visual content industry, cultural and creative industries, digital imagery

JEL Classification: Z1, Z19, L82

INTRODUCTION

Although 100 years have passed since the discovery of photography, the communication power of photography as a medium gets new dimensions in the digital age. The global age uses photography as an easily understandable universal communication language without mediation of the textual message. Photography is globally omnipresent today for several reasons:

1. For the same price, digital photo cameras today allow taking higher quality of photographs than ever before. Britton & Joinson (2012)
2. Minimal technical knowledge is required for photographic recording due to sophisticated electronics built into the latest cameras Clark (2008)
3. Once taken, photographs are distributed via internet quickly, securely and without financial demands.
4. Computer applications (Photoshop2 and related software) are important and accessible tools for digital processing of the photographed content.

Photographs is determined by the customer, but the stock photograph still remains the property of the person (physical or legal) who holds the copyright of the photographs.

An image editing software developed and manufactured by Adobe Systems Inc. Photoshop is considered one of the leaders in photo editing software. The software allows users to manipulate, crop,
5. Human brain decodes visual content much faster than textual content (Hand 2014).

This paper analyses the situation in the stock photography market and possible future photography trends.

1. STOCK PHOTOGRAPHY

Stock photography derives from the word „stock“ and implies the sale/rent of an already existing photograph, which was not taken according to the customer's order. On the other hand, the use of stock photographs is determined by the customer, but the stock photograph still remains the property of the person (physical or legal) who holds the copyright of the photographs. Stock photography as an independent industry has emerged in the 70s of the last century, and is based on the sale of the copyright to reproduce photographs. Relations between the stakeholders in this industry are as follows:

- Agencies are intermediaries between photographers and customers
- Customers are:
  - Journal editors
  - Book editors
  - Magazine editors
  - Graphic and web designers
  -...

Before the appearance of the stock photography phenomenon, customers had to order photographs and there was a long delivery period. The point of the stock photography business is that it enables the client to select and immediately buy the desired photograph, which was taken in advance and stored in agency database. A customer can easily find the desired photograph using well-defined keywords, since the photograph was already taken in advance and stored in the database. Before, customer had to order the photograph, and there was a long period of waiting until the delivery. Photographs in the digital age are becoming affordable due to mass production. However, photographers still manage to generate sufficient revenues because they can repeatedly sell the same photograph resize, and correct color on digital photos. The software is particularly popular amongst professional photographers and graphic designers.
to different customers who purchase them for different purposes. Therefore, in addition to technical and aesthetic value of photographs, in the stock business it is of utmost importance that the photographer successfully defines the keywords that describe individual photographs. In this way photographer helps the customer to search the content, i.e., with well-defined keywords, customer can easily find the desired photographic content by using internet browsers.

The object of the sale is the photograph that the customer selects when he has already defined the objectives in advance – *in what way will they affect the viewer*.

*Commercial digital imagery consists of licensed photographs, illustrations and video clips that companies use in their visual communications, such as websites, digital and print marketing materials, corporate communications, books, publications and video content.* Shutterstock (2013:3)

Photographs in marketing systematically affect consumer awareness, influencing their decisions and forming habits. Despite the negative effects that accompany the transition of photography in its process of transformation into a mass-produced good, even such photographic „products” (stock photographs) are able to encourage to a particular activity and ultimately generate revenue for numerous industries standing in the background of the „photography-product“.

According to Frosh (2001:3) „Stock photography is a global business that manufactures, promotes and distributes photographic images primarily for use in marketing promotions, packaging design, corporate communications and advertising.“ While Glückler & Panitz (2013a:3) define the stock image market „As the business of licensing pre-produced visual/ audio-visual content for specific uses“ Still images (photos) account for 94 per cent of total image stock, while moving images (video footage) and other images represent 3 per cent. Production and distribution of stock photographs is one of the derivates of the digital age in which business in the domain of production of photographs is expanded to their distribution to users of websites and/or digital communication channels.

Retouching is a major use of digital imaging for stock. It’s easy to remove a blemish that makes stock less saleable... Another common use of digital retouching is to add background to enhance the shape of a photo... But the most exciting aspect of imaging is the ability to create new, unimagined photos.

The end users are often not aware of the origin of photographs that surround them. Particularly surprising and worrying is the fact that the most scholars of
contemporary photography, visual culture, advertising and consumer culture also ignore the theoretical study of the stock business, with rare exceptions being Miller (1999), Frosh (2003) and Glückler & Panitz (2013).

The stock photography market is based on the interaction of its three stakeholders: photographers, intermediaries and users – mutually dependent on each other (Sheme 1).

**Sheme 1.** Stakeholders in the stock photography market

![Diagram showing the interaction between photographers, agencies, and image users](image)

*Source: Authors*

2. **PHOTOGRAPHERS AS CREATORS OF VISUAL CONTENT OF CULTURAL AND CREATIVE INDUSTRY**

The task of the photographer is to capture a successful stock photograph that conveys a direct message to the observer, which can be a thought or a concept. So, whoever publishes that photograph communicates with the observer through a concept. And that concept can be ideas or feelings. For example, if we enter words „new ideas“ into a stock agency’s search engine, majority of the photographs will show the household light bulb. Such visual communication is appropriate for all cultures and the majority of observers will understand the sent message, and thus Sontag (1977:48) has concluded that „The painter constructs, the photographer discloses.“ Abbott (1989) has added that photography helps people to see. The task of commercial stock photography is to affect consumers’ awareness exclusively in the way desired by the sender of visual
content – the ultimate goal is the purchase of their product or service. That is why Frosh (2001:635) concludes that „Photographers and agencies also are themselves responsive to changes in cultural trends.“ Dijck (2008) continues by stating that digital cameras, camera phones, photo blogs and other multipurpose devices are used to promote the use of images as the preferred idiom of a new generation of users. Successful stock photos, then, is a term that authorizes and executes the twin attributes of Adorno and Horkheimer’s (1979) culture industry: standardization and pseudo-individuation.

Furthermore, Frosh (2003:59) published: “As contracted freelancers, photographers are only paid when their images are sold. Without the benefit of an income unrelated to immediate sales, they are therefore discouraged from undue experimentation, it being far less risky to produce technically competent variations of an already successful formula.“

In the context of commercial use, photography is increasingly seen as a raw material for some future image, which will be created by combining several different photographs and text. The success of a stock photograph can be very simply tracked according to the number of sales it has generated, and thus also the revenue it has brought to its author. The same photographs can be sold to different users several thousand times. This data is publicly available on agency websites, and therefore such photographs become success stories, i.e., become the subject of detailed analyses through which photographers are trying to figure out the reason for their commercial success. The above is one of the most common reasons for plagiarizing successful stock photographs, where because of the lack of creativity and uniqueness, photographers plagiarize each other in order to achieve quick profits.

The market set-up in this way, in which photography is more popular, accessible and cheaper than ever, has resulted in the emergence of top amateur and professional photographers and the reason for their excellence lies in the availability of quality cameras. It is also important to mention that technical support has facilitated the learning process, which comes down to the „trial and error“ principle (taking the photograph – observing the image on the screen – decision – and the photograph is accepted, or taken again).

Most professional photographers are dissatisfied with the direction of the development of the stock photography market that has occurred in the 21st century. According to discussions of the stock photographers’ community on so-
cial networks, many excellent creative people ignore the whole business because they do not want to sell their works at a price of only $0.25 and up.

Stock photography is only a minor activity for amateurs, where, e.g. on a trip or an afternoon stroll, they take some dozen photographs, which they can monetize, but the key is that they do not depend on that revenue. Therefore, image prices can vary widely depending on criteria such as image size, file format, intended use, download frequency and type of contributor. Based on the author’s insight in the prices of photographs in microstock agencies, it can be concluded that these prices usually do not exceed $10.

In relation to professional photographers, amateurs are in a more favourable position, because their professional career does not depend on income from the sale of photographs, and their interest is often satisfied with self-promotion in photographic circles. Observed in this way, amateurs in the stock photography business constitute unfair competition for professionals and directly endanger their careers. Due to immense supply of photographs in the market, agencies are in a position to constantly raise the quality criteria, which are hard for some to follow. On the other hand, digital technology enables amateurs to take photographs of professional quality, and they are becoming a major threat for the professionals. According to the Pareto principle, 20% of the highest quality photographers create 80% of the best-selling visual content. Accordingly, the Microstock agency (2013) has announced that out the total number of their registered contributors, as much as 73% of photographers are amateurs, while stock photography is the main source of income for 17% of photographers. The levels of financial performance of these two groups would be an interesting topic for some future research.

3. **AGENCIES**

One of the first major stock photography agencies was founded in 1920 by H. Roberts, which continues today under the name RobertStock. Over time, agencies have become increasingly sophisticated, they are trying to monitor and anticipate the needs of the advertising industry, and then obtain precisely defined photographs from photographers, which will be ready for sale in advance. The first wave of interest into stock photography by individual freelance amateur and hobbyist photographers started in the 1980s, spurred on by the publication of a book series “Sell & Re-Sell your Photos” by Engh R. In the 1990s,
a period of consolidation followed, with Getty Images and Corbis becoming the two largest companies as a result of acquisitions. But the real revolution of stock photography began with the mass use of the internet and digitalization of photography, when it lost the properties of a physically tangible product and became intellectual property. Internet is becoming a bridge for photography, which allows it to cross into a new dimension, thus expanding its production and sales capacities. Today, it is a fact that stock photography could not exist in its present form without internet, meaning that a symbiosis of photography – means of communication and network space – communication space – allows business association of these communication subjects and their new perspectives in the digital age. In the year 2000, the iStockphoto agency began selling photographs for only $1, which has irreversibly changed the market. There is a mass production of cheap and quality photo cameras of high resolution, because of which amateurs have offered large quantities of commercial photographs.

According to price range of photographs they offer in the market, there are two groups of stock agencies:

a) Microstock agencies

that sell the rights to use of photographs for as low as $1-10, and they have a large number of photographers with whom they collaborate, including amateurs. Copyright licenses of those images are mostly royalty-free, which means that the same photograph can be sold countless times to different users. The first such agency was iStockphoto, and later established were Fotolia, Depositphotos, 123RF.com, Can Stock Photo, Dreamstime, Shutterstock, etc. Testifying to the scope of this business is the fact that in December of 2014 global software giant Adobe purchased the Fotolia agency for dizzying $800 million. If it is known that agencies own mainly intangible assets (database of photographs, contracts with customers and contributors and company’s goodwill), it is evident what kind of business potential does the stock photography have.

Frosh (2003:58) states that „One of the fundamental commercial premises of stock photography, allowing photographers and agencies to make money while charging lower prices than for assignment photographs.“

b) Macrostock agencies

They operate in the traditional way; they offer quality personalized service and meet the customers’ strict specific requirements. The two largest macrostock agencies are Corbis and Getty Images.
They are used by customers that can afford to do so financially, or do not have the time to personally search databases. These agencies exclusively sell copyrights for the exclusive use of the content, rights-managed. For example, it would be insulting for a pharmaceutical company if they would find out they are using the same photograph as a competitor. The prices of photographs range from $100 to $10,000. These agencies mediate exclusively with top artists of or photographers specialized for strictly specific or scientific motives, e.g., taking photographs of rare animal species.

Thinking about such creative people, (Frosh 2002:7) concludes that „Artists have that rare ability to think visually and communicate visually.”

According to research by Glückler & Panitz (2013b) 4 types of agencies have been segmented according to their specialities, and the Scheme 2. shows modes of operation of stock photography agencies:

a) Classic agencies receive the relative majority of their images from original creators and generate more than 50 per cent of their revenues with final image users.

b) Collector agencies also receive the relative majority of their images from original creators but realize the majority of revenues through sales partnerships with other agencies.

c) Distributor agencies receive the relative majority of their images from partner agencies and generate more than 50% of their revenues with final image users.

d) Go-between agencies that receive and sell the majority of images from and through partner agencies.

**Scheme 2.** Modes of operation of 4 types of stock photography agencies

Glückler & Panitz (2013a) furthermore conclude that, looking geographically, 68% of all agencies are concentrated in Germany (31%), United Kingdom
(19%) and the U.S. (18%). If these countries are joined by Switzerland (6%), France (4%) and China (2%), these countries make up the list of the 6 most significant countries in the stock business. Approximately 1.5 million photographs is the average portfolio of an agency, but as much as 50% of agencies are small and have only about 100,000 photographs. This shows a strong concentration in the market. Eleven of the largest agencies (5%) offer as many as 189 million photographs, which accounts for over 50% of the total supply. In terms of license models, rights-managed photography (RM) takes share of (62%), while royalty-free photography (RF) contributes 22 per cent to total sales. Out of the total revenue, the largest expenses for the agencies are the payments to photographers, which amount to about 24% of total revenues. According to agencies’ annual reports, it can be assumed that European and U.S. agencies today offer about 600 million photographs. 20% of those agencies create 80% of total revenues. An interesting assumption is that only 18% of total annual image growth represents original content and the rest are duplicates because photographers usually offer the same content for sale in 4-5 different agencies.

Technological development of digital photography has enabled end users to purchase photographs at prices that are lower than ever before in history, and the market is growing dramatically each year. Published financial statements of the Shutterstock agency (2013) at the Grafics 1 show the trends in demand for visual content:

**Grafics 1.** Shutterstock annual revenue 2009-2013

![Grafics 1](image)

*Source: Shutterstock Annual report (2013:10)*

Sheme 3. shows that agency has 50,000 contributors-photographers, and as many as 900,000 customers who annually buy 100 million downloads, which they pay $ 236 million, which represents an annual revenue growth of 39%.
4. BUYERS OF PHOTOGRAPHS

Demand for commercial digital imagery comes primarily from:

a) Businesses: Large corporations, small and medium-sized businesses and sole proprietorships that have marketing, communications and design needs.

b) Marketing Agencies: Creative service providers such as advertising agencies, media agencies, graphic design firms, web design firms.

c) Media Organizations: Creators of print and digital content, from large publishers and broadcast companies to professional bloggers.

Modern agencies can accurately adjust their offer to the wishes of a particular customer. New smart technology records searches and purchase history, and leaves a digital footprint in the agency’s system. Suppliers systematically analyse the history of internet searches, and through special algorithms are able to detect customers’ future preferences and offer personalized results according to the expected needs of each customer. According to Glückler & Panitz (2013b), only 21% of agencies are using such mechanisms so far.

The use of language is crucial for the search and selection of visual content. English is dominant and the vast majority, as much as 85% of agencies, according to Glückler & Panitz (2013b), offer their photographs in English. Due to high demand for photographs in Germany, it is not surprising that 40% of agencies also offer their photographs in German, while only 13% do it in French. It is interesting that 74% of agencies from non-English speaking countries offer...
their content also in English, while only 10% of Anglophone agencies offer content to customers in other languages. This fact confirms English as the dominant language in the industry of visual content.

5. STOCK PHOTOGRAPHY MARKET

The first global research on stock industry was conducted in 2012 at the Heidelberg University. Glückler & Panitz (2013a) conclude that today in the world there is a total of 2,439 for-profit image suppliers. Furthermore, it is evident that Europe is the global hub for the collection of original content from creators around the world.

Majority of photographers in the stock business are located in Europe, they record mainly for European and U.S. agencies, and they create 80% of the visual content. U.S. agencies buy 8 times more (31,400 photographs) in Europe than Europeans do in the U.S. (4,000 photographs). But Asian, Latin American, African and Australian creators do produce their images basically for European image agencies. Europe is the only region that delivers content to all world regions and at the same time is the most important regional partner for the other regions. As a result of this composite estimation approach, it can be spoken of $2.88 billion gross global revenues in the stock image market in 2012. Glückler & Panitz (2013a).

The Shutterstock agency has collected even more ambitious data, so that they estimate that the market for pre-shot commercial digital imagery will grow from approximately $4 billion in 2011 to approximately $6 billion in 2016, based on a study conducted on our behalf by L.E.K. Consulting LLC. (Shutterstock 2013).

„In the last five years to 2015, the number of public websites has grown an average rate of 43% annually to more than 785 million“, according to news.netcraft.com (2015). It is expected, therefore, that the sales of photographs will also grow, because communication and creativity are cheaper than ever before.

According to BIA/Kelsey Company (2015), „More than 32% of small and medium-sized U.S. businesses, or SMBs, surveyed do not yet have a website. Therefore, they estimate that SMB advertising spending on online digital media will increase from $5.4 billion in 2010 to $16.6 billion in 2015, representing a compound annual growth rate of 25%.“
Interesting is the emergence of web portals that offer download of visual content completely free of charge: e.g. Freeimages was launched in February 2001 as an alternative for expensive stock photography, there are over 2,500,000 registered users and around 400,000 high quality and high resolution photographs.

Stock photography also successfully exists as a part of the cultural and creative industry in the Republic of Croatia. According to the UNCTD report (2013), this is important because countries with a high concentration of cultural and creative industry have the highest rate of growth of the economy, their stakeholders are the biggest drivers of innovation, and as such they start new cycles of growth of mature industries, they are a valuable tool for the development of identity and attractiveness of each country, they are accelerators of development of cities. According to the characteristics of the market, Glückler & Panitz (2013c) classify Croatia as part of the group of Eastern Europe and Asian countries. Categories of customers are the same as in foreign markets, and photographers are selling their photographs through European and U.S. agencies, because domestic agencies do not yet exist.

SWOT analysis of the stock photography market

**Scheme 4. SWOT analysis of the stock photography market**

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant growth of the stock photography market. Quick, easy and inexpensive distribution of digital content over the internet. Thousands of photographers as agency contributors are eager for additional earnings and affirmation. Cameras are of very high quality and affordable.</td>
<td>Agencies are lowering photographers’ commissions, but it is necessary to set the lower limit, since otherwise the system could collapse. Plagiarism of others’ content leads to impersonality. Constant demands for raising the criteria of quality of photographs. Danger of filling up the database to the point when new photographs will no longer be necessary in such numbers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
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<tbody>
<tr>
<td>There are businesses without web pages. Increasing quality of photographic equipment of the future will enable recruiting of new generations of photographers in the stock business. Creation of specific niches that will be accessible to a narrow circle of specialized photographers.</td>
<td>The offer of free photographs is increasing. The demand for alternative visual content is increasing (vector drawings and stock video content). Possibility of a sudden drop in the market after several years of continuous growth. Theft and unauthorised use of photographs. Establishment of photographic associations in order to avoid agencies as intermediaries.</td>
</tr>
</tbody>
</table>

Source: Authors
7. DISCUSSION

Since the beginning of the 21st century, the stock photography market has been in constant growth, and hundreds of thousands of photographers are active contributors to stock agencies. Technological advances in the production of photographic equipment have enabled amateurs to catch up with professionals, and this phenomenon is going to continue as it is expected that the quality of photographic equipment will continue to increase in the future. High demand for visual content is predicted in the coming years, since according to research, e.g. more than 32% of small businesses in the U.S. still do not have webpages and that market niche represents a business opportunity for further growth. Also, agencies require strictly specific motives, where there is still a lack of quality photographs, which expands possible activity of photographers who offer their stock photographs.

In their desire for the highest possible profit, stock agencies systematically lower the share of commissions that they pay to photographers, while on the other hand, due to high influx of stock photographs, the level of quality that is required from the providers of stock photographs is increasing.

Also, it is just a question of time when some of databases will become filled up to such an extent that out of the content offered, only exceptionally high-quality work will be received and accepted for (re)sale. Each new stock photograph will be competing with millions of already stored photographs. In the end, it is evident that only after its first 100 hundred years photography has entered its golden age. But the real significance of the impact of stock photography on cultural and creative industry of the digital age still has to be explored, and open questions of copyright protection, fair and healthy market competition, and possibilities for future networking – both of professional businesses and professionals and the stock photography content.

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